Series Compatible with Secondary Batteries

25A- Series



Copper (Cu) and Zinc (Zn) Restrictions

Compatible with dew points as low as -80°C

Longer life due to use of grease compatible with low dew points

A wide range of products! Now with a greater number of models!

New

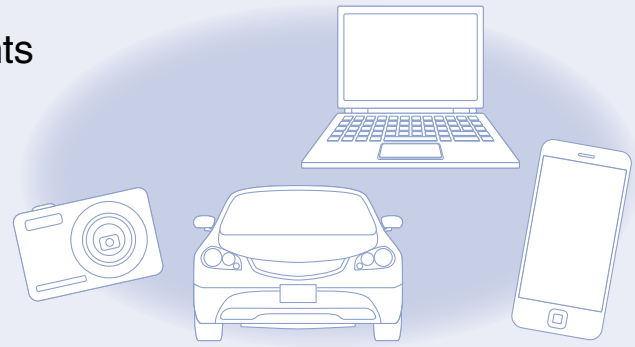
57 models have been newly added.
(For details, refer to the “INDEX” pages.)

Compatible with the various environments of each manufacturing process

SMC

P-E23-13 Ⓐ

Products compatible with the environments of the secondary battery manufacturing process are available, contributing to the improvement of productivity and reduced defects.



Series Compatible with Secondary Batteries 25A- Series

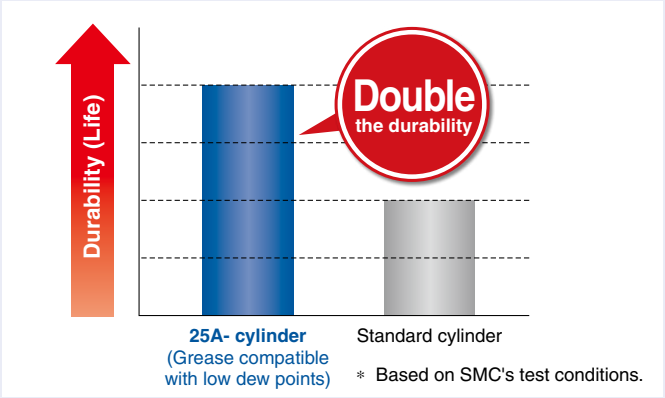
Applicable for use at −80°C

Improved performance in environments with low dew points

- **Uses grease compatible with low dew points**

Double the durability

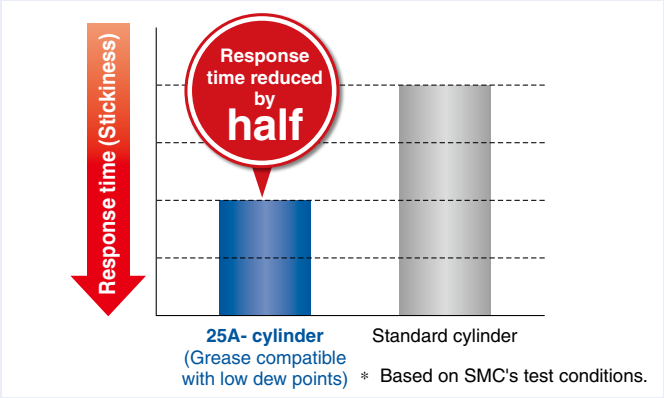
Durability comparison (Air cylinder)



＊ Based on SMC's test conditions.

Response time reduced by half

Comparison of cylinder response times after being pressurized and stored



＊ Based on SMC's test conditions.

Material Restrictions

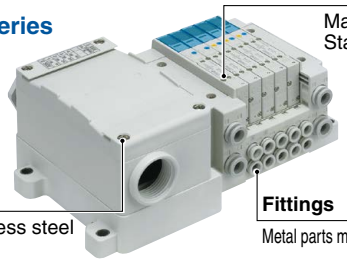
The following materials are not used in order to reduce the number of defective products produced during the secondary battery manufacturing process:

- **Metal materials whose main component is either copper or zinc are not used.**
  ＊ Some of the aluminum alloy and aluminum die-cast materials contain traces of copper or zinc as an additive element. If a product with restrictions on the amounts of these additive elements is required, we can accommodate your needs via a special product. Please contact your local sales representative for further details.
- **Electrolytic nickel plating with a copper layer or zinc plating are not used.**
  ＊ Electroless nickel plating is used.
- **Parts of the piston rod, clevis pin, split pin, etc., of the cylinder are made of carbon steel with hard chrome plating. Therefore, as the processed parts aren't coated, an anti-rust oil coating is applied to these parts before shipment.**
  ＊ Rust may be generated due to the operating environment. If the generation of rust is a problem, made-to-order options using stainless steel, etc., are available. Please contact your local sales representative for further details.
- **The coils of solenoid valves, the circuit boards of electrical equipment, the motors of electric actuators, etc., use copper materials.**
  ＊ Parts whose materials cannot be easily changed to alternative ones and parts whose functions would be compromised by changing to alternative materials use copper and/or zinc materials. Please contact your local sales representative for further details.

Restrictions

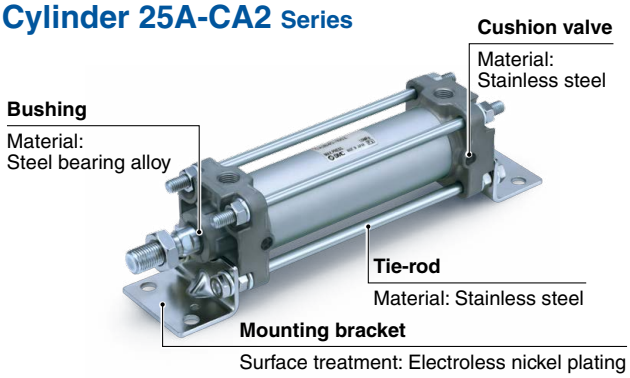
Material	**Copper (Cu)** **Zinc (Zn)**
Surface treatment	● Electrolytic nickel plating with a copper layer ● Zinc plating (Electroless nickel plating is used.)

Solenoid Valve 25A-SY Series



* Coils for solenoid valves, connector pins, and lead wires are made of copper.
* Manifold terminal block, wiring parts, connector metal parts, and printed circuit board are made of copper.

Cylinder 25A-CA2 Series



Compact Cylinder 25A-CQ2 Series



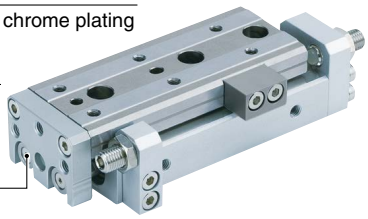
* The auto switch magnet contains copper and/or zinc. (ø12)

Compact Guide Cylinder 25A-MGPM Series



* The auto switch magnet contains copper and/or zinc. (ø12)

Air Slide Table 25A-MXQ Series



Corrosion-resistant Air Slide Table (Made to Order: 25A-MXQ□-X771, 25A-MXS□-X1949)

The material of the head cap part has been changed to a highly corrosion-resistant material.



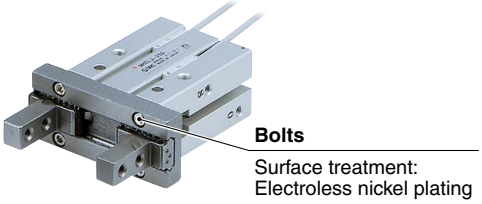
	After change	Before change
Head cap	Aluminum alloy	Synthetic resin

Dual Rod Cylinder/Compact Type 25A-CXSJ Series



* The auto switch magnet contains copper and/or zinc. (ø6, ø10, ø15)

Air Gripper 25A-MHZ2 Series



* Cylinder mounting brackets made of steel are either electroless nickel plated, treated with RAYDENT®, or coated with electrodeposition paint.

Series Compatible with Secondary Batteries

Air Filter 25A-AF Series



Rod (AF50 to 60-D)
Material: Stainless steel

Drain plug (AF30 to 60-A, AF30 to 60-D)
Material: Stainless steel

Regulator 25A-AR Series



Valve, Stem
Material: Stainless steel

Adjusting spring, Screw
Surface treatment: Electroless nickel plating

Precision Regulator 25A-IR□-A Series

Screw
Surface treatment: Electroless nickel plating

Screws
Material: Stainless steel



Vacuum Regulator 25A-IRV Series

Stem, Valve, Screws
Material: Stainless steel

Seal, O-ring
Material: EPDM

Fittings
Metal material: Stainless steel



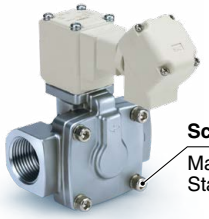
3-Color Display High-Precision Digital Pressure Switch ZSE20□(F)/ISE20□ Series



Port thread
Material: Stainless steel

∗ A copper material is used for the lead wires.

Pilot Operated 2-Port Solenoid Valve 25A-VXD Series



Screw
Material: Stainless steel

∗ A copper material is used for the solenoid coils and lead wires.

Solid State Auto Switch D-M9□-900 Series



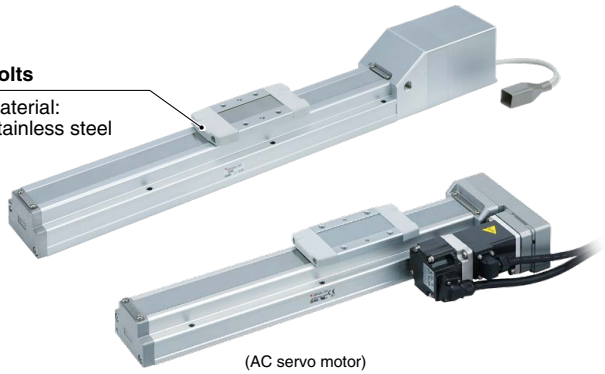
Mounting screw
Material: Stainless steel

∗ A copper material is used for the lead wires.

Electric Actuator/Slider Type Ball Screw Drive 25A-LEFS Series

(Step motor / Servo motor)

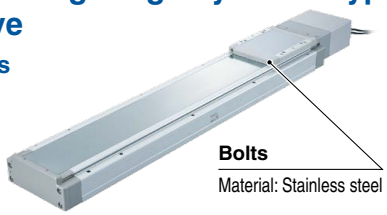
Bolts
Material: Stainless steel



(AC servo motor)

∗ Copper and zinc materials are used for the motors, cables, controllers/drivers.
∗ The motor magnet contains copper and/or zinc.

Electric Actuator/High Rigidity Slider Type Ball Screw Drive 25A-LEJS Series



Bolts
Material: Stainless steel

∗ Copper and zinc materials are used for the motors, cables, controllers/drivers.
∗ The motor magnet contains copper and/or zinc.

Electric Actuator/Rod Type 25A-LEY Series

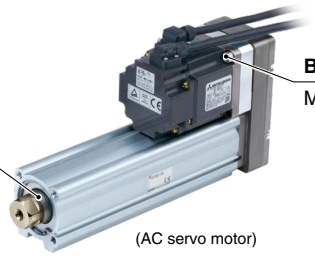
Bolts
Material: Stainless steel

Bushing
Material: Steel bearing alloy

Bushing
Material: Steel bearing alloy



(Step motor / Servo motor)



(AC servo motor)

Bolts
Material: Stainless steel

∗ Copper and zinc materials are used for the motors, cables, controllers/drivers. ∗ The motor magnet contains copper and/or zinc.

Dustproof Products

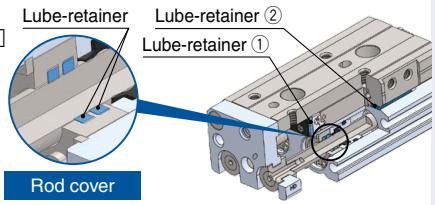
＊ Not compatible with the secondary battery specifications

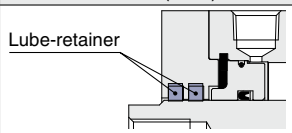
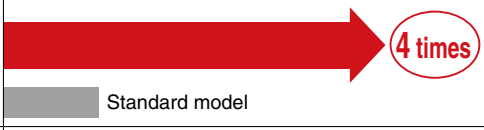
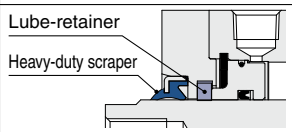
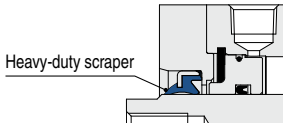
High Durability Series Dust Resistant Cylinder CM2/CG1/MB/CQ2/MGP/MXQ-XC4□

- Up to **6 times** more durable in dusty environments (-XC4A/-XC4B/-XC4C)
  Applicable powder particle size: 20 to 100 µm
  Suitable for environments with ceramic powder, toner powder, paper powder, and metallic powder
  ＊ Excludes weld spatter
- Can be selected according to the application

MXQ-XC4A

- Lube-retainers are installed on the guide unit and rod cover.
  This prevents the entry of dust and foreign matter.

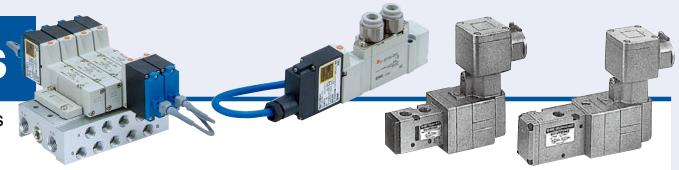


Description	Applicable powder particle size	Structure (CQ2)	Durability
With 2 Lube-retainers **XC4A**	20 to 50 µm		
With heavy-duty scraper + Lube-retainer **XC4B**	30 to 100 µm		
With heavy-duty scraper **XC4C**	50 to 100 µm		

Applicable Cylinders

Air Cylinder **CM2-XC4□** ø20 to ø40 	Air Cylinder **CG1-XC4□** ø20 to ø100 	Air Cylinder **MB-XC4□** ø32 to ø100 	Compact Cylinder **CQ2-XC4□** ø20 to ø63 
Compact Guide Cylinder **MGP-XC4□** ø12 to ø100 	Air Slide Table **MXQ-XC4A** ø6 to ø25 		

Explosion-proof Products



＊ Not compatible with the secondary battery specifications

Explosion-proof Solenoid Valves

For Japan (TIIS certification)

- Intrinsically Safe Explosion-proof System 5-Port Solenoid Valve
  · 51-SY5000/7000/9000 Series

Ex ia IIB T4

- Explosion-proof (Flameproof) 3/5-Port Solenoid Valve
  · 50-VFE/VPE Series

d2G4, Ex d IIB T4

For China (CCC certification)

- Intrinsically Safe Explosion-proof 5-Port Solenoid Valve
  · 52-SY5000/7000/9000-X140 Series

Ex ia IIC T4 to T6 Gb

- Explosion-proof (Flameproof) 3/5-Port Solenoid Valve
  · 50-VFE/VPE-X140 Series

Ex d IIC T5/T6 Gb
Ex tD A21 IP6X T85°C/T100°C

For Taiwan (TS certification)

- Explosion-proof (Flameproof) 3/5-Port Solenoid Valve
  · 50-VFE/VPE-X170 Series

Ex db IIC T5/T6 Gb
Ex tb IIIC T100°C/T85°C Db

For Europe (CE marking, ATEX directive)

- Intrinsically Safe Explosion-proof System
  · 5-Port Solenoid Valve/52-SY5000/7000/9000

Ⓔx II 2G Ex ia IIC T4...T5 Gb Ta–10°C to +50°C
II 2G Ex ia IIC T6 Gb Ta–10°C to +45°C
[Certification no.: DEKRA 11ATEX0273 X]

- Explosion-proof (Flameproof) 3/5-Port Solenoid Valve
  · 50-VFE/VPE-X60 Series

Ⓔx II 2G Ex db IIC T5 Gb Ta:–10°C TO +50°C
II 2G Ex db IIC T6 Gb Ta:–10°C TO +40°C
II 2D Ex tb IIIC T100°C Db Ta:–10°C TO +50°C
II 2D Ex tb IIIC T85°C Db Ta:–10°C TO +40°C
[Certification no.: KEMA 09ATEX0024X]

For Korea (KOSHA certification)

- Explosion-proof (Flameproof) 3/5-Port Solenoid Valve
  · 50-VFE/VPE-X100 Series

Ex d IIB T4

For North America (UL 913/CSA C22.2 No. 157)

- Intrinsically Safe Explosion-proof
  · Pilot Operated 5-Port Solenoid Valve: 53-SY5000/7000/9000 Series

Electrical Entry TT	Electrical Entry L and LL
Hazardous Location	Hazardous Location
Class I, II, III	Class I
Division 1	Division 1
Groups A, B, C, D, E, F, G	Groups A, B, C, D

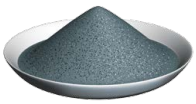
Secondary Battery Manufacturing Process

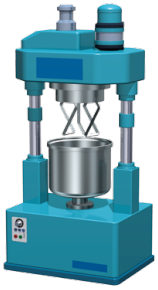
Electrode Production Process

Same for both can types and laminate types

① Mixing and kneading machine

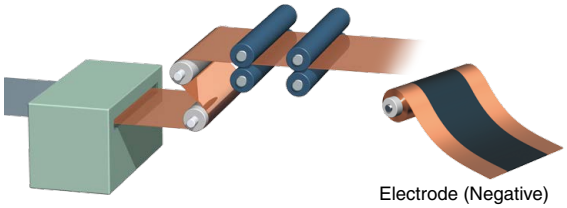
The proper amount of raw materials for positive or negative electrodes are mixed to make electrode slurry.





② Coating and rolling

Positive or negative electrode slurry is coated with a metallic foil made from aluminum, copper, etc.
The coated slurry is then compressed with rollers continuously to enhance the density of the electrode sheet.



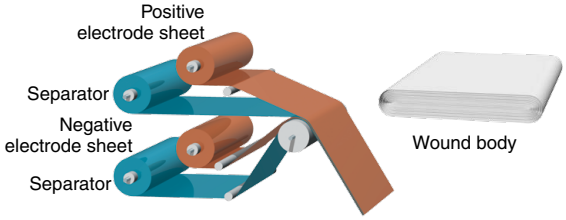
Electrode (Negative)

Cell Assembly Process

Can type

④ Winder (Winding)

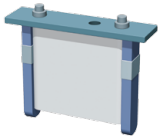
The positive electrode sheet, negative electrode sheet, and separator sheets are laid on top of each other and wound to form a wound body.



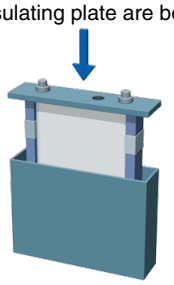
Wound body

⑤ Attaching tabs and an insulating plate and inserting into a case

Current collecting tabs and an insulating plate are bonded to the wound body.
It is then inserted into a case.



Bonding tabs and an insulating plate

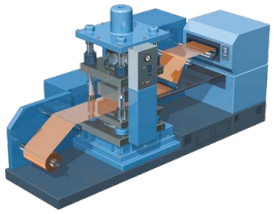


Inserting into a case

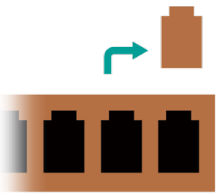
Laminate type

④ Punching electrodes

The rolled positive and negative electrodes are punched according to the battery size.

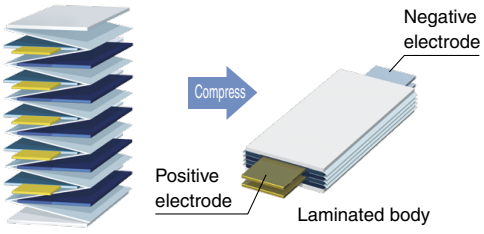


Electrode puncher



⑤ Stacking (Layering)

Positive and negative electrodes are stacked alternately and accurately at high speed with a separator inserted between them.



Stacking positive and negative electrodes

Inspection/Packaging Process

Same for both can types and laminate types

⑧ Charging/discharging and aging

Standard products are applicable.

Charging and discharging are repeated to activate batteries. Charged battery cells are then left for a certain period of time, and the initial deterioration of batteries is checked to detect defective products.



Activation of batteries

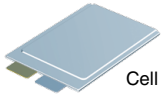


Aging

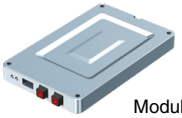
⑨ Packaging

Standard products are applicable.

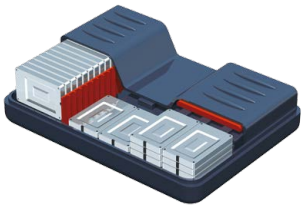
Connected multiple cells are enclosed in a metallic case, and terminals are attached to form a module.
Then, the connected multiple modules with a sensor and a controller are enclosed in a case to form a battery pack.



Cell



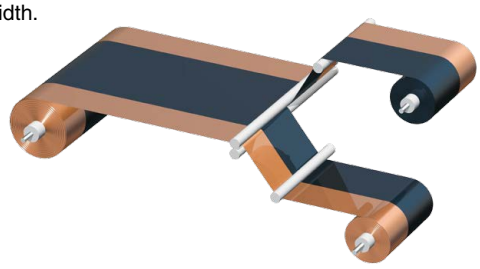
Module



Pack

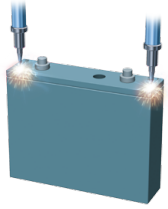
❸ Slitting

The electrode sheet and separator are cut to the cell width.

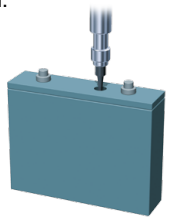


❻ Welding cell lid and pouring electrolytic solution

The electrode and lid are laser-welded, and then the entire periphery of the cell case and lid is welded. Electrolytic solution is poured into the cell.



Welding cell lid



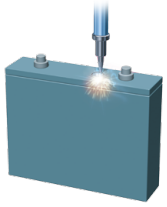
Pouring electrolytic solution

❼ Pre-charging and welding infusion plug

Pre-charging (formation charging) is performed to remove the gas generated in the initial charging process, and then the infusion plug is welded to seal the cell.



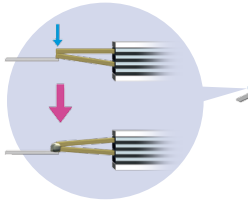
Pre-charging



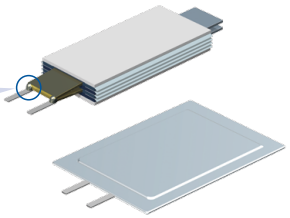
Welding infusion plug

❻ Tab welding and lamination

Current collecting tabs are welded to the laminated body. The laminated body is wrapped with armoring material.



Tab welding



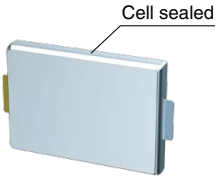
Lamination

❼ Pre-charging and sealing cell

Pre-charging (formation charging) is performed to remove the gas generated in the initial charging process, and then heat is applied to seal the cell.



Pre-charging



Sealing cell

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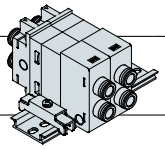
	Separate Type Double Check Block		25A-VQ1000/2000-FPG	95
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		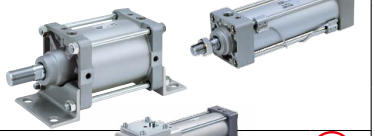	25A-MB (ø32 to ø100)	115
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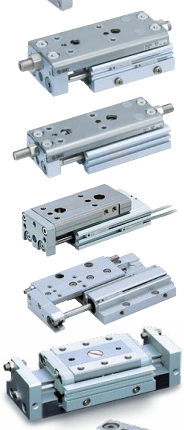
	Air Slide Table		25A-MXS (ø6 to ø25)	145
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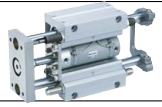
	Guide Cylinder		25A-MGGL (Ball bushing bearing) (ø20 to ø50)	161

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∗1 Standard products: For the standard model, copper (Cu) and zinc (Zn) are not used as main components in the metal materials. Refer to the **Web Catalog** for details.

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∗1 Standard products: For the standard model, copper (Cu) and zinc (Zn) are not used as main components in the metal materials. Refer to the **Web Catalog** for details.

∗2 Pressure gauge mounting: The G43-10-01-X300/G46-SRB pressure gauge cannot be mounted directly to the booster regulator as it will interfere with the booster regulator (25A-VBA10A) handle or the other pressure gauge (for the 25A-VBA20A/40A). In order to mount the pressure gauge, piping which does not cause any interference must be prepared separately.

∗3 Aside from the external parts and wetted parts, copper (Cu) and zinc (Zn) are used as main components in the metal materials.

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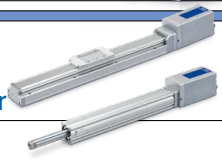
Electric Actuators	e-Actuator Easy to Operate Integrated Controller 	New 25A-EQFS□H (Integrated controller slider type/Battery-less absolute (Step Motor))	297-1
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25A- series grease pack*1 applicable models

*1 Air cylinders (Except guide unit). For other models, please contact your local sales representative.

Grease pack part no.	Quantity
GR-D-005	5 g
GR-D-010	10 g
GR-D-100	100 g

Contained in a plastic container.

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	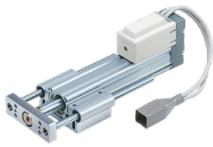 New	25A-LEYG (Guide rod type/Incremental (Step motor/Servo motor): Applicable to the JXC□/LEC□)	314-2
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		D-F79/F7P/J79-900	
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		D-Z80L-900	
		D-E73A/E76A/E80A	

Special Products (Please contact your local sales representative for more details.)

Description		Series
Directional Control Valves	3-Port Solenoid Valve/Residual Pressure Release Valve with Detection of Main Valve Position (Safety Standard ISO 13849-1 Certified) 	VG342-X87
Air Cylinders	Air Cylinder With End Lock 	CBM2
		MBB
	Compact Cylinder with Lock 	CLQ
	Stopper Cylinder 	RSQ
	Heavy Duty Stopper Cylinder 	RS2H
Vacuum Equipment	Non-contact Gripper 	XT661
High Vacuum Equipment	Aluminum High Vacuum Angle Valve 	XLA (Normally closed)
		XLC (Double acting)

Related Products

Consult with SMC for "Copper (Cu) and Zinc (Zn) Restrictions" products.

1 Antistatic Equipment

Vacuum | Static electricity

Antistatic performance achieved through conductive measures for a reduction in static-related trouble.

Actuators

- Antistatic Air Cylinder (Made to Order) ····· *CM2-X1051 Series*

Vacuum Equipment

- Vacuum Pad ····· *ZP Series*

Fittings and Tubing

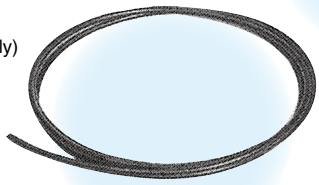
- Antistatic One-touch Fittings ····· *KA Series*
- Miniature Fittings/Stainless Steel 316 ····· *MS Series* (Some types only)
- Miniature Fittings ····· *M Series* (Some types only)
- Antistatic Tubing ····· *TA□ Series*

Flow Control Equipment

- Antistatic Speed Controller (Made to Order) ····· *AS-X260 Series*



KA Series



TA□ Series

2 Static Neutralization Equipment

Static electricity

Ions generated by corona discharge neutralize static electricity.

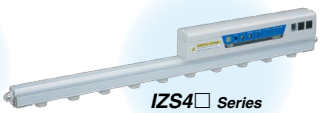
- Ionizer/Bar Type ····· *IZS4□ Series*
- Bar Type Ionizer Separate Controller ····· *IZT4□ Series*
- Ionizer ····· *IZS31 Series*
- Nozzle Type Ionizer ····· *IZN10E Series*
- Fan Type Ionizer ····· *IZF□ Series*

Measurement Equipment Measures the electrostatic potential.

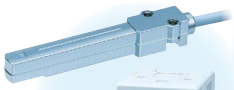
- Electrostatic Sensor ····· *IZD10/IZE11 Series*
- Handheld Electrostatic Meter ····· *IZH10 Series*



IZF10 Series



IZS4□ Series





IZN10E Series



IZD/IZE Series

IZT4□ Series

3 Temperature Control Equipment

- Thermo-chiller/Standard Type ····· *HRS Series*



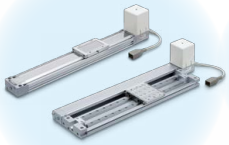
HRS Series

4 Electric Actuators

- Electric Actuator/Slider Type ····· *LEFB Series*
- Electric Actuator/Low Profile Slider Type ····· *LEM Series*
- Electric Actuator/Guide Rod Slider ····· *LEL Series*
- Electric Slide Table ····· *LES Series*
- Electric Actuator/Miniature Rod Type /Miniature Slide Table Type ····· *LEPY/LEPS Series*
- Electric Rotary Table ····· *LER Series*
- Electric Gripper ····· *LEH□ Series*
- Motorless Type Electric Actuator ····· *LE□ Series*



LEL Series



LEM Series



LES Series



LEPS/LEPY Series



LER Series



LEHZ Series

5 High Purity Chemical Liquid Valves

- High Purity Chemical Liquid Valve/Air Operated Type ····· *LVC/LVA/LVH Series*



LVC Series



LVA Series

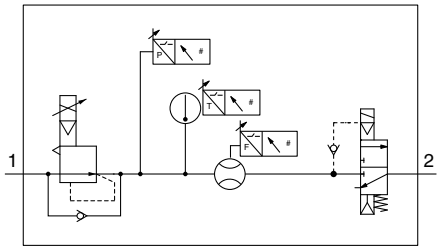


LVH Series

Air Management System
Electro-Pneumatic Regulator Type
25A-AMS20A/30A/40A/60A Series

Symbol

N.C.



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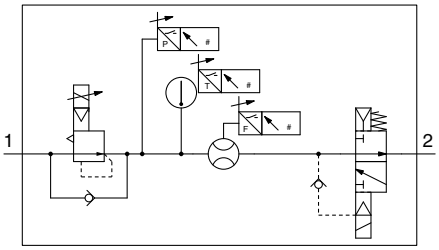
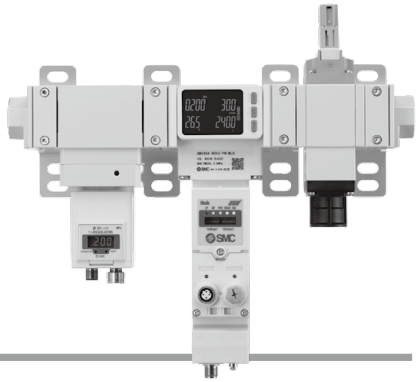




How to Order

25A – AMS 40 A – F 04 C – PN – M L G

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼

			Symbol	Description	❶ Body size 20	30	40	60
❷	Pipe thread type		**R**	Rc	●	●	●	●
			N	NPT	●	●	●	●
			F	G	●	●	●	●
			H	Without attachments	●	●	●	●
			+					
❸	Port size		**01**	1/8	●	—	—	—
			02	1/4	●	●	—	—
			03	3/8	—	●	●	—
			04	1/2	—	—	●	—
			06	3/4	—	—	—	●
			10	1	—	—	—	●
			00	Without attachments	●	●	●	●
			+					
❹	Electro-Pneumatic regulator, Residual pressure relief 3-port solenoid valve	N.O./N.C.	**C**	N.C. (Normally closed)	●	●	●	●
			D	N.O. (Normally open)	●	●	●	●
			+					
❺	Air management hub	Protocol	**SA**	Standalone (When wireless adapter is connected*3: Wireless remote)	●	●	●	●
			PN	PROFINET, OPC UA (When wireless adapter is connected*3: Wireless base)	●	●	●	●
			EN	EtherNet/IP™, OPC UA (When wireless adapter is connected*3: Wireless base)	●	●	●	●
			EC	EtherCAT*4 (When wireless adapter is connected*3: Wireless base)	●	●	●	●
			+					
❻	Electro-Pneumatic regulator, Air management hub	Unit	**K***1	EXA1/ITV: Units selection function	●	●	●	●
			M*2	EXA1/ITV: SI units only	●	●	●	●
			+					
❼	Residual pressure relief 3-port solenoid valve	Manual override	**G**	Non-locking push type	●	●	●	●
			E	Push-turn locking type (Manual)	●	●	●	●

*1 Applies to overseas destinations only
*2 Fixed units Instantaneous flow: L/min
Accumulated flow : L
Pressure : kPa, MPa
Temperature : °C
*3 The wireless adapter is sold separately. (Refer to page 14-8.)
*4 EtherCAT is not compatible with OPC UA. In addition, the PLC (Programmable Logic Controller)/controller must support EoE (Ethernet over EtherCAT).
* The connection cable for the standby electro-pneumatic regulator/residual pressure relief valve is connected.

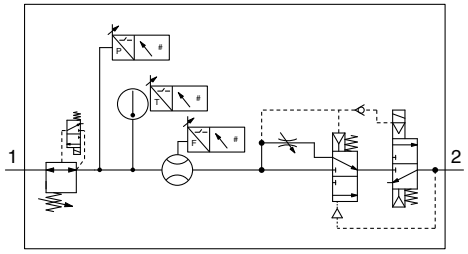
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Air Management System
Regulator Type
25A-AMS20B/30B/40B/60B Series

Symbol

N.C.



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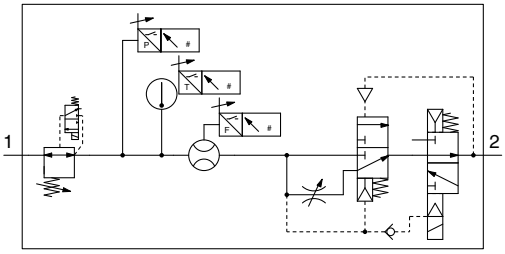
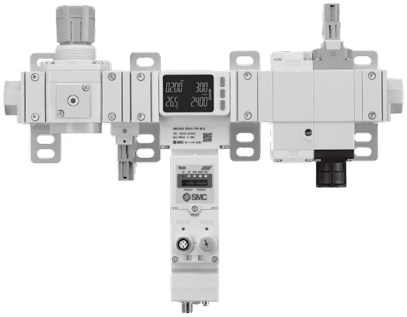




How to Order

25A – AMS 40 B – F 04 C – PN – M L G

(1) (2) (3) (4) (5) (6) (7)

Series compatible with secondary batteries

			Symbol	Description	① Body size 20	30	40	60
②	Pipe thread type*1		R	Rc	●	●	●	●
			N	NPT	●	●	●	●
			F	G	●	●	●	●
+								
③	Port size		01	1/8	●	—	—	—
			02	1/4	●	●	—	—
			03	3/8	—	●	●	—
			04	1/2	—	—	●	—
			06	3/4	—	—	—	●
			10	1	—	—	—	●
			00	Without attachments	●	●	●	●
+								
④	Residual pressure relief 3-port solenoid valve	N.O./N.C.	C	N.C. (Normally closed)	●	●	●	●
			D	N.O. (Normally open)	●	●	●	●
+								
⑤	Air management hub	Protocol	SA	Standalone (When wireless adapter is connected*4: Wireless remote)	●	●	●	●
			PN	PROFINET, OPC UA (When wireless adapter is connected*4: Wireless base)	●	●	●	●
			EN	EtherNet/IP™, OPC UA (When wireless adapter is connected*4: Wireless base)	●	●	●	●
			EC	EtherCAT*5 (When wireless adapter is connected*4 : Wireless base)	●	●	●	●
+								
⑥	Air management hub	Unit	K*2	EXA1: Units selection function	●	●	●	●
			M	EXA1: SI units only*3	●	●	●	●
+								
⑦	Regulator/Residual pressure relief 3-port solenoid valve	Manual override	G	Non-locking push type	●	●	●	●
			E	Push-turn locking type (Manual)	●	●	●	●

*1 For port size "00", specify thread type of the standby regulator (ARS).
*2 Applies to overseas destinations only
*3 Fixed units Instantaneous flow: L/min
Accumulated flow : L
Pressure : kPa, MPa
Temperature : °C
*4 The wireless adapter is sold separately. (Refer to page 14-8.)
*5 EtherCAT is not compatible with OPC UA. In addition, the PLC (Programmable Logic Controller)/controller must support EoE (Ethernet over EtherCAT).
* The connection cable for the standby electro-pneumatic regulator/residual pressure relief valve is connected.

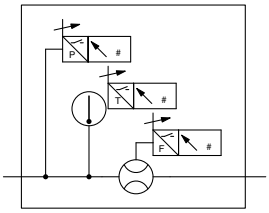
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Air Management Hub

25A-EXA1 Series

Symbol





How to Order

25A – EXA1 – 40 – SA – M L

- 25A: Series compatible with secondary batteries
- ❶ 40: Body size
- ❷ SA: Protocol
- ❸ M: Unit

	Symbol	Description	❶ Body size 20 (For 25A-AMS20)	30 (For 25A-AMS30)	40 (For 25A-AMS40)	60 (For 25A-AMS60)
❷ Protocol	**SA**	Standalone (When wireless adapter is connected*3: Wireless remote)	●	●	●	●
	PN	PROFINET, OPC UA (When wireless adapter is connected*3: Wireless base)	●	●	●	●
	EN	EtherNet/IP™, OPC UA (When wireless adapter is connected*3: Wireless base)	●	●	●	●
	EC	EtherCAT*4 (When wireless adapter is connected*3 : Wireless base)	●	●	●	●
+						
❸ Unit	**K***1	Units selection function	●	●	●	●
	M*2	SI units only	●	●	●	●

*1 Applies to overseas destinations only
*2 Fixed units Instantaneous flow: L/min, Accumulated flow: L, Pressure: kPa/MPa, Temperature: °C
*3 The wireless adapter is sold separately. (Refer to page 14-8.)
*4 EtherCAT is not compatible with OPC UA. In addition, the PLC (Programmable Logic Controller)/controller must support EoE (Ethernet over EtherCAT).

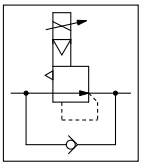
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Standby Electro-Pneumatic Regulator

25A-ITV2050 to 3050-X399

Symbol
N.C./N.O.





How to Order

For 25A-AMS20A	25A – ITV2050 – IL 20 – 1 – K – X399
For 25A-AMS30A	25A – ITV2050 – IL 30 – 1 – K – X399
For 25A-AMS40A	25A – ITV3050 – IL 40 – 1 – K – X399
For 25A-AMS60A	25A – ITV3050 – IL 60 – 1 – K – X399

Series compatible with secondary batteries

❶ ❷ ❸

❶ Applicable AMS□A size

20	For 25A-AMS20A
30	For 25A-AMS30A
40	For 25A-AMS40A
60	For 25A-AMS60A

❷ Type of actuation

1	Normally closed
2	Normally open

❸ Pressure display unit

K	Units selection function
M	SI units only

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

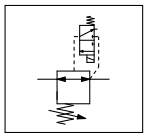
For details, refer to the Web Catalog.

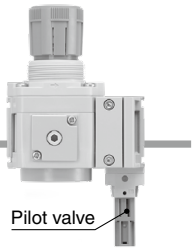
Pilot valve only

RoHS

Standby Regulator
25A-AR20S to 50S Series

Symbol





How to Order

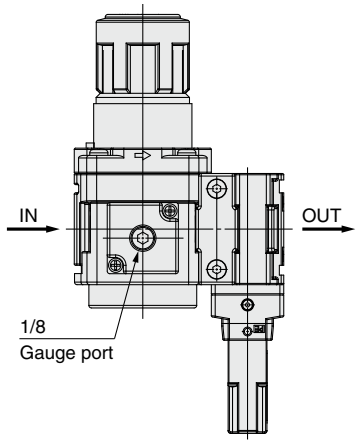
25A – AR ❶30 S – ❷ ❸03 – Y – 15V ❹

Series compatible with secondary batteries

			Symbol	Description	❶ Body size 20 For 25A-AMS20B	30 For 25A-AMS30B	40 For 25A-AMS40B	50 For 25A-AMS60B
❷	Pipe thread type		**Nil**	Rc	●	●	●	●
			N	NPT	●	●	●	●
			F	G	●	●	●	●
			+					
❸	Port size (Screws are IN side only.)		**02**	1/4	●	—	—	—
			03	3/8	—	●	—	—
			04	1/2	—	—	●	—
			10	1	—	—	—	●
			+					
❹	Pilot valve	Manual override	**Nil**	Non-locking push type	●	●	●	●
			E	Push-turn locking type (Manual)	●	●	●	●

Gauge port view

∗ Same for all sizes



∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

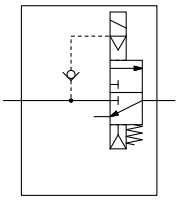
SMC

Residual Pressure Relief 3-Port Solenoid Valve

25A-VP346E/546E/746E/946E-X660/X661

Symbol

N.C.



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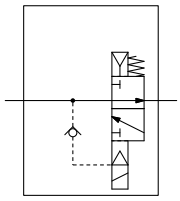
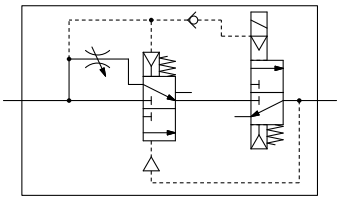


With soft start-up function

N.C.



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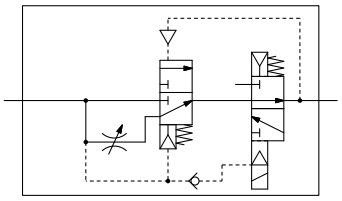
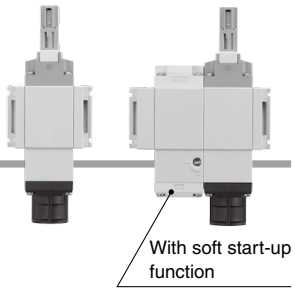




How to Order

25A – VP 3 46 E – 5 KVO Z □ 1 – □ – X660

- 1: Series compatible with secondary batteries
- 2: M12 connector
- 3: Manual override
- 4: Soft start-up function
- 5: Type of actuation

❶ Series

3	**For 25A-AMS20**	VP300
5	**For 25A-AMS30**	VP500
7	**For 25A-AMS40**	VP700
9	**For 25A-AMS60**	VP900

❷ M12 connector

		Pin assignment	Series			
			VP300	**VP500**	**VP700**	**VP900**
KO	Without connector		—	—	—	●
KVO	Without connector		●	●	●	—

❸ Manual override

Nil	Non-locking push type
E	Push-turn locking type (Manual)

❹ Soft start-up function

Nil	None
S	With soft start-up function

❺ Type of actuation

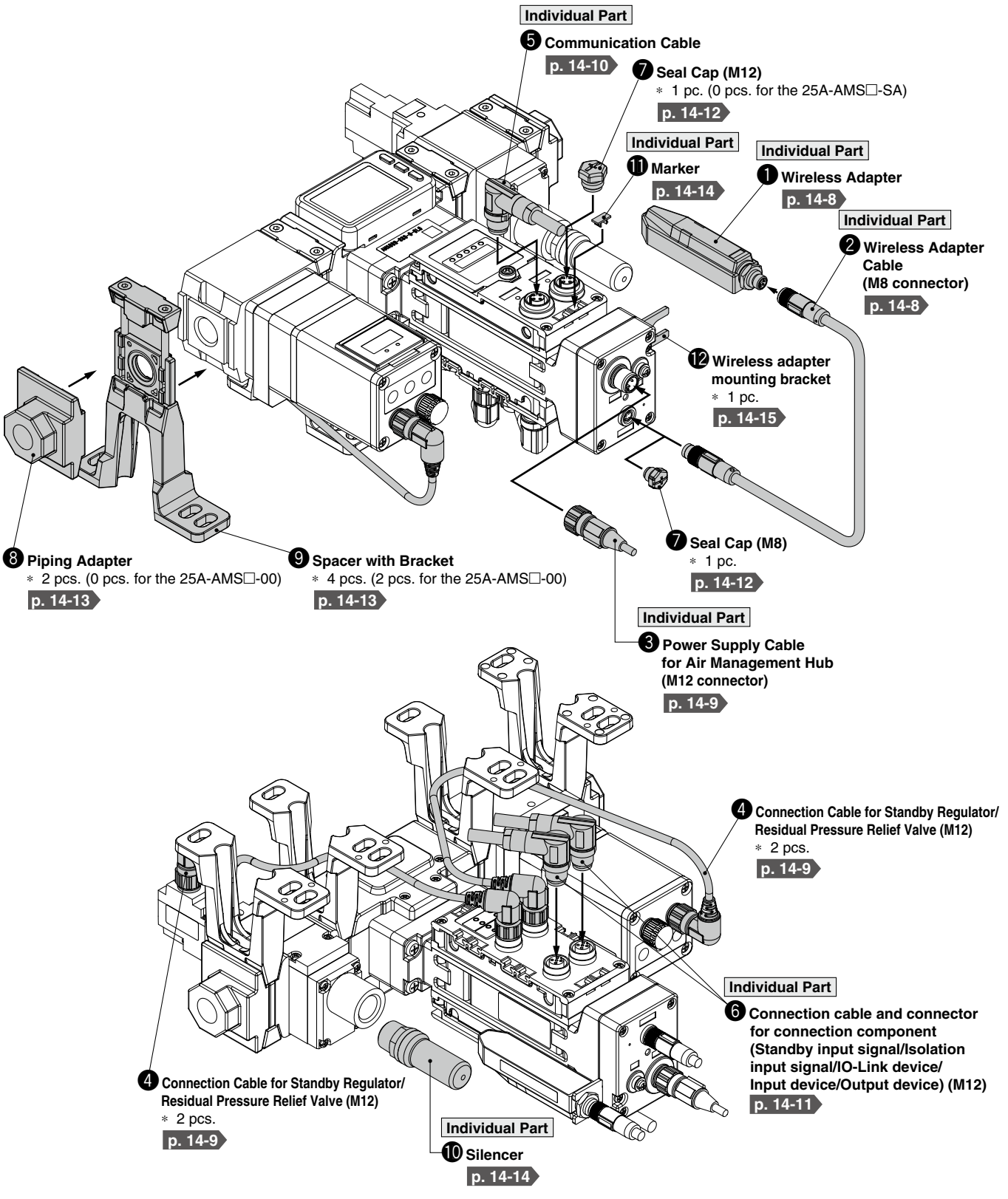
X660	N.C. (Normally closed)
X661	N.O. (Normally open)

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Accessories

List of Accessories



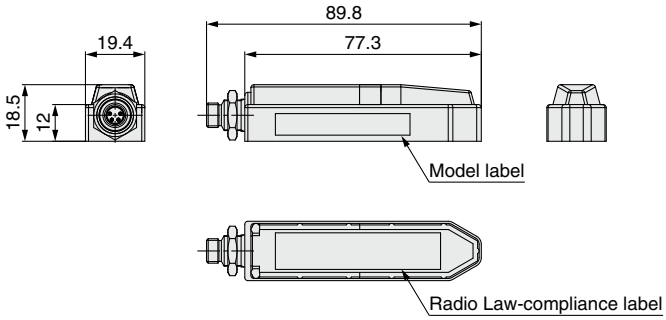
∗ The number of pieces included for the 25A-AMS

❶ Wireless Adapter

Wireless adapter for air management hub EXA1
A wireless adapter needs to be connected to both the wireless base and the wireless remote.

EXW1-A11N



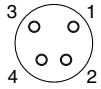


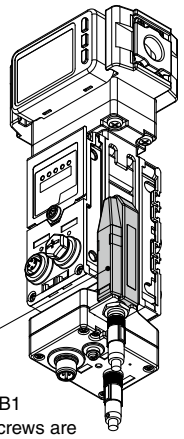
Specifications

Item		Specifications
Wireless communication	Protocol	SMC original protocol (SMC encryption)
	Radio wave type (spread)	Frequency Hopping Spread Spectrum (FHSS)
	Frequency	2.4 GHz (2403 to 2481 MHz)
	Number of frequency channels	79 ch
	Channel bandwidth	1.0 MHz
	Communication speed	1 Mbps
	Communication distance	Approx. 100 m (Depending on the operating environment)
	Radio Law certificate	Refer to the SMC website for the latest information regarding in which countries the product is certified.
Electrical	Power supply voltage range	24 VDC +10%
	Current consumption	50 mA or less
General	Enclosure	IP67
	Ambient temperature (Operating temperature)	0 to 50°C
	Ambient temperature (Storage temperature)	−10 to 60°C
	Ambient humidity	35 to 85%RH (No condensation)
	Withstand voltage	500 VAC, 1 min
	Insulation resistance	500 VDC, 10 MΩ or more
	Vibration resistance	Conforms to EN 61131-2 5 < = f < 8.4 Hz 3.5 mm 8.4 < = f < 150 Hz 9.8 m/s²
	Impact resistance	Conforms to EN 61131-2 147 m/s², 11 ms
	Standards	CE/UKCA marking, UL (CSA)*1
	Weight	40 g

*1 UL (CSA) compliance applies only when connected to an EXA1 air management hub.
*2 Order the wireless adapter cable separately.

Connector

M8, 4-pin, plug	Terminal no.	Description
	1	24V (US1)
	2	Internal bus B
	3	0V (US1)
	4	Internal bus A

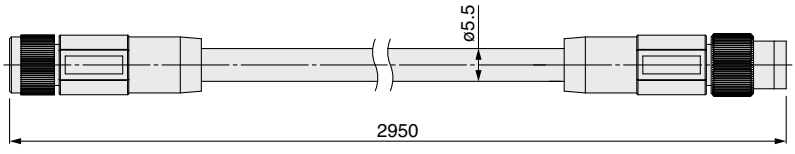


Wireless adapter
* Included parts: Fixing bracket
* Fixing bracket part no.: 25A-EXA1-AB1
* Only the screws are stainless steel.

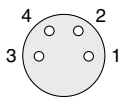
❷ Wireless Adapter Cable [M8 connector, For EXW1-A11N, With connectors on both sides (socket/plug)]

EXW1-AC030-SSPS Straight 2950 mm

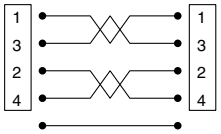
* This product must be used in a fixed position.



Socket connector pin arrangement

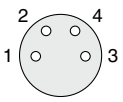


Terminal no. — Terminal no.



Connections

Plug connector pin arrangement



Item	Specifications
Cable O.D.	ø5.5 mm
Conductor nominal cross section	AWG24
Wire O.D. (Including insulator)	1.12 mm
Min. bending radius	22 mm

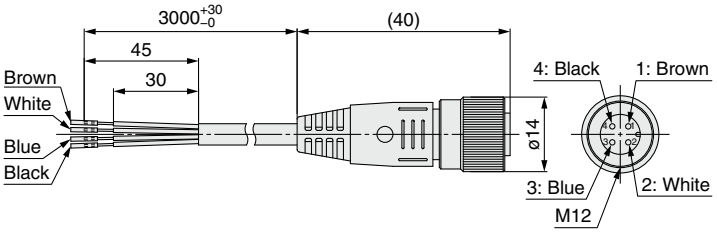
❸ Power Supply Cable (M12 connector, For EXA1)

＊ The shape of the M12 connector is A-coded (Normal key).

90-ZS-37-A-X258
Lead wire with M12 connector

Cable Specifications

Item		Specifications
Conductor	Nominal cross section	AWG23
Insulator	Outside diameter	Approx. 1.1 mm
	Color	Brown, Blue, Black, White
Sheath	Finished outside diameter	ø4

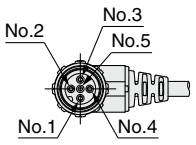


Pin no.	Pin name	Wire color
1	DC(+)	Brown
2	N.C.	White
3	DC(–)	Blue
4	N.C.	Black

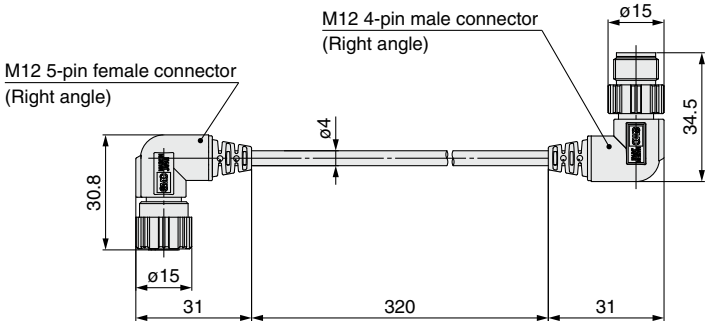
❹ Connection Cable for Standby Regulator/Residual Pressure Relief Valve [With M12 angle connectors on both sides (male/female)]

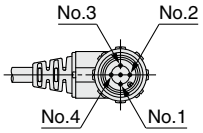
25A-EXA1-AC1 Cable length L: 320 mm
25A-EXA1-AC2 Cable length L: 220 mm

＊ Included with 25A-AMS□A/B air management systems

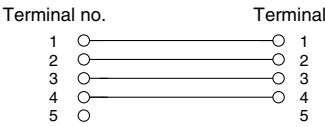


M12 5-pin female connector pin assignment





M12 4-pin male connector pin assignment



Connections

Component and Connection Cable Suitable Table

Body size	Standby electro-pneumatic regulator	Standby regulator	Residual pressure relief 3-port solenoid valve
20	25A-EXA1-AC1	25A-EXA1-AC2	25A-EXA1-AC2
30			
40			
60			25A-EXA1-AC1

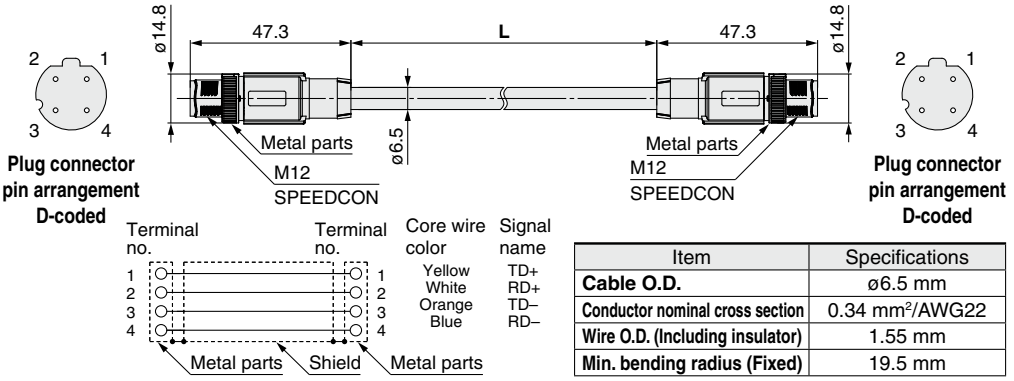
❺ Communication Cable

For EtherCAT® | For PROFINET | For EtherNet/IP™

EX9-AC 005 EN-PSPS (With connector on both sides (Plug/Plug))

Cable length (L)

005	500 mm
010	1000 mm
020	2000 mm
030	3000 mm
050	5000 mm
100	10000 mm



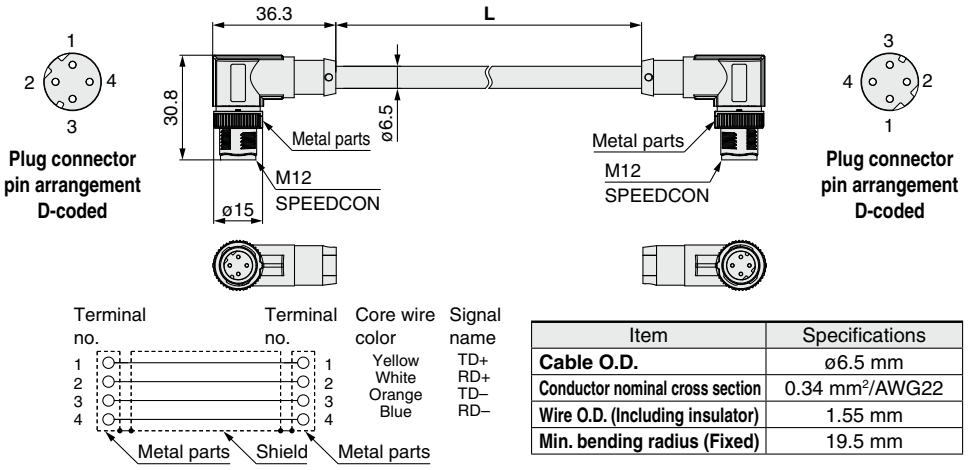
Connections (Straight cable)

Item	Specifications
Cable O.D.	ø6.5 mm
Conductor nominal cross section	0.34 mm²/AWG22
Wire O.D. (Including insulator)	1.55 mm
Min. bending radius (Fixed)	19.5 mm

EX9-AC 005 EN-PAPA (With angled connector on both sides (Plug/Plug))

Cable length (L)

005	500 mm
010	1000 mm
020	2000 mm
030	3000 mm
050	5000 mm
100	10000 mm



Connections (Straight cable)

Item	Specifications
Cable O.D.	ø6.5 mm
Conductor nominal cross section	0.34 mm²/AWG22
Wire O.D. (Including insulator)	1.55 mm
Min. bending radius (Fixed)	19.5 mm

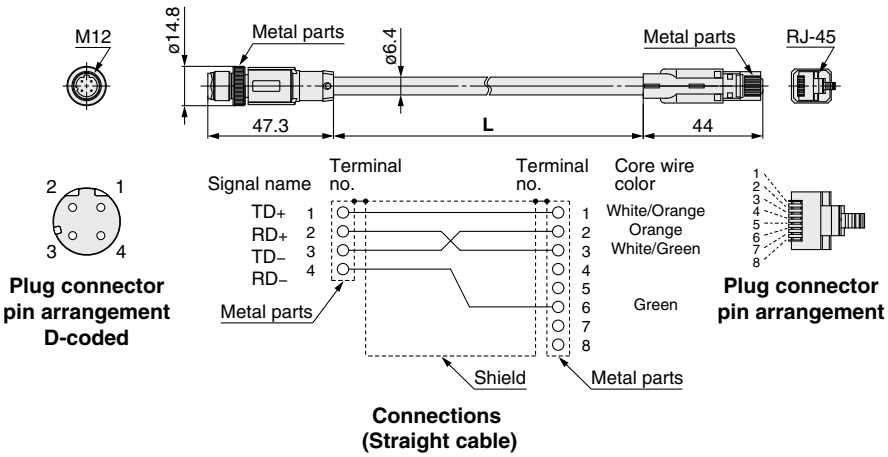
❺ Communication Cable

For EtherCAT® | **For PROFINET** | **For EtherNet/IP™**

EX9-AC 020 EN-PSRJ (Plug/RJ-45 connector)

Cable length (L)

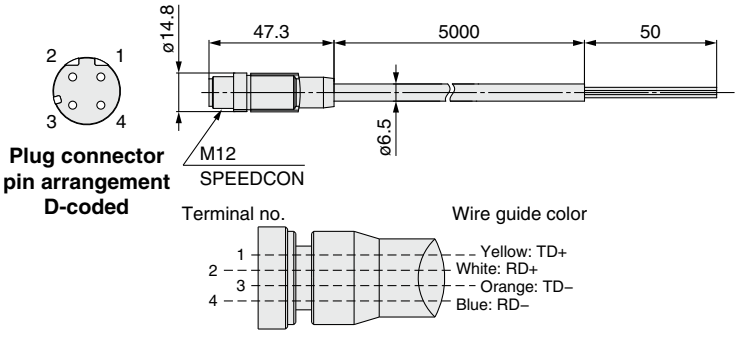
010	1000 mm
020	2000 mm
030	3000 mm
050	5000 mm
100	10000 mm



Connections (Straight cable)

Item	Specifications
Cable O.D.	ø6.4 mm
Conductor nominal cross section	0.14 mm²/AWG26
Wire O.D. (Including insulator)	0.98 mm
Min. bending radius (Fixed)	26 mm

PCA-1446566 (Plug)

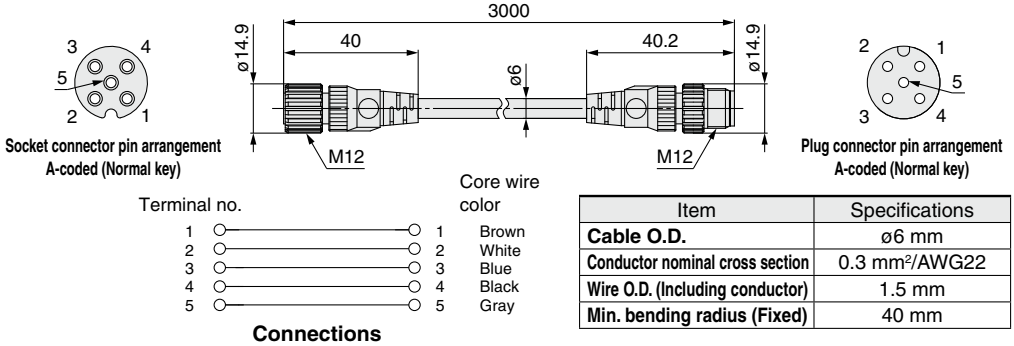


Connections

Item	Specifications
Cable O.D.	ø6.5 mm
Conductor nominal cross section	AWG22
Wire O.D. (Including insulator)	1.55 mm
Min. bending radius (Fixed)	45.5 mm

❻ Connection cable and connector for connection component (Standby input signal/Isolation input signal/IO-Link device/Input device/Output device) (M12)

IO-Link Device Cable
90-ZS-37-A-X547



Connections

Item	Specifications
Cable O.D.	ø6 mm
Conductor nominal cross section	0.3 mm²/AWG22
Wire O.D. (Including conductor)	1.5 mm
Min. bending radius (Fixed)	40 mm

❼ Seal Cap (10 pcs.)

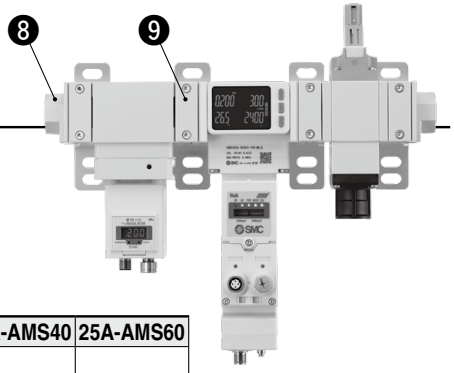
Be sure to mount a seal cap on any unused I/O connectors.
Otherwise, the specified enclosure cannot be maintained.



EX9-AWES
For M8



EX9-AWTS
For M12



❽ Piping Adapter

A piping adapter allows for the installation/removal of the component without removing the piping and thus makes maintenance easier.

E 200 - □ 01 -D

Applicable size

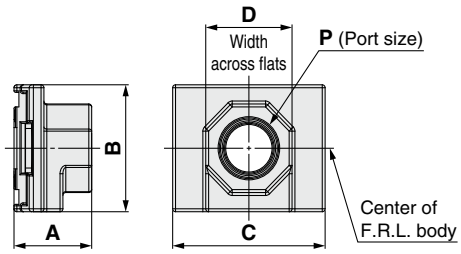
200	25A-AMS20
300	25A-AMS30
400	25A-AMS40
600	25A-AMS60

Thread type

Symbol	Thread type
Nil	Rc
F	G
N	NPT

Port size

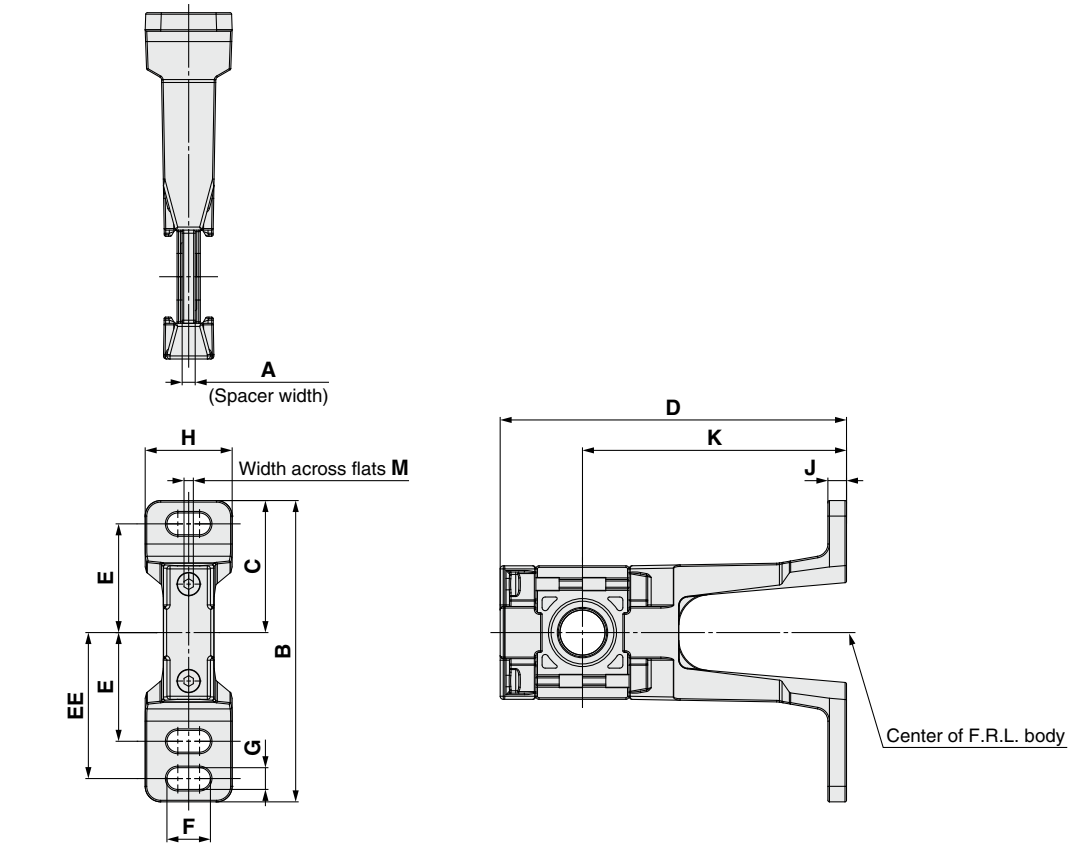
Symbol	Port size	25A-AMS20	25A-AMS30	25A-AMS40	25A-AMS60
01	1/8	●			
02	1/4	●	●		
03	3/8		●	●	
04	1/2			●	
06	3/4				●
10	1				●



Model	P	A	B	C	D
E200-□01-D	1/8	24	35	42	24
E200-□02-D	1/4	24	35	42	24
E300-□02-D	1/4	27	43	53	30
E300-□03-D	3/8	27	43	53	30
E400-□03-D	3/8	30	51	71	36
E400-□04-D	1/2	30	51	71	36
E600-□06-D	3/4	39	64	90	46
E600-□10-D	1	39	64	90	46

∗ A spacer with bracket is required for modular unit.

❾ Spacer with Bracket

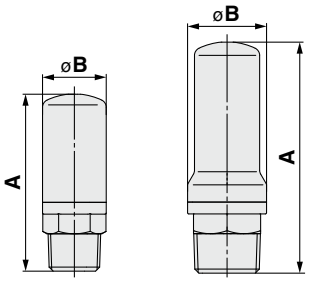


Model	A	B	C	D	E	EE	F	G	H	J	K	M	Applicable size
25A-Y200T-2-D	3.2	97	42.5	106	35	47	14	7	28	6	85	2	**25A-AMS20**
25A-Y300T-2-D	4.2	97	42.5	111.5	35	47	14	7	28	6	85	3	**25A-AMS30**
25A-Y400T-1-D	5.2	115	50	120.5	40	55	18	9	32	7	85	3	**25A-AMS40**
25A-Y600T-2-D	6.2	140	60	145	50	70	20	11	37	8	100	4	**25A-AMS60**

⑩ Silencer

Compact Resin Type

AN20 **AN30, AN40**



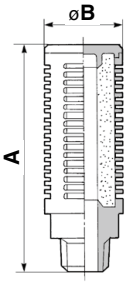


Dimensions [mm]

Model	Port size R	A	B
AN20-02	1/4	45	16.5
AN30-03	3/8	58.5	20
AN40-04	1/2	68	24

High Noise Reduction Type

AN202 to 402



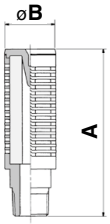


Dimensions [mm]

Model	Port size R	A	B
AN202-02	1/4	64	22
AN302-03	3/8	84	28
AN402-04	1/2	95	34

High Noise Reduction Type

ANA1-06





Dimensions [mm]

Model	Port size R	A	B
ANA1-06	3/4	111	46

Compatibility Chart for Residual Pressure Relief Valve and Silencers

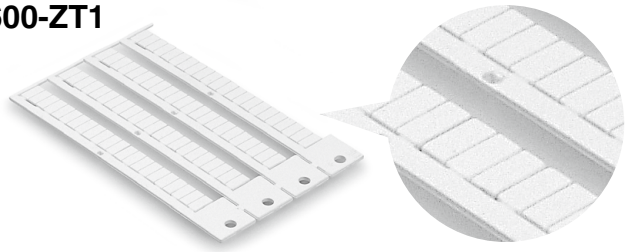
	Silencer	Compact resin type			High noise reduction type			
	Model	**AN20-02**	**AN30-03**	**AN40-04**	**AN202-02**	**AN302-03**	**AN402-04**	**ANA1-06**
	Port size	1/4	3/8	1/2	1/4	3/8	1/2	3/4
25A-VP346E	X660 (N.C.)	○	—	—	○	—	—	—
	X661 (N.O.)	○	—	—	—	—	—	—
25A-VP546E	X660 (N.C.)	—	○	—	—	○	—	—
	X661 (N.O.)	—	○	—	—	—	—	—
25A-VP746E	X660 (N.C.)	—	—	○	—	—	○	—
	X661 (N.O.)	—	○	—	—	—	—	—
25A-VP946E	X660 (N.C.)	—	—	—	—	—	—	○*1
	X661 (N.O.)	—	—	—	—	—	—	○

*1 Combined with silencer bushing: 25A-AMS-AB1

⑪ Marker (1 sheet, 88 pcs.)

The signal name of I/O device and each unit address can be entered and mounted on each unit.

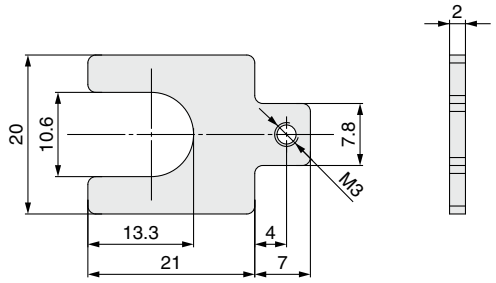
EX600-ZT1



⓬ Wireless Adapter Mounting Bracket

1 round head combination screw (M3 x 10) is included.

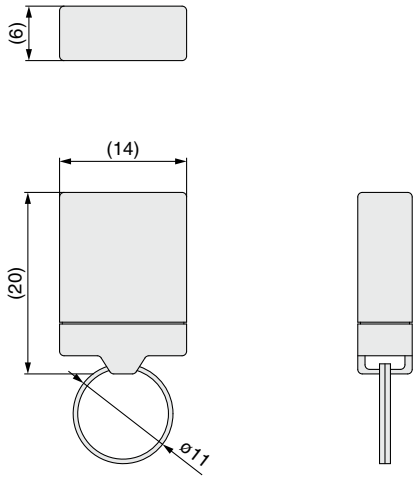
25A-EXA1-AB1



⓭ IO-Link Device Tool License Key

USB dongle

EX9-ZSW-LDT1



∗ The IO-Link Device Tool V5-PE (V5 or later only) manufactured by TMG Technologie und Engineering GmbH (hereinafter referred to as TMG) is required for setting IO-Link devices. The IO-Link Device Tool can be downloaded for free from TMG's website. However, to use it for more than 30 days, a license key for the IO-Link Device Tool is required.

Plug-in **Connector Connecting Base**

D-sub Connector

Type 10
Side Ported

25A-JSY1000/3000 Series

Internal Pilot

How to Order Manifolds

25A-JJ5SY 3 - 10 F 1 - 05 D □ - C6 □

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾

Series compatible with secondary batteries

❶ Series

1	JSY1000
3	JSY3000

❷ Type

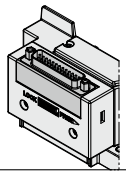
10	Side ported

❸ Connector type

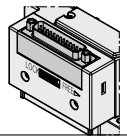
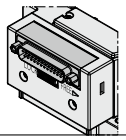
F: D-sub connector

Connector entry direction adjustable

<IP40> (25 pins)



❹ Connector entry direction

1: Upward	2: Lateral
	

❺ Valve stations

F: D-sub connector (25 pins)

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
12	12 stations	
02	2 stations	Specified layout*2 (Up to 16 solenoids available)
⋮	⋮	
16	16 stations	

*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

* This also includes the number of blanking plates.

❻ P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 16 stations)

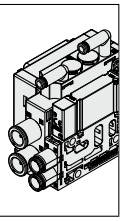
❼ SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

* The 3/5(E) port is plugged for the built-in silencer type.

❽ A, B port size (Metric/One-touch fitting)

Symbol	A, B port		JSY1000	JSY3000
C4	Straight	ø4	●	—
C6		ø6	●	●
C8		ø8	—	●
CM*1		Straight port, mixed sizes	●	●
P, E port size (One-touch fittings)			ø8	ø10



*1 Indicate the sizes on the manifold specification sheet for "CM."

* The JSY1000 manifold pitch for C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

❾ Mounting and Option

Symbol	Mounting
Nil	Direct mounting
D□	DIN rail mounting

DIN Rail Option

Nil	DIN rail mounting (With DIN rail)	
0	DIN rail mounting (Without DIN rail)	
3	For 3 stations	Specify a length longer than that of the standard rail.
⋮	⋮	
16	For 16 stations	

* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown above.)

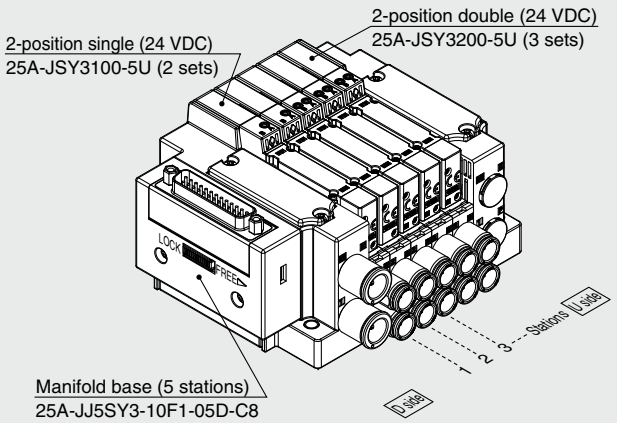
* Refer to the **Web Catalog** for details on securing the DIN rail mounting type manifold.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

How to Order Manifold Assembly

Example (25A-JJ5SY3-10F1-□)



25A-JJ5SY3-10F1-05D-C8 ···1 set (Type 10 5-station manifold base part no.)
∗ 25A-JSY3100-5U ·····2 sets (2-position single part no.)
∗ 25A-JSY3200-5U ·····3 sets (2-position double part no.)
→ The asterisk denotes the symbol for the assembly. Prefix it to the part numbers of the valve, etc.

· For the valve arrangement, the valve closest to the D side is considered the 1st station.
· Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to the **Web Catalog** for valve specifications.

25A-JSY 3 1 00 □ -5 □ □

❶ ❷ ❸ ❹ ❺

● Series compatible with secondary batteries

❶ Series

1	JSY1000
3	JSY3000

❷ Type of actuation

1	2-position	Single
2		Double
3	3-position	Closed center
4		Exhaust center
5		Pressure center
A	4-position dual 3-port	N.C./N.C.
B		N.O./N.O.
C		N.C./N.O.

❸ Coil specifications

Symbol	Coil specifications	JSY1000	JSY3000
Nil	Standard	—	●
T	With power-saving circuit (Continuous duty type)	●	●

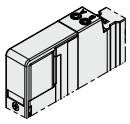
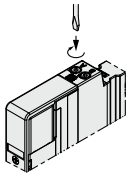
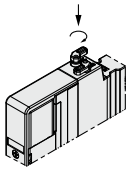
∗ For the JSY1000 series, only the power-saving circuit specification is available.
∗ Be careful of the energizing time when the power-saving circuit is selected.

❹ Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification	JSY1000	JSY3000
U	●	●	Non-polar	—	●
Z			Polar Positive common	●	●
NZ			Polar Negative common	●	●

∗ When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to the **Web Catalog**.
∗ Only "Z" and "NZ" types are available with a power saving circuit.

❺ Manual override

Symbol/Specification	JSY1000	JSY3000
Nil: Non-locking push type 	●	●
D: Push-turn locking slotted type 	●	●
E: Push-turn locking lever type 	—	●

∗ Push-turn locking lever type "E" is not available for the JSY1000.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

⚠ Protective class class Ⅲ (Mark: ⟨Ⅲ⟩)

⚠ Caution

If the JSY3000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification.

∗ **When ordering a valve individually, the base gasket is not included.**
Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance.
Refer to the **Web Catalog** for base gasket part numbers.
Refer to page 24 for mounting screw part numbers.

Plug-in Connector Connecting Base

Terminal Block Box

Type 10
Side Ported

25A-JSY1000/3000 Series

Internal Pilot

How to Order Manifolds

25A – JJ5SY [3] – 10 [T] – [05] [D] [ ] – [C6] [ ]

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

❶ Series

1	JSY1000
3	JSY3000

❷ Type

10	Side ported

❸ Wiring

T	Terminal block box

❹ Valve stations

T: Terminal block box

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
10	10 stations	
02	2 stations	Specified layout*2 (Up to 16 solenoids available)
⋮	⋮	
16	16 stations	

*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

*3 This also includes the number of blanking plates.

❺ P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 16 stations)

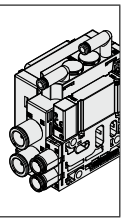
❻ SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

* The 3/5(E) port is plugged for the built-in silencer type.
* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

❼ A, B port size (Metric/One-touch fitting)

Symbol		A, B port	JSY1000	JSY3000
C4	Straight	ø4	●	—
C6		ø6	●	●
C8		ø8	—	●
CM*1		Straight port, mixed sizes	●	●
P, E port size (One-touch fittings)			ø8	ø10



*1 Indicate the sizes on the manifold specification sheet for "CM."

* The JSY1000 manifold pitch for C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

❽ Mounting and Option

Symbol	Mounting
Nil	Direct mounting
D□	DIN rail mounting

* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
* Refer to the **Web Catalog** for details on securing the DIN rail mounting type manifold.

DIN Rail Option

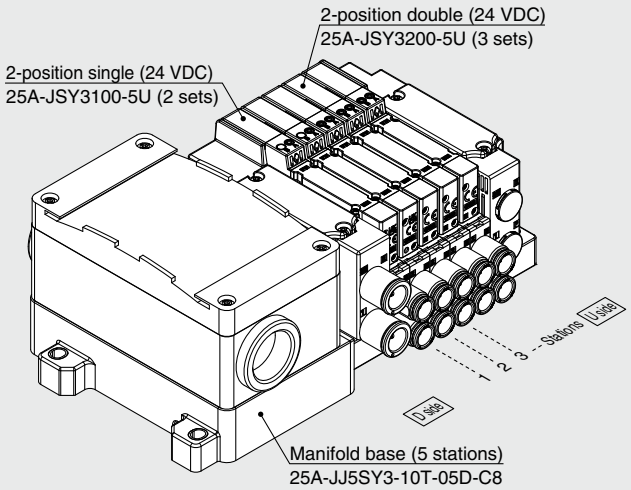
Nil	DIN rail mounting (With DIN rail)	
0	DIN rail mounting (Without DIN rail)	
3	For 3 stations	Specify a length longer than that of the standard rail.
⋮	⋮	
16	For 16 stations	

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

How to Order Manifold Assembly

Example (25A-JJ5SY3-10T-□)



25A-JJ5SY3-10T-05D-C8 ····· **1 set (Type 10 5-station manifold base part no.)**
＊ 25A-JSY3100-5U ····· **2 sets (2-position single part no.)**
＊ 25A-JSY3200-5U ····· **3 sets (2-position double part no.)**
The asterisk denotes the symbol for the assembly.
Prefix it to the part numbers of the valve, etc.

- For the valve arrangement, the valve closest to the D side is considered the 1st station.
- Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to the **Web Catalog** for valve specifications.

25A-JSY 3 1 0 0 □ -5 □ □
❶ ❷ ❸ ❹ ❺

Series compatible with secondary batteries

❶ Series

1	JSY1000
3	JSY3000

❷ Type of actuation

1	2-position	Single
2		Double
3	3-position	Closed center
4		Exhaust center
5		Pressure center
A	4-position dual 3-port	N.C./N.C.
B		N.O./N.O.
C		N.C./N.O.

❸ Coil specifications

Symbol	Coil specifications	JSY1000	JSY3000
Nil	Standard	—	●
T	With power-saving circuit (Continuous duty type)	●	●

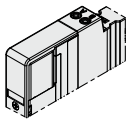
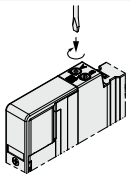
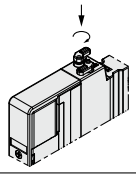
＊ For the JSY1000 series, only the power-saving circuit specification is available.
＊ Be careful of the energizing time when the power-saving circuit is selected.

❹ Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification	JSY1000	JSY3000
U	●	●	Non-polar	—	●
Z			Polar Positive common	●	●
NZ			Polar Negative common	●	●

＊ When the non-polar common specification type is selected, take measures to prevent surge voltage. For details, refer to the **Web Catalog**.
＊ Only "Z" and "NZ" types are available with a power saving circuit.

❺ Manual override

Symbol/Specification	JSY1000	JSY3000
Nil: Non-locking push type 	●	●
D: Push-turn locking slotted type 	●	●
E: Push-turn locking lever type 	—	●

＊ Push-turn locking lever type "E" is not available for the JSY1000.

＊ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

⚠ Protective class class Ⅲ (Mark: ⧫)

⚠ Caution

If the JSY3000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification.

＊ **When ordering a valve individually, the base gasket is not included.**
Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance.
Refer to the **Web Catalog** for base gasket part numbers.
Refer to page 24 for mounting screw part numbers.

Plug-in Connector Connecting Base

EX260

Type 10
Side Ported

25A-JSY1000/3000 Series

Internal Pilot

How to Order Manifolds

25A – JJ5SY ❶3 – ❷10 S ❸QA – ❹05 ❺D ❻□ – ❼C6 ❽□

Series compatible with secondary batteries

❶ Series

1	JSY1000
3	JSY3000

❷ Type

10	Side ported

❸ SI unit (Output polarity, Protocol, Number of outputs, Communication connector)

Symbol (Output polarity)		Protocol	Number of outputs	Communication connector
Positive common (NPN)	Negative common (PNP)			
0*1		Without SI unit		
QA	QAN	DeviceNet™	32	M12
QB	QBN		16	
NA	NAN	PROFIBUS DP	32	M12
NB	NBN		16	
VA	VAN	CC-Link	32	M12
VB	VBN		16	
DA	DAN	EtherCAT	32	M12
DB	DBN		16	
FA	FAN	PROFINET	32	M12
FB	FBN		16	
EA	EAN	EtherNet/IP™	32	M12
EB	EBN		16	

*1 Without SI unit, the output polarity is decided by the SI unit used.
Ensure a match with the common specification of the valves to be used.
* DIN rail cannot be mounted without SI unit.

❺ P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 16 stations)

❻ SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

* The 3/5(E) port is plugged for the built-in silencer type.
* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

❹ Valve stations

In the case of the 32-output SI unit

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
16	16 stations	

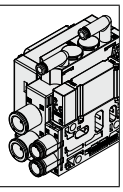
In the case of the 16-output SI unit

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
08	8 stations	
02	2 stations	Specified layout*2 (Up to 16 solenoids available)
⋮	⋮	
16	16 stations	

*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations.
The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
* This also includes the number of blanking plates.
* For the product without the SI unit (S0), note the maximum number of solenoids of the SI unit that will be mounted. If the layout is specified, indicate it on the manifold specification sheet.

❼ A, B port size (Metric/One-touch fitting)

Symbol	A, B port		JSY1000	JSY3000
C4	Straight	ø4	●	—
C6		ø6	●	●
C8		ø8	—	●
CM*1		Straight port, mixed sizes	●	●
P, E port size (One-touch fittings)			ø8	ø10



*1 Indicate the sizes on the manifold specification sheet for "CM."
* The JSY1000 manifold pitch for C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

❽ Mounting and Option

Symbol	Mounting
Nil	Direct mounting
D□	DIN rail mounting

* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)
* Refer to the **Web Catalog** for details on securing the DIN rail mounting type manifold.
* DIN rail mounting (D□) is not available for the product without the SI unit (S0).

DIN Rail Option

Nil	DIN rail mounting (With DIN rail)	
0	DIN rail mounting (Without DIN rail)	
3	For 3 stations	Specify a length longer than that of the standard rail.
⋮	⋮	
16	For 16 stations	

* Refer to L3 of the dimensions for the DIN rail length and order separately. (Refer to the **Web Catalog** for the DIN rail part number.)

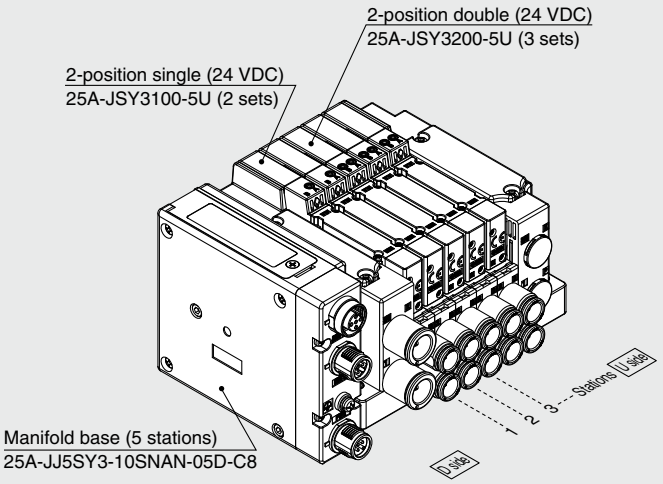
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

For details on the EX260 Integrated Type (For Output) Serial Transmission System, refer to the Web Catalog and the Operation Manual. For the part numbers of the SI units to be mounted, refer to the Web Catalog. Please download the Operation Manual via the SMC website: https://www.smcworld.com

How to Order Manifold Assembly

Example (25A-JJ5SY3-10SNAN-□)



25A-JJ5SY3-10SNAN-05D-C8 ···1 set (Type 10 5-station manifold base part no.)
∗ **25A-JSY3100-5U** ·····2 sets (2-position single part no.)
∗ **25A-JSY3200-5U** ·····3 sets (2-position double part no.)
→ **The asterisk denotes the symbol for the assembly. Prefix it to the part numbers of the valve, etc.**

· For the valve arrangement, the valve closest to the D side is considered the 1st station.
· Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to the **Web Catalog** for valve specifications.

25A-JSY 3 1 00 □ -5 □ □

❶ ❷ ❸ ❹ ❺

Series compatible with secondary batteries

❶ Series

1	JSY1000
3	JSY3000

❷ Type of actuation

1	2-position	Single
2		Double
3	3-position	Closed center
4		Exhaust center
5		Pressure center
A	4-position dual 3-port	N.C./N.C.
B		N.O./N.O.
C		N.C./N.O.

❸ Coil specifications

Symbol	Coil specifications	JSY1000	JSY3000
Nil	Standard	—	●
T	With power-saving circuit (Continuous duty type)	●	●

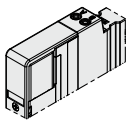
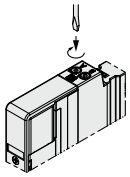
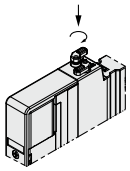
∗ For the JSY1000 series, only the power-saving circuit specification is available.
∗ Be careful of the energizing time when the power-saving circuit is selected.

❹ Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification	JSY1000	JSY3000
U	●	●	Non-polar	—	●
Z			Polar Positive common	●	●
NZ			Polar Negative common	●	●

∗ Select "U" or "Z" for the valve when the SI unit output polarity is positive common. Select "U" or "NZ" for the valve when the SI unit output polarity is negative common.
∗ Only "Z" and "NZ" types are available with a power saving circuit.

❺ Manual override

Symbol/Specification	JSY1000	JSY3000
Nil: Non-locking push type 	●	●
D: Push-turn locking slotted type 	●	●
E: Push-turn locking lever type 	—	●

∗ Push-turn locking lever type "E" is not available for the JSY1000.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

⚠ Protective class class Ⅲ (Mark: ⟨Ⅲ⟩)

⚠ Caution

If the JSY3000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification.

∗ **When ordering a valve individually, the base gasket is not included.**
Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance. Refer to the **Web Catalog** for base gasket part numbers.
Refer to page 24 for mounting screw part numbers.

Plug-in Connector Connecting Base

EX120

Type 10
Side Ported

25A-JSY1000/3000 Series

Internal Pilot

How to Order Manifolds

25A – JJ5SY 3 – 10 S3 Q – 05 D □ – □ □

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

❶ Series

1	JSY1000
3	JSY3000

❷ Type

10	Side ported

❸ SI unit

0	Without SI unit
Q	DeviceNet™ (Positive common NPN)
V	CC-Link (Positive common NPN)

∗ Ensure a match with the common specification of the valve to be used.

❹ Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring∗1
⋮	⋮	
08	8 stations	
02	2 stations	Specified layout∗2 (Up to 16 solenoids available)
⋮	⋮	
16	16 stations	

∗1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

∗2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

∗ This also includes the number of blanking plates.

❺ P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 16 stations)

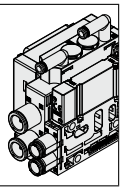
❻ SUP/EXH block

Nil	Internal pilot
S	Internal pilot, Built-in silencer

∗ The 3/5(E) port is plugged for the built-in silencer type.

❼ A, B port size (Metric/One-touch fitting)

Symbol	A, B port		JSY1000	JSY3000
C4	Straight	ø4	●	—
C6		ø6	●	●
C8		ø8	—	●
CM∗1		Straight port, mixed sizes	●	●
P, E port size (One-touch fittings)			ø8	ø10



∗1 Indicate the sizes on the manifold specification sheet for "CM."

∗ The JSY1000 manifold pitch for C4 is 6.5 mm, and 9 mm for C6. When CM is selected, the manifold pitch is different depending on the selected fitting.

❽ Mounting and Option

Symbol	Mounting
Nil	Direct mounting
D□	DIN rail mounting

∗ Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" shown below.)

∗ Refer to the **Web Catalog** for details on securing the DIN rail mounting type manifold.

DIN Rail Option

Nil	DIN rail mounting (With DIN rail)	
0	DIN rail mounting (Without DIN rail)	
3	For 3 stations	Specify a length longer than that of the standard rail.
⋮	⋮	
16	For 16 stations	

∗ If the DIN rail must be mounted without an SI unit, select D0. Refer to L3 of the dimensions for the DIN rail length and order separately. (Refer to the **Web Catalog** for the DIN rail part number.)

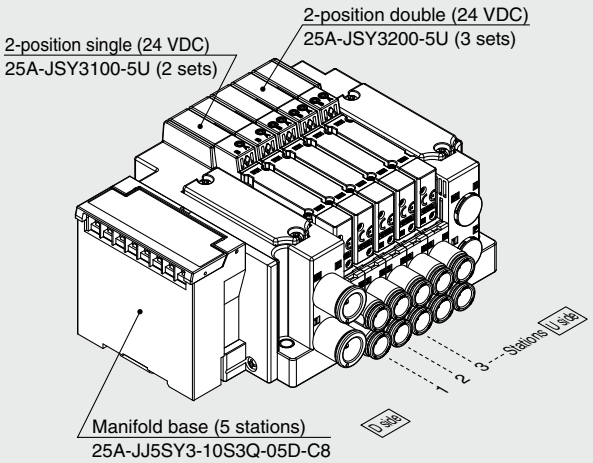
∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

For details on the EX120 Integrated Type (For Output) Serial Transmission System, refer to the Web Catalog and the Operation Manual. For the part numbers of the SI units to be mounted, refer to the Web Catalog. Please download the Operation Manual via the SMC website: https://www.smcworld.com

How to Order Manifold Assembly

Example (25A-JJ5SY3-10S3Q-□)



25A-JJ5SY3-10S3Q-05D-C8 ··1 set (Type 10 5-station manifold base part no.)
∗ **25A-JSY3100-5U** ·····2 sets (2-position single part no.)
∗ **25A-JSY3200-5U** ·····3 sets (2-position double part no.)
→ **The asterisk denotes the symbol for the assembly. Prefix it to the part numbers of the valve, etc.**

· For the valve arrangement, the valve closest to the D side is considered the 1st station.
· Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

Internal Pilot

How to Order Valves (With mounting screw)

Refer to the **Web Catalog** for valve specifications.

25A-JSY 3 1 00 □ -5 □ □

❶ ❷ ❸ ❹ ❺

25A — Series compatible with secondary batteries

❶ Series

1	JSY1000
3	JSY3000

❷ Type of actuation

1	2-position	Single
2		Double
3	3-position	Closed center
4		Exhaust center
5		Pressure center
A	4-position dual 3-port	N.C./N.C.
B		N.O./N.O.
C		N.C./N.O.

❸ Coil specifications

Symbol	Coil specifications	JSY1000	JSY3000
Nil	Standard	—	●
T	With power-saving circuit (Continuous duty type)	●	●

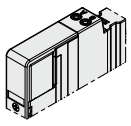
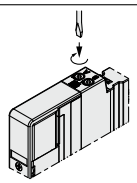
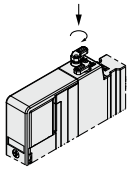
∗ For the JSY1000 series, only the power-saving circuit specification is available.
∗ Be careful of the energizing time when the power-saving circuit is selected.

❹ Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification	JSY1000	JSY3000
U	●	●	Non-polar	—	●
Z			Polar Positive common	●	●
NZ			Polar Negative common	●	●

∗ Only "Z" and "NZ" types are available with a power saving circuit.

❺ Manual override

Symbol/Specification	JSY1000	JSY3000
Nil: Non-locking push type 	●	●
D: Push-turn locking slotted type 	●	●
E: Push-turn locking lever type 	—	●

∗ Push-turn locking lever type "E" is not available for the JSY1000.
∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

⚠ Protective class class Ⅲ (Mark: ⟨Ⅲ⟩)

⚠ Caution

If the JSY3000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification.

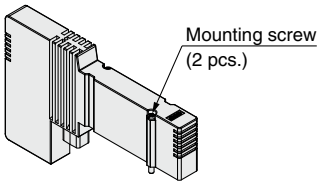
∗ **When ordering a valve individually, the base gasket is not included.**
Since the base gasket is attached to the manifold, please order the base gasket separately if it is needed for maintenance. Refer to the **Web Catalog** for base gasket part numbers.
Refer to page 24 for mounting screw part numbers.

25A-JSY1000/3000 Series
Manifold Options

■ Blanking plate assembly

(With two mounting screws)

Used when valve additions are expected or for maintenance. A structure is in place on the blanking plate to prevent the mounting screws from sliding.



How to Order Blanking Plate Assembly

25A – JSY [3] 1M – 26P – 1A

Series

1	JSY1000
3	JSY3000

SI Unit Part Nos.

Description	SI unit part no.	Note
EX260 SI unit	**EX260-SPR1-X117**	PROFIBUS DP M12 connector, 32 outputs, Negative common (PNP)
	EX260-SPR2-X117	PROFIBUS DP M12 connector, 32 outputs, Positive common (NPN)
	EX260-SPR3-X117	PROFIBUS DP M12 connector, 16 outputs, Negative common (PNP)
	EX260-SPR4-X117	PROFIBUS DP M12 connector, 16 outputs, Positive common (NPN)
	EX260-SDN1-X117	DeviceNet® M12 connector, 32 outputs, Negative common (PNP)
	EX260-SDN2-X117	DeviceNet® M12 connector, 32 outputs, Positive common (NPN)
	EX260-SDN3-X117	DeviceNet® M12 connector, 16 outputs, Negative common (PNP)
	EX260-SDN4-X117	DeviceNet® M12 connector, 16 outputs, Positive common (NPN)
	EX260-SEC1-X117	EtherCAT M12 connector, 32 outputs, Negative common (PNP)
	EX260-SEC2-X117	EtherCAT M12 connector, 32 outputs, Positive common (NPN)
	EX260-SEC3-X117	EtherCAT M12 connector, 16 outputs, Negative common (PNP)
	EX260-SEC4-X117	EtherCAT M12 connector, 16 outputs, Positive common (NPN)
	EX260-SMJ1-X117	CC-Link M12 connector, 32 outputs, Negative common (PNP)
	EX260-SMJ2-X117	CC-Link M12 connector, 32 outputs, Positive common (NPN)
	EX260-SMJ3-X117	CC-Link M12 connector, 16 outputs, Negative common (PNP)
	EX260-SMJ4-X117	CC-Link M12 connector, 16 outputs, Positive common (NPN)
	EX260-SPN1-X117	PROFINET M12 connector, 32 outputs, Negative common (PNP)
	EX260-SPN2-X117	PROFINET M12 connector, 32 outputs, Positive common (NPN)
	EX260-SPN3-X117	PROFINET M12 connector, 16 outputs, Negative common (PNP)
	EX260-SPN4-X117	PROFINET M12 connector, 16 outputs, Positive common (NPN)
	EX260-SEN1-X117	EtherNet/IP™ M12 connector, 32 outputs, Negative common (PNP)
	EX260-SEN2-X117	EtherNet/IP™ M12 connector, 32 outputs, Positive common (NPN)
	EX260-SEN3-X117	EtherNet/IP™ M12 connector, 16 outputs, Negative common (PNP)
	EX260-SEN4-X117	EtherNet/IP™ M12 connector, 16 outputs, Positive common (NPN)
EX120 SI unit	**EX120-SMJ1-X220**	CC-Link (Terminal block, 16 outputs, Positive common (NPN))
	EX120-SDN1-X220	DeviceNet® (Terminal block, 16 outputs, Positive common (NPN))

One-touch Fittings Part Nos.

Series / Port size		25A-JSY1000		25A-JSY3000	Note
		6.5 mm pitch	9 mm pitch		
A, B port	ø4	25A-KQSY10-C4-X1336	—	—	The part number is for 1 piece. (Sales unit: 10 pcs.)
	ø6	—	25A-KQSY11-C6-X1336	25A-KQSY30-C6	
	ø8	—		25A-KQSY30-C8-X1336	
P, E port	ø8	25A-KQSY30-C8-X1336		—	
	ø10	—		25A-KQSY31-C10-X1336	

How to Order Individual SUP/EXH Spacer Assembly

One-touch fitting Straight type

25A – JSY [3] 1M – [38] P – 1A – [C6]

Series

1	JSY1000
3	JSY3000

Spacer type

38	Individual SUP spacer
39	Individual EXH spacer

Port size (Metric)

Symbol	P, E port	JSY1000	JSY3000
C4	ø4 One-touch fitting	●	—
C6	ø6 One-touch fitting	—	●

Part numbers of mounting screw (2 pcs. of each)

JSY1000: 25A-JSY11V-23-5A
JSY3000: 25A-JSY31V-23-2A

Manifold Parts Nos./For the 25A-JJ5SY1-10, 25A-JJ5SY3-10

Description	25A-JSY1000		25A-JSY3000
	6.5 mm pitch	9 mm pitch	
Tie-rod for additional stations	**JSY11M-49P-4-1-A** (6.5 mm pitch)	**JSY11M-49P-3-1-A** (9 mm pitch)	**JSY31M-49P-2-1-A** (11.5 mm pitch)
Tie-rod	**JSY11M-49P-4-□-A** (6.5 mm pitch)	**JSY11M-49P-3-□-A** (9 mm pitch)	**JSY31M-49P-2-□-A** (11.5 mm pitch)
Valve mounting screw	**25A-JSY11V-23-4A** (M1.4 x 21.5)		**25A-JSY31V-23-1A** (M2 x 25)
Clamp bracket (for connector connecting base)	**25A-JSY11M-15P-1A** (Refer to the table below.) **25A-JSY11M-15P-2A** (Refer to the table below.)		**25A-SY30M-15-1A**

Table. 25A-JSY1000 series clamp bracket

Wiring (JSY1000 series)		25A-JSY11M-15P-1A	25A-JSY11M-15P-2A
F	D-sub connector	●	—
T	Terminal block box	—	●
S□□	EX260	●	—
S3	EX120	●	—

Manifold Parts Nos.

Ⓐ Manifold block assembly

25A − JSY 3 1M − 2P − 1 D A − C8

Series

1	JSY1000
3	JSY3000

Manifold pitch

1	JSY1000 (6.5 mm pitch) JSY3000 (11.5 mm pitch)
2	JSY1000 (9 mm pitch)

Wiring type

S	Single wiring
D	Double wiring

A, B port size (One-touch fittings)

Symbol	A, B port	JSY1000		JSY3000
		6.5 mm pitch	9 mm pitch	
C4	ø4 One-touch fitting	●	—	—
C6	ø6 One-touch fitting	—	●	●
C8	ø8 One-touch fitting	—		●

Manifold Parts Nos.

Ⓑ SUP/EXH end block assembly

25A − JSY [3] 1M − 3P − 1A [ ] − [C10] [ ]

Series

1	JSY1000
3	JSY3000

Pilot, Silencer type

Symbol	Pilot type: Internal	Built-in silencer
Nil	●	—
S	●	●

P, E port size (One-touch fittings)

Symbol	P, E port	JSY1000	JSY3000
C8	ø8 One-touch fitting	●	—
C10	ø10 One-touch fitting	—	●
00	Plug	●	●

Mounting

Nil	Direct mounting
D0	DIN rail mounting (Without DIN rail)
D00∗1	DIN rail mounting (Without DIN rail)

∗1 Part number only for the 25A-JSY1000
Part number is different depending on the wiring.
Refer to Table 1.

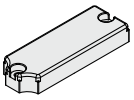
Table 1. JSY1000 series DIN rail mounting

Symbol	Wiring
D0	D-sub connector (**F** type) EX260 (**S**□□ type) EX120 (**S3** type)
D00	Terminal block box (**T** type)

Clamp bracket

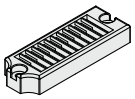
Series		Part no.
25A-JSY1000	For **D0**	25A-JSY11M-15P-1A
	For **D00**	25A-JSY11M-15P-2A
25A-JSY3000		25A-SY30M-15-1A

■ Cover, Silencer cover for SUP/EXH (end) block assembly



Cover
(Internal pilot)

25A − JSY [3] 1M − 4P − 1A



Silencer cover
(Internal pilot, Built-in silencer)

25A − JSY [3] 1M − 5P − 1A

Series

1	JSY1000
3	JSY3000

Manifold Parts Nos.

Ⓒ SUP/EXH block assembly

For D-sub connector

25A-JSY [3] 1M-1P-3A [ ] [1] - [C10] [ ]

Series

1	JSY1000
3	JSY3000

Mounting

Nil	Direct mounting
D0	DIN rail mounting (Without DIN rail)

Pilot, Silencer type

Symbol	Pilot type: Internal	Built-in silencer
Nil	●	—
S	●	●

P, E port size (One-touch fittings)

Symbol	P, E port	JSY1000	JSY3000
C8	ø8 One-touch fitting	●	—
C10	ø10 One-touch fitting	—	●
00	Plug	●	●

Connector entry direction

1	Upward
2	Lateral

For the terminal block box or EX260

25A-JSY [3] 1M-1P-1A [ ] - [C10] [ ]

Series

1	JSY1000
3	JSY3000

Mounting

Symbol	Mounting	JSY1000: Terminal block	JSY1000: EX260	JSY3000
Nil	Mounting	●	●	●
D00	Direct mounting	●	—	—
D0	DIN rail mounting (Without DIN rail)	—	●	●

Pilot, Silencer type

Symbol	Pilot type: Internal	Built-in silencer
Nil	●	—
S	●	●

P, E port size (One-touch fittings)

Symbol	P, E port	JSY1000	JSY3000
C8	ø8 One-touch fitting	●	—
C10	ø10 One-touch fitting	—	●
00	Plug	●	●

For EX120

25A-JSY [3] 1M-1P-14A [ ] - [C10] [ ]

Series

1	JSY1000
3	JSY3000

Mounting

Nil	Direct mounting
D0	DIN rail mounting (Without DIN rail)

Pilot, Silencer type

Symbol	Pilot type: Internal	Built-in silencer
Nil	●	—
S	●	●

P, E port size (One-touch fittings)

Symbol	P, E port	JSY1000	JSY3000
C8	ø8 One-touch fitting	●	—
C10	ø10 One-touch fitting	—	●
00	Plug	●	●

∗ Refer to page 25 for clamp bracket part numbers.

How to Order Pilot Valves

25A − V112 □ − 5 A

Rated voltage

5	24 VDC

Coil type

Nil	Standard
T	With power-saving circuit

Pilot cover

25A − SY30V − 25AS (For 25A-JSY3000)

∗ The pilot valve of the 25A-JSY1000 series cannot be replaced.

Type 40
Side Ported

Non Plug-in Metal Base
25A-JSY1000/3000 Series

CE UK CA RoHS

Internal Pilot

How to Order Manifolds

25A – JJ5SY 3 – 40 – 05 D – C6 □

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻

❶ Series

1	JSY1000
3	JSY3000

❷ Type

40	Side ported

❸ Valve stations

Symbol	Stations
02	2 stations
⋮	⋮
20	20 stations

❹ P, E port entry

U	U side*1
D	D side*1
B	Both sides

*1 Plugs are mounted on the opposite side of the selected ports.

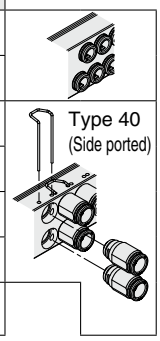
❺ A, B port size

Thread piping

Symbol	A, B port	JSY1000	JSY3000
M3	M3 x 0.5	●	—
M5	M5 x 0.8	●	●
01	1/8	—	●

One-touch fitting (Metric)

	Symbol	A, B port	JSY1000	JSY3000
Fixed	C4	ø4	●	—
	C6	ø6	—	●
Replaceable	KC4	ø4	●	—
	KC6	ø6	●	●
	KC8	ø8	—	●
	M*1	A, B ports mixed	—	●
P, E port size (Thread piping)			1/8	1/4



*1 When ports are mixed sizes, indicate the piping specifications on the manifold specification sheet.

❻ Thread type

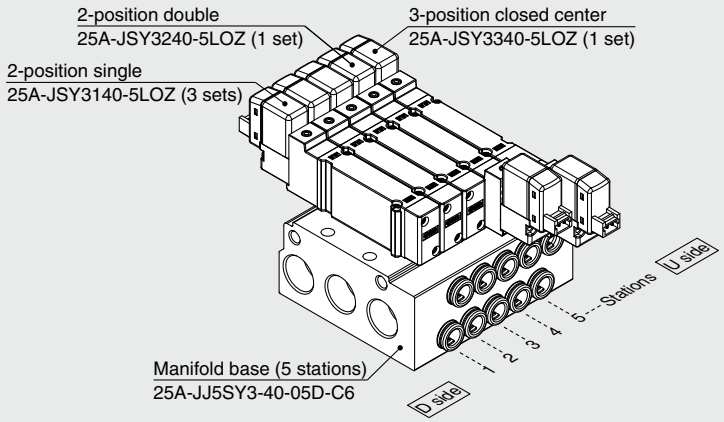
Nil	Rc

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

How to Order Manifold Assembly

Example (25A-JJ5SY3-40-□)



25A-JJ5SY3-40-05D-C6 ··1 set (Type 40 5-station manifold base part no.)
* **25A-JSY3140-5LOZ** ·····3 sets (2-position single part no.)
* **25A-JSY3240-5LOZ** ·····1 set (2-position double part no.)
* **25A-JSY3340-5LOZ** ·····1 set (3-position closed center part no.)

The asterisk denotes the symbol for the assembly. Prefix it to the part numbers of the valve, etc.

· For the valve arrangement, the valve closest to the D side is considered the 1st station.
· Under the manifold part number, state the valves to be mounted in order starting with the 1st station as shown in the figure. If the arrangement becomes too complicated, specify the details on a manifold specification sheet.

Internal Pilot

How to Order Valves (With two mounting screws)

25A-JSY 3 1 4 0 ❸ -5 ❹ Z ❻

❶ ❷ ❸ ❹ ❺ ❻

● Series compatible with secondary batteries

❶ Series

1	JSY1000
3	JSY3000

❷ Type of actuation

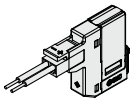
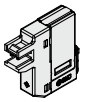
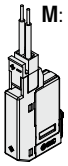
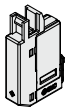
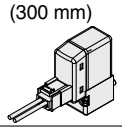
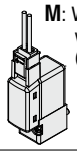
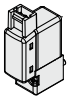
1	2-position	Single
2		Double
3	3-position	Closed center
4		Exhaust center
5		Pressure center
A	4-position dual 3-port	N.C./N.C.
B		N.O./N.O.
C		N.C./N.O.

❸ Coil specifications

Symbol	Coil specifications	JSY1000	JSY3000
Nil	Standard	—	●
T	With power-saving circuit (Continuous duty type)	●	●

∗ For the JSY1000 series, only the power-saving circuit specification is available.
∗ Be careful of the energizing time when the power-saving circuit is selected.

❹ Electrical entry

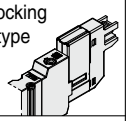
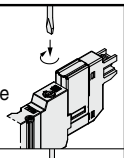
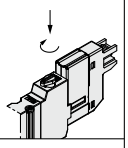
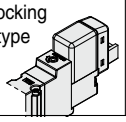
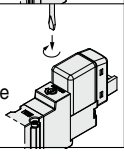
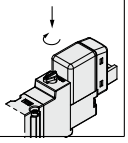
	L plug connector		M plug connector	
	L	**LO**	**M**	**MO**
JSY1000	**L**: With lead wire (300 mm) 	**LO**: Without connector 	**M**: With lead wire (300 mm) 	**MO**: Without connector 
JSY3000	**L**: With lead wire (300 mm) 	**LO**: Without connector 	**M**: With lead wire (300 mm) 	**MO**: Without connector 

∗ Refer to the **Web Catalog** for the lead wire length of L and M plug connectors.

❺ Light/surge voltage suppressor

Z	With light/surge voltage suppressor

❻ Manual override

JSY1000	**Nil**: Non-locking push type 	**D**: Push-turn locking slotted type 	**E**: Push-turn locking lever type 
JSY3000	**Nil**: Non-locking push type 	**D**: Push-turn locking slotted type 	**E**: Push-turn locking lever type 

⚠ Caution

If the JSY3000 series is to be continuously energized, please be sure to select the power-saving circuit (continuous duty type) specification.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

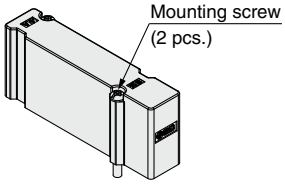
For details, refer to the Web Catalog.

25A-JSY1000/3000 Series
Manifold Options

■ Blanking plate assembly

(With two mounting screws)

Used when valve additions are expected or for maintenance. A structure is in place on the blanking plate to prevent the mounting screws from sliding.



How to Order Blanking Plate Assembly

25A – JSY [3] 1M – 26 – 1A

Series

1	JSY1000
3	JSY3000

Valve Mounting Screw Part No.

Description	Part no.		Note
	25A-JJ5SY1	**25A-JJ5SY3**	
Round head combination screw	**25A-JSY11V-23-4A**	**25A-JSY31V-23-4A**	Part numbers shown on the left are for 10 valves. (20 pcs.)

One-touch Fittings Part Nos.

Port size			25A-JSY1000	25A-JSY3000
A, B port	Metric size	ø4 One-touch fitting (Straight type)	**25A-KQSY10-C4-X1336**	—
		ø6 One-touch fitting (Straight type)	**25A-KQSY11-C6-X1336**	**25A-KQSY30-C6**
		ø8 One-touch fitting (Straight type)	—	**25A-KQSY30-C8-X1336**

How to Order Individual SUP/EXH Spacer Assembly

One-touch fitting Straight type

25A – JSY [3] 1M – [38] – 1A – [C6]

Series

1	JSY1000
3	JSY3000

Spacer type

38	Individual SUP spacer
39	Individual EXH spacer

Port size (Metric)

Symbol	P, E port	JSY1000	JSY3000
C4	ø4 One-touch fitting	●	—
C6	ø6 One-touch fitting	—	●

Part numbers of mounting screw (2 pcs. of each)

JSY1000: 25A-JSY11V-23-5A
JSY3000: 25A-JSY31V-23-5A

How to Order Pilot Valves

For 25A-JSY3000

25A – V111 [ ] – 5 [L] [Z]

Coil type

Nil	Standard
T	With power-saving circuit (Made to Order)

Light/surge voltage suppressor

Z	With light/surge voltage suppressor

Rated voltage

5	24 VDC

Electrical entry

L	L plug connector	With lead wire
LO		Without connector
M	M plug connector	With lead wire
MO		Without connector

∗ For the 25A-JSY1000, the pilot valve is the same as that of the standard model.

Type 10
Side Ported

Type 11
Bottom Ported

Plug-in Connector Connecting Base

D-sub Connector

25A-SY5000/7000 Series

How to Order Manifolds

25A-SS5Y [5] - [10] [F] [1] - [05] [U] [ ] - [C6] [ ]
❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾

- 25A: Series compatible with secondary batteries

❶ Series

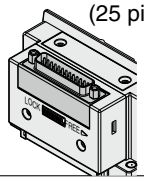
5	SY5000
7	SY7000

❷ Type

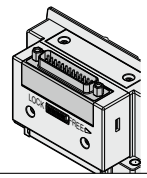
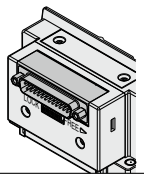
10	Side ported
11	Bottom ported

❸ Connector type

F: D-sub connector (25 pins)



❹ Connector entry direction

1: Upward	2: Lateral
	

❺ Valve stations

F: D-sub connector (25 pins)

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
12	12 stations	
02	2 stations	Specified layout*2 (Up to 24 solenoids available)
⋮	⋮	
24	24 stations	

*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

* The blanking plate assembly is included in this number.

❻ P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

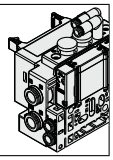
❼ SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer
R	External pilot

* The 3/5(E) port is plugged for the built-in silencer type.

❽ A, B port size (Metric)

Symbol		A, B port	Type 10/ Side ported		Type 11/ Bottom ported	
			SY5000	SY7000	SY5000	SY7000
C4	Straight	ø4	●	—	●	—
C6		ø6	●	●	●	●
C8		ø8	●	●	●	●
C10		ø10	—	●	—	●
C12		ø12	—	●	—	●
CM*1		Straight port, mixed sizes	●	●	●	●
P, E port size (One-touch fittings)			ø10	ø12	ø10	ø12



*1 Indicate the sizes on the manifold specification sheet for "CM."

* The direction of P, E port fittings is the same as for the A, B port.

❾ Mounting

Symbol	Mounting	Option	
		Name plate	Station number
Nil	Direct mounting	—	—
AA		●	●
BA		●	—
D□	DIN rail mounting	—	—
A□		●	●
B□		●	—

DIN Rail Option

Nil	Direct mounting	
0	Without DIN rail (with bracket)	
3	For 3 stations	Specify a longer rail than the total length of specified stations.
⋮	⋮	
24	For 24 stations	

* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" above.)

* Only direct mounting is available for the type 11 bottom-ported type.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

How to Order Valves (With mounting screw)

25A-SY [5] [1] [0] [0] [ ] [ ] [ ] [ ] **-** [5] [ ] [ ] **1**

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

- ❶❷: Series compatible with secondary batteries
- ❸: Base mounted

❶ Series

5	SY5000
7	SY7000

❷ Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

❸ Seal type

0	Rubber seal

❹ Pilot type

Nil	Internal pilot
R	External pilot

* When selecting the external pilot specification for the 4-position dual 3-port valve, pay attention to the pilot pressure. For details, refer to the valve specifications of the standard SY series product in the **Web Catalog**.

❺ Back pressure check valve (Built-in valve type)

Nil	None
H	Built-in

* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

❻ Pilot valve option

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

❼ Coil type

Nil	Standard
T	With power-saving circuit (Continuous duty type)

* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

❽ Rated voltage

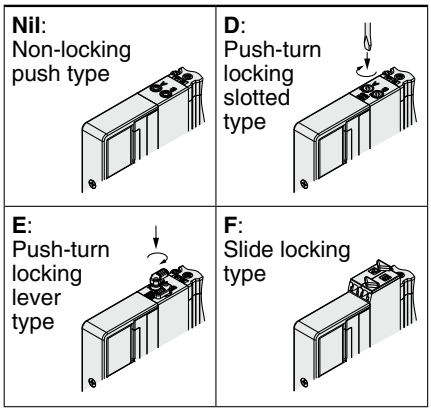
5	24 VDC
6	12 VDC

❾ Light/surge voltage suppressor and common specification

Nil	Without light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

* Only "Z" and "NZ" types are available with a power-saving circuit.

❿ Manual override



* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Protective class class Ⅲ (Mark: ⧫)

Type 12
Top Ported

Plug-in Connector Connecting Base

D-sub Connector

25A-SY5000/7000 Series

How to Order Manifolds

25A-SS5Y [5] -12 F [1] - [05] [U] [ ] - [ ]

❶ ❷ ❸ ❹ ❺ ❻ ❼

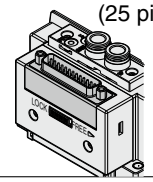
- 25A: Series compatible with secondary batteries

❶ Series

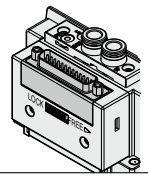
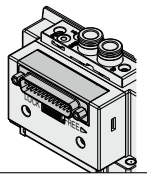
5	SY5000
7	SY7000

❷ Connector type

F: D-sub connector (25 pins)



❸ Connector entry direction

1: Upward	**2**: Lateral
	

❹ Valve stations

F: D-sub connector (25 pins)

Symbol	Stations	Note
02	2 stations	Double wiring∗1
⋮	⋮	
12	12 stations	
02	2 stations	Specified layout∗2 (Up to 24 solenoids available)
⋮	⋮	
24	24 stations	

∗1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

∗2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

∗ The blanking plate assembly is included in this number.

❺ P, E port entry

U∗1	U side (2 to 10 stations)
D∗1	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

∗1 ❻ For type "S," SUP/EXH block assembly with a built-in silencer, choose "U" or "D" for P port entry.

❻ SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

∗ The P and E ports are only available on the U and D sides for the built-in silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)

❼ Mounting

Nil	Direct mounting	
D	DIN rail mounting (With DIN rail)	
D0	DIN rail mounting (Without DIN rail)	
D3	For 3 stations	Specify a length longer than that of the standard rail.
⋮	⋮	
D24	For 24 stations	

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

How to Order Valves (With mounting screw)

25A-SY 5 1 3 0 □ □ □ - 5 □ □ 1 - C6 □

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫

- Series compatible with secondary batteries
- Top ported

❶ Series

5	SY5000
7	SY7000

❷ Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

❸ Seal type

0	Rubber seal

❹ Back pressure check valve (Built-in valve type)

Nil	None
H	Built-in

∗ The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

❺ Pilot valve option

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

❻ Coil type

Nil	Standard
T	With power-saving circuit (Continuous duty type)

∗ Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
∗ Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

❼ Rated voltage

5	24 VDC
6	12 VDC

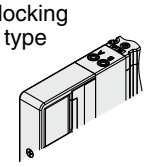
❽ Light/surge voltage suppressor and common specification

Nil	Without light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

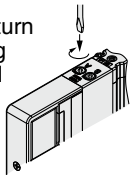
∗ Only "Z" and "NZ" types are available with a power-saving circuit.

❾ Manual override

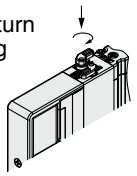
Nil: Non-locking push type



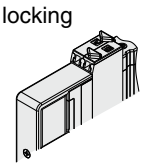
D: Push-turn locking slotted type



E: Push-turn locking lever type



F: Slide locking type



❿ A, B port size

Thread piping

Symbol	Port size	Applicable series
02	1/4	SY7000

One-touch fitting (Metric)

Symbol	A, B port	SY5000	SY7000
C4	ø4	●	—
C6	ø6	●	●
C8	ø8	●	●
C10	ø10	—	●
C12	ø12	—	●

⓫ Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

⚠ Protective class class Ⅲ (Mark: ⟨Ⅲ⟩)

Type 10
Side Ported

Type 11
Bottom Ported

Plug-in Connector Connecting Base

Terminal Block Box

25A-SY5000/7000 Series

How to Order Manifolds

25A- SS5Y ❶5 - ❷10 T - ❸05 ❹U ❺ - ❻C6 ❼

- 25A-: Series compatible with secondary batteries

❶ Series

5	SY5000
7	SY7000

❷ Type

10	Side ported
11	Bottom ported

❸ Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
10	10 stations	
02	2 stations	Specified layout*2 (Up to 20 solenoids available)
⋮	⋮	
20	20 stations	

*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations.
The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

* The blanking plate assembly is included in this number.

❹ P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 20 stations)

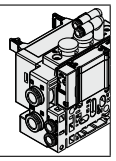
❺ SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer
R	External pilot

* The 3/5(E) port is plugged for the built-in silencer type.
* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

❻ A, B port size (Metric)

Symbol		A, B port	Type 10/ Side ported		Type 11/ Bottom ported	
			SY5000	SY7000	SY5000	SY7000
C4	Straight	ø4	●	—	●	—
C6		ø6	●	●	●	●
C8		ø8	●	●	●	●
C10		ø10	—	●	—	●
C12		ø12	—	●	—	●
CM*1		Straight port, mixed sizes	●	●	●	●
P, E port size (One-touch fittings)			ø10	ø12	ø10	ø12



*1 Indicate the sizes on the manifold specification sheet for "CM."
* The direction of P, E port fittings is the same as for the A, B port.

❼ Mounting

Symbol	Mounting	Option	
		Name plate	Station number
Nil	Direct mounting	—	—
AA		●	●
BA		●	—
D□	DIN rail mounting	—	—
A□		●	●
B□		●	—

* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" below.)
* Only direct mounting is available for the type 11 bottom-ported type.

DIN Rail Option

Nil	Direct mounting	
0	Without DIN rail (with bracket)	
3	For 3 stations	Specify a longer rail than the total length of specified stations.
⋮	⋮	
20	For 20 stations	

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

How to Order Valves (With mounting screw)

25A-SY 5 1 0 0 □ □ □ □ - 5 □ □ 1

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

- Base mounted
- Series compatible with secondary batteries

❶ Series

5	SY5000
7	SY7000

❷ Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

❸ Seal type

0	Rubber seal

❹ Pilot type

Nil	Internal pilot
R	External pilot

* When selecting the external pilot specification for the 4-position dual 3-port valve, pay attention to the pilot pressure. For details, refer to the valve specifications of the standard SY series product in the **Web Catalog**.

❺ Back pressure check valve (Built-in valve type)

Nil	None
H	Built-in

* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

❻ Pilot valve option

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

❼ Coil type

Nil	Standard
T	With power-saving circuit (Continuous duty type)

* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

❽ Rated voltage

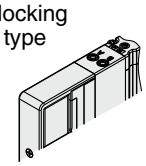
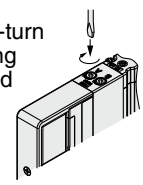
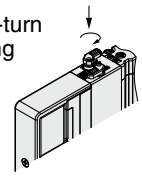
5	24 VDC
6	12 VDC

❾ Light/surge voltage suppressor and common specification

Nil	Without light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

* Only “Z” and “NZ” types are available with a power-saving circuit.

❿ Manual override

Nil: Non-locking push type 	**D**: Push-turn locking slotted type 
E: Push-turn locking lever type 	**F**: Slide locking type 

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

⚠ Protective class class Ⅲ (Mark: ⟨III⟩)

Type 12
Top Ported

Plug-in Connector Connecting Base

Terminal Block Box

25A-SY5000/7000 Series

RoHS

How to Order Manifolds

25A – SS5Y 5 – 12T – 05 U □ – □

❶ ❷ ❸ ❹ ❺

Series compatible with secondary batteries

❶ Series

5	SY5000
7	SY7000

❸ P, E port entry

U*1	U side (2 to 10 stations)
D*1	D side (2 to 10 stations)
B	Both sides (2 to 20 stations)

*1 ❹ For type "S," SUP/EXH block assembly with a built-in silencer, choose "U" or "D" for P port entry.

❷ Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
10	10 stations	
02	2 stations	Specified layout*2 (Up to 20 solenoids available)
⋮	⋮	
20	20 stations	

*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations.
The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

* The blanking plate assembly is included in this number.

❹ SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

* The P and E ports are only available on the U and D sides for the built-in silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)
* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

❺ Mounting

Nil	Direct mounting	
D	DIN rail mounting (With DIN rail)	
D0	DIN rail mounting (Without DIN rail)	
D3	For 3 stations	Specify a length longer than that of the standard rail.
⋮	⋮	
D20	For 20 stations	

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

How to Order Valves (With mounting screw)

25A-SY 5 1 3 0 □ □ □ - 5 □ □ 1 - C6 □

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫

- ❸ Top ported
- Series compatible with secondary batteries

❶ Series

5	SY5000
7	SY7000

❷ Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

❸ Seal type

0	Rubber seal

❹ Back pressure check valve (Built-in valve type)

Nil	None
H	Built-in

* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

❺ Pilot valve option

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

❻ Coil type

Nil	Standard
T	With power-saving circuit (Continuous duty type)

* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

❼ Rated voltage

5	24 VDC
6	12 VDC

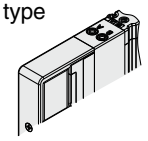
❽ Light/surge voltage suppressor and common specification

Nil	Without light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

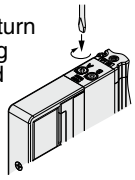
* Only "Z" and "NZ" types are available with a power-saving circuit.

❾ Manual override

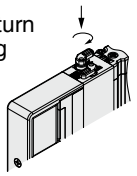
Nil: Non-locking push type



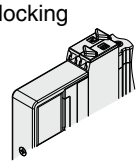
D: Push-turn locking slotted type



E: Push-turn locking lever type



F: Slide locking type



❿ A, B port size

Thread piping

Symbol	Port size	Applicable series
02	1/4	SY7000

One-touch fitting (Metric)

Symbol	A, B port	SY5000	SY7000
C4	ø4	●	—
C6	ø6	●	●
C8	ø8	●	●
C10	ø10	—	●
C12	ø12	—	●

⓫ Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Protective class class Ⅲ (Mark: ⧫)

Type 10
Side Ported

Type 11
Bottom Ported

Plug-in Connector Connecting Base

Lead Wire

25A-SY5000/7000 Series

RoHS

How to Order Manifolds

25A-SS5Y 5 - 10 L1 1 - 05 U □ - C6 □

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾

25A: Series compatible with secondary batteries

❶ Series

5	SY5000
7	SY7000

❷ Type

10	Side ported
11	Bottom ported

❸ Number of cores (Lead wire)

L1	34 cores
L2	17 cores
L3	9 cores

❹ Lead wire length

1	0.6 m
2	1.5 m
3	3 m

❺ Valve stations

(L1□)

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
16	16 stations	
02	2 stations	Specified layout*2 (Up to 32 solenoids available)
⋮	⋮	
24	24 stations	

(L2□)

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
08	8 stations	
02	2 stations	Specified layout*2 (Up to 16 solenoids available)
⋮	⋮	
16	16 stations	

(L3□)

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
04	4 stations	
02	2 stations	Specified layout*2 (Up to 8 solenoids available)
⋮	⋮	
08	8 stations	

*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

* The blanking plate assembly is included in this number.

❻ P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

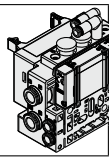
❼ SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer
R	External pilot

* The 3/5(E) port is plugged for the built-in silencer type.
* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

❽ A, B port size (Metric)

Symbol		A, B port	Type 10/Side ported SY5000	Type 10/Side ported SY7000	Type 11/Bottom ported SY5000	Type 11/Bottom ported SY7000
C4	Straight	ø4	●	—	●	—
C6	Straight	ø6	●	●	●	●
C8	Straight	ø8	●	●	●	●
C10	Straight	ø10	—	●	—	●
C12	Straight	ø12	—	●	—	●
CM*1	Straight	Straight port, mixed sizes	●	●	●	●
P, E port size (One-touch fittings)			ø10	ø12	ø10	ø12



*1 Indicate the sizes on the manifold specification sheet for "CM."

* The direction of P, E port fittings is the same as for the A, B port.

❾ Mounting

Symbol	Mounting	Option: Name plate	Option: Station number
Nil	Direct mounting	—	—
AA		●	●
BA		●	—
D□	DIN rail mounting	—	—
A□		●	●
B□		●	—

* Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" below.)
* Only direct mounting is available for the type 11 bottom-ported type.

DIN Rail Option

Nil	Direct mounting	
0	Without DIN rail (with bracket)	
3	For 3 stations	Specify a longer rail than the total length of specified stations.
⋮	⋮	
24	For 24 stations	

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

How to Order Valves (With mounting screw)

25A-SY [5] [1] [0] [0] [ ] [ ] [ ] [ ] – [5] [ ] [ ] **1**

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

- ❸: Base mounted
- **25A-**: Series compatible with secondary batteries

❶ Series

5	SY5000
7	SY7000

❷ Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

❸ Seal type

0	Rubber seal

❹ Pilot type

Nil	Internal pilot
R	External pilot

* When selecting the external pilot specification for the 4-position dual 3-port valve, pay attention to the pilot pressure. For details, refer to the valve specifications of the standard SY series product in the **Web Catalog**.

❺ Back pressure check valve (Built-in valve type)

Nil	None
H	Built-in

* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

❻ Pilot valve option

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

❼ Coil type

Nil	Standard
T	With power-saving circuit (Continuous duty type)

* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

❽ Rated voltage

5	24 VDC
6	12 VDC

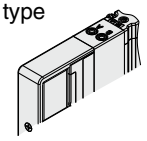
❾ Light/surge voltage suppressor and common specification

Nil	Without light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

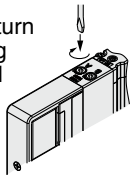
* Only "Z" and "NZ" types are available with a power-saving circuit.

❿ Manual override

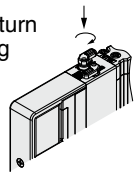
Nil: Non-locking push type



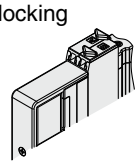
D: Push-turn locking slotted type



E: Push-turn locking lever type



F: Slide locking type



* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Plug-in Connector Connecting Base

Lead Wire

Type 12
Top Ported

25A-SY5000/7000 Series

How to Order Manifolds

25A- SS5Y [5] -12 [L1] [1] - [05] [U] [ ] - [ ]

❶ ❷ ❸ ❹ ❺ ❻ ❼

Series compatible with secondary batteries

❶ Series

5	SY5000
7	SY7000

❷ Number of cores (Lead wire)

L1	34 cores
L2	17 cores
L3	9 cores

❸ Lead wire length

1	0.6 m
2	1.5 m
3	3 m

❹ Valve stations

(L1□)

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
16	16 stations	
02	2 stations	Specified layout*2 (Up to 32 solenoids available)
⋮	⋮	
24	24 stations	

(L3□)

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
04	4 stations	
02	2 stations	Specified layout*2 (Up to 8 solenoids available)
⋮	⋮	
08	8 stations	

(L2□)

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
08	8 stations	
02	2 stations	Specified layout*2 (Up to 16 solenoids available)
⋮	⋮	
16	16 stations	

*1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

* The blanking plate assembly is included in this number.

❺ P, E port entry

U*1	U side (2 to 10 stations)
D*1	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

*1 ❻ For type "S," SUP/EXH block assembly with a built-in silencer, choose "U" or "D" for P port entry.

❻ SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

* The P and E ports are only available on the U and D sides for the built-in silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)
* When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

❼ Mounting

Nil	Direct mounting	
D	DIN rail mounting (With DIN rail)	
D0	DIN rail mounting (Without DIN rail)	
D3	For 3 stations	Specify a length longer than that of the standard rail.
⋮	⋮	
D24	For 24 stations	

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

How to Order Valves (With mounting screw)

25A – SY [5] [1] [3] [0] [ ] [ ] [ ] – [5] [ ] [ ] 1 – [C6] [ ]

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫

- ❸ Top ported
- 25A: Series compatible with secondary batteries

❶ Series

5	SY5000
7	SY7000

❷ Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

❸ Seal type

0	Rubber seal

❹ Back pressure check valve (Built-in valve type)

Nil	None
H	Built-in

* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

❺ Pilot valve option

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

❻ Coil type

Nil	Standard
T	With power-saving circuit (Continuous duty type)

* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

❼ Rated voltage

5	24 VDC
6	12 VDC

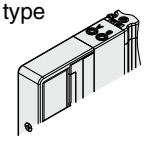
❽ Light/surge voltage suppressor and common specification

Nil	Without light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

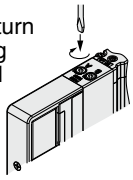
* Only "Z" and "NZ" types are available with a power-saving circuit.

❾ Manual override

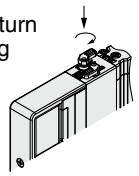
Nil: Non-locking push type



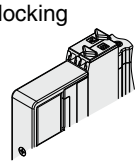
D: Push-turn locking slotted type



E: Push-turn locking lever type



F: Slide locking type



❿ A, B port size

Thread piping

Symbol	Port size	Applicable series
02	1/4	SY7000

One-touch fitting (Metric)

Symbol	A, B port	SY5000	SY7000
C4	ø4	●	—
C6	ø6	●	●
C8	ø8	●	●
C10	ø10	—	●
C12	ø12	—	●

⓫ Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Protective class class Ⅲ (Mark: ⧫)

Type 10
Side Ported

Type 11
Bottom Ported

Plug-in Connector Connecting Base

EX260

25A-SY5000/7000 Series

How to Order Manifolds

25A-SS5Y [5] - [10] S [NAN] - [05] [U] [ ] - [C6] [ ]

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

- 25A: Series compatible with secondary batteries

❶ Series

5	SY5000
7	SY7000

❷ Type

10	Side ported
11	Bottom ported

❸ SI unit specifications

(Output polarity, Protocol, Number of outputs, Communication connector)

Symbol (Output polarity)		Protocol	Number of outputs	Communication connector
Positive common (NPN)	Negative common (PNP)			
0		Without SI unit		
QA	QAN	DeviceNet®	32	M12
QB	QBN		16	
NA	NAN	PROFIBUS DP	32	M12
NB	NBN		16	
VA	VAN	CC-Link	32	M12
VB	VBN		16	
DA	DAN	EtherCAT	32	M12
DB	DBN		16	
FA	FAN	PROFINET	32	M12
FB	FBN		16	
EA	EAN	EtherNet/IP™	32	M12
EB	EBN		16	
—	KAN	IO-Link	32	M12

∗ Without SI unit, the output polarity is decided by the SI unit used. Ensure a match with the common specification of the valves to be used.
∗ DIN rail cannot be mounted without SI unit.
∗ For IO-Link, only the negative common (PNP) type and the 32 outputs type are available.

❹ Valve stations

In the case of the 32-output SI unit

Symbol	Stations	Note
02	2 stations	Double wiring∗1
⋮	⋮	
16	16 stations	
02	2 stations	Specified layout∗2 (Up to 32 solenoids available)
⋮	⋮	
24	24 stations	

In the case of the 16-output SI unit

Symbol	Stations	Note
02	2 stations	Double wiring∗1
⋮	⋮	
08	8 stations	
02	2 stations	Specified layout∗2 (Up to 16 solenoids available)
⋮	⋮	
16	16 stations	

∗1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
∗2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
∗ The blanking plate assembly is included in this number.
∗ For the model without the SI unit (S0), note the maximum number of solenoids of the SI unit that will be mounted. If the layout is specified, indicate it on the manifold specification sheet.

❺ P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

❻ SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer
R	External pilot

∗ The 3/5(E) port is plugged for the built-in silencer type.
∗ When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

❽ Mounting

Symbol	Mounting	Option	
		Name plate	Station number
Nil	Direct mounting	—	—
AA		●	●
BA		●	—
D□	DIN rail mounting	—	—
A□		●	●
B□		●	—

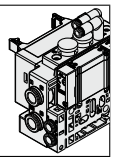
∗ Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" below.)
∗ Only direct mounting is available for the type 11 bottom-ported type.

DIN Rail Option

Nil	Direct mounting	
0	Without DIN rail (with bracket)	
3	For 3 stations	Specify a longer rail than the total length of specified stations.
⋮	⋮	
24	For 24 stations	

❼ A, B port size (Metric)

Symbol		A, B port	Type 10/Side ported		Type 11/Bottom ported	
			SY5000	SY7000	SY5000	SY7000
C4	Straight	ø4	●	—	●	—
C6		ø6	●	●	●	●
C8		ø8	●	●	●	●
C10		ø10	—	●	—	●
C12		ø12	—	●	—	●
CM∗1		Straight port, mixed sizes	●	●	●	●
P, E port size (One-touch fittings)			ø10	ø12	ø10	ø12



∗1 Indicate the sizes on the manifold specification sheet for "CM."

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

For details on the EX260 Integrated Type (For Output) Serial Transmission System, refer to the Web Catalog and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 53 in this catalog. Please download the Operation Manual via the SMC website: https://www.smcworld.com

How to Order Valves (With mounting screw)

25A- SY 5 1 0 0 ❶ ❷ ❸ ❹ ❺ ❻ ❼ - 5 ❽ ❾ ❿ 1

- ❶ ❷: Series compatible with secondary batteries
- ❸: Base mounted

❶ Series

5	SY5000
7	SY7000

❷ Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

❸ Seal type

0	Rubber seal

❹ Pilot type

Nil	Internal pilot
R	External pilot

* When selecting the external pilot specification for the 4-position dual 3-port valve, pay attention to the pilot pressure. For details, refer to the valve specifications of the standard SY series product in the **Web Catalog**.

❺ Back pressure check valve (Built-in valve type)

Nil	None
H	Built-in

* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

❻ Pilot valve option

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

❼ Coil type

Nil	Standard
T	With power-saving circuit (Continuous duty type)

* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

❽ Rated voltage

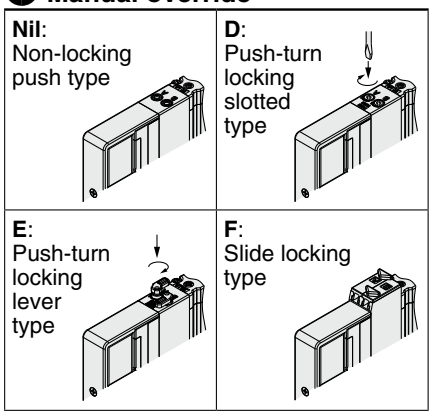
5	24 VDC

❾ Light/surge voltage suppressor and common specification

R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

* Select "R," "U," "S," or "Z" for the valve when the SI unit output polarity is positive common. Select "R," "U," "NS," or "NZ" for the valve when the SI unit output polarity is negative common.
* Only "Z" and "NZ" types are available with a power-saving circuit.

❿ Manual override



* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Protective class class Ⅲ (Mark: ⧫)

Plug-in Connector Connecting Base

EX260

Type 12
Top Ported

25A-SY5000/7000 Series

How to Order Manifolds

25A-SS5Y [5] - 12S [NAN] - [05] [U] [ ] - [ ]

❶ ❷ ❸ ❹ ❺ ❻

• **Series compatible with secondary batteries**

❶ Series

5	SY5000
7	SY7000

❷ SI unit specifications

(Output polarity, Protocol, Number of outputs, Communication connector)

Symbol (Output polarity)		Protocol	Number of outputs	Communication connector
Positive common (NPN)	Negative common (PNP)			
0		Without SI unit		
QA	**QAN**	DeviceNet®	32	M12
QB	**QBN**		16	
NA	**NAN**	PROFIBUS DP	32	M12
NB	**NBN**		16	
VA	**VAN**	CC-Link	32	M12
VB	**VBN**		16	
DA	**DAN**	EtherCAT	32	M12
DB	**DBN**		16	
FA	**FAN**	PROFINET	32	M12
FB	**FBN**		16	
EA	**EAN**	EtherNet/IP™	32	M12
EB	**EBN**		16	
—	**KAN**	IO-Link	32	M12

∗ Without SI unit, the output polarity is decided by the SI unit used. Ensure a match with the common specification of the valves to be used.
∗ DIN rail cannot be mounted without SI unit.
∗ For IO-Link, only the negative common (PNP) type and the 32 outputs type are available.

❸ Valve stations

In the case of the 32-output SI unit

Symbol	Stations	Note
02	2 stations	Double wiring∗1
⋮	⋮	
16	16 stations	
02	2 stations	Specified layout∗2 (Up to 32 solenoids available)
⋮	⋮	
24	24 stations	

In the case of the 16-output SI unit

Symbol	Stations	Note
02	2 stations	Double wiring∗1
⋮	⋮	
08	8 stations	
02	2 stations	Specified layout∗2 (Up to 16 solenoids available)
⋮	⋮	
16	16 stations	

∗1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations. The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
∗2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
∗ The blanking plate assembly is included in this number.
∗ For the model without the SI unit (S0), note the maximum number of solenoids of the SI unit that will be mounted. If the layout is specified, indicate it on the manifold specification sheet.

❹ P, E port entry

U∗1	U side (2 to 10 stations)
D∗1	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

∗1 ❺ For type "S," SUP/EXH block assembly with a built-in silencer, choose "U" or "D" for P port entry.

❺ SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

∗ The P and E ports are only available on the U and D sides for the built-in silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)
∗ When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

❻ Mounting

Nil	Direct mounting	
D	DIN rail mounting (With DIN rail)	
D0	DIN rail mounting (Without DIN rail)	
D3	For 3 stations	Specify a length longer than that of the standard rail.
⋮	⋮	
D24	For 24 stations	

∗ If the DIN rail must be mounted without an SI unit, select D0. Then, refer to L3 of the dimensions for the DIN rail length and order separately.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

For details on the EX260 Integrated Type (For Output) Serial Transmission System, refer to the Web Catalog and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 53 in this catalog. Please download the Operation Manual via the SMC website: https://www.smcworld.com

How to Order Valves (With mounting screw)

25A- SY [5][1][3][0][ ][ ][ ]- 5[ ][ ] 1 - C6[ ]

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫

- ❸: Top ported
- 25A-: Series compatible with secondary batteries

❶ Series

5	SY5000
7	SY7000

❷ Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

❸ Seal type

0	Rubber seal

❹ Back pressure check valve (Built-in valve type)

Nil	None
H	Built-in

* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

❺ Pilot valve option

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

❻ Coil type

Nil	Standard
T	With power-saving circuit (Continuous duty type)

* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

❼ Rated voltage

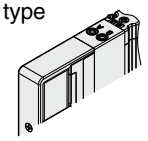
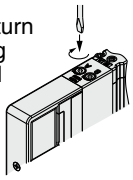
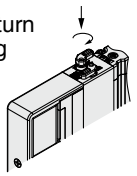
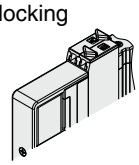
5	24 VDC

❽ Light/surge voltage suppressor and common specification

R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

* Select “R,” “U,” “S,” or “Z” for the valve when the SI unit output polarity is positive common. Select “R,” “U,” “NS,” or “NZ” for the valve when the SI unit output polarity is negative common.
* Only “Z” and “NZ” types are available with a power-saving circuit.

❾ Manual override

Nil: Non-locking push type 	**D**: Push-turn locking slotted type 
E: Push-turn locking lever type 	**F**: Slide locking type 

❿ A, B port size

Thread piping

Symbol	Port size	Applicable series
02	1/4	SY7000

One-touch fitting (Metric)

Symbol	A, B port	SY5000	SY7000
C4	ø4	●	—
C6	ø6	●	●
C8	ø8	●	●
C10	ø10	—	●
C12	ø12	—	●

⓫ Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Protective class class Ⅲ (Mark: Ⅲ)

Type 10
Side Ported

Type 11
Bottom Ported

Plug-in Connector Connecting Base

EX126

25A-SY5000/7000 Series

How to Order Manifolds

25A-SS5Y [5] – [10] **S4** [V] – [05] [U] [ ] – [C6] [ ]

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

● **Series compatible with secondary batteries**

❶ Series

5	SY5000
7	SY7000

❷ Type

10	Side ported
11	Bottom ported

❸ SI unit

0	Without SI unit
V	CC-Link (Positive common NPN)

∗ Only a terminal block plate is mounted for the valve without SI unit.
For SI unit part numbers, refer to page 53.

❹ Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring∗1
⋮	⋮	
08	8 stations	
02	2 stations	Specified layout∗2 (Up to 16 solenoids available)
⋮	⋮	
16	16 stations	

∗1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations.
The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

∗2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

∗ The blanking plate assembly is included in this number.

❺ P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 16 stations)

❻ SUP/EXH block assembly

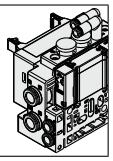
Nil	Internal pilot
S	Internal pilot, Built-in silencer
R	External pilot

∗ The 3/5(E) port is plugged for the built-in silencer type.

∗ When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

❼ A, B port (Metric)

Symbol	A, B port		Type 10/ Side ported		Type 11/ Bottom ported	
			SY5000	SY7000	SY5000	SY7000
C4	Straight	ø4	●	—	●	—
C6		ø6	●	●	●	●
C8		ø8	●	●	●	●
C10		ø10	—	●	—	●
C12		ø12	—	●	—	●
CM∗1		Straight port, mixed sizes	●	●	●	●
P, E port size (One-touch fittings)			ø10	ø12	ø10	ø12



∗1 Indicate the sizes on the manifold specification sheet for "CM."

∗ The direction of P, E port fittings is the same as for the A, B port.

❽ Mounting

Symbol	Mounting	Option	
		Name plate	Station number
Nil	Direct mounting	—	—
AA		●	●
BA		●	—
D□	DIN rail mounting	—	—
A□		●	●
B□		●	—

∗ Enter the number of stations inside □ when it is larger than the number of valve stations. (Refer to "DIN Rail Option" below.)

∗ Only direct mounting is available for the type 11 bottom-ported type.

DIN Rail Option

Nil	Direct mounting	
0	Without DIN rail (with bracket)	
3	For 3 stations	Specify a longer rail than the total length of specified stations.
⋮	⋮	
16	For 16 stations	

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

For details on the EX126 Integrated Type (For Output) Serial Transmission System, refer to the Web Catalog and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 53 in this catalog. Please download the Operation Manual via the SMC website: https://www.smcworld.com

How to Order Valves (With mounting screw)

25A- SY 5 1 0 0 □ □ □ □ - 5 □ □ 1

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

- ❸ Base mounted
- Series compatible with secondary batteries

❶ Series

5	SY5000
7	SY7000

❷ Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

❸ Seal type

0	Rubber seal

❹ Pilot type

Nil	Internal pilot
R	External pilot

* When selecting the external pilot specification for the 4-position dual 3-port valve, pay attention to the pilot pressure. For details, refer to the valve specifications of the standard SY series product in the **Web Catalog**.

❺ Back pressure check valve (Built-in valve type)

Nil	None
H	Built-in

* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

❻ Pilot valve option

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

❼ Coil type

Nil	Standard
T	With power-saving circuit (Continuous duty type)

* Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
* Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

❽ Rated voltage

5	24 VDC

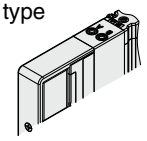
❾ Light/surge voltage suppressor and common specification

R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)

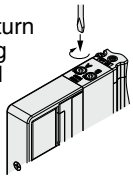
* Only "Z" type is available with a power-saving circuit.

❿ Manual override

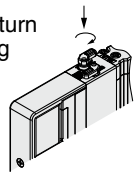
Nil: Non-locking push type



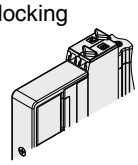
D: Push-turn locking slotted type



E: Push-turn locking lever type



F: Slide locking type



* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Plug-in Connector Connecting Base

EX126

Type 12
Top Ported

25A-SY5000/7000 Series

How to Order Manifolds

25A – SS5Y [5] – 12S4 [V] – [05] [U] [ ] – [ ]

❶ ❷ ❸ ❹ ❺ ❻

25A: Series compatible with secondary batteries

❶ Series

5	SY5000
7	SY7000

❷ SI unit

0	Without SI unit
V	CC-Link (Positive common NPN)

∗ Only a terminal block plate is mounted for the valve without SI unit.
For SI unit part numbers, refer to page 53.

❸ Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring∗1
⋮	⋮	
08	8 stations	
02	2 stations	Specified layout∗2 (Up to 16 solenoids available)
⋮	⋮	
16	16 stations	

∗1 Double wiring: 2-position single, 2-position double, 3-position, and 4-position valves can be used on all manifold stations.
The use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

∗2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

∗ The blanking plate assembly is included in this number.

❹ P, E port entry

U∗1	U side (2 to 10 stations)
D∗1	D side (2 to 10 stations)
B	Both sides (2 to 16 stations)

∗1 ❺ For type “S,” SUP/EXH block assembly with a built-in silencer, choose “U” or “D” for P port entry.

❺ SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

∗ The P and E ports are only available on the U and D sides for the built-in silencer type. The 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of the P and E port entry. (Example: When the P and E port entry is on the D side, the silencer exhaust port is on the U side.)

∗ When the built-in silencer type is used, keep the exhaust port from coming into direct contact with water or other liquids.

❻ Mounting

Nil	Direct mounting	
D	DIN rail mounting (With DIN rail)	
D0	DIN rail mounting (Without DIN rail)	
D3	For 3 stations	Specify a length longer than that of the standard rail.
⋮	⋮	
D16	For 16 stations	

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

For details on the EX126 Integrated Type (For Output) Serial Transmission System, refer to the Web Catalog and the Operation Manual. For the part numbers of the SI units to be mounted, refer to page 53 in this catalog. Please download the Operation Manual via the SMC website: https://www.smcworld.com

How to Order Valves (With mounting screw)

25A- SY [5][1][3][0][ ][ ][ ]-[5][ ][ ]1-[C6][ ]

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫

- ❶: Series compatible with secondary batteries
- ❸: Top ported

❶ Series

5	SY5000
7	SY7000

❷ Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

❸ Seal type

0	Rubber seal

❹ Back pressure check valve (Built-in valve type)

Nil	None
H	Built-in

∗ The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

❺ Pilot valve option

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

❻ Coil type

Nil	Standard
T	With power-saving circuit (Continuous duty type)

∗ Be sure to select the power-saving circuit type if the valve is to be continuously energized for long periods of time.
∗ Be careful of the energizing time when the power-saving circuit is selected. For details, refer to the standard product catalog.

❼ Rated voltage

5	24 VDC

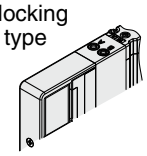
❽ Light/surge voltage suppressor and common specification

R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)

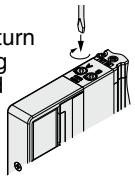
∗ Only "Z" type is available with a power-saving circuit.

❾ Manual override

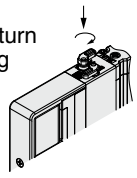
Nil: Non-locking push type



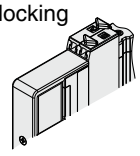
D: Push-turn locking slotted type



E: Push-turn locking lever type



F: Slide locking type



❿ A, B port size

Thread piping

Symbol	Port size	Applicable series
02	1/4	SY7000

One-touch fitting (Metric)

Symbol	A, B port	SY5000	SY7000
C4	ø4	●	—
C6	ø6	●	●
C8	ø8	●	●
C10	ø10	—	●
C12	ø12	—	●

⓫ Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

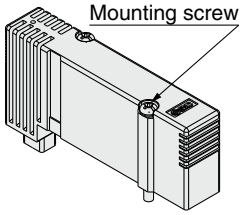
⚠Caution

Tightening torque for mounting screw
M3: 0.8 N·m

Manifold Options

■Blanking plate assembly

(With mounting screw)
Used when valve additions are expected or for maintenance. A structure is in place on the blanking plate to prevent the mounting screws from sliding.



25A-SY50M-26-1A

How to Order Blanking Plate Assembly

25A−SY[5]0M−26−[1] A

Series

5	SY5000
7	SY7000

Base type

1	For plug-in connector connecting base

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

SI Unit Part Nos.

Description	SI unit part no.	Note
EX260 SI unit	**EX260-SPR1-X117**	PROFIBUS DP M12 connector, 32 outputs, Negative common (PNP)
	EX260-SPR2-X117	PROFIBUS DP M12 connector, 32 outputs, Positive common (NPN)
	EX260-SPR3-X117	PROFIBUS DP M12 connector, 16 outputs, Negative common (PNP)
	EX260-SPR4-X117	PROFIBUS DP M12 connector, 16 outputs, Positive common (NPN)
	EX260-SDN1-X117	DeviceNet® M12 connector, 32 outputs, Negative common (PNP)
	EX260-SDN2-X117	DeviceNet® M12 connector, 32 outputs, Positive common (NPN)
	EX260-SDN3-X117	DeviceNet® M12 connector, 16 outputs, Negative common (PNP)
	EX260-SDN4-X117	DeviceNet® M12 connector, 16 outputs, Positive common (NPN)
	EX260-SEC1-X117	EtherCAT M12 connector, 32 outputs, Negative common (PNP)
	EX260-SEC2-X117	EtherCAT M12 connector, 32 outputs, Positive common (NPN)
	EX260-SEC3-X117	EtherCAT M12 connector, 16 outputs, Negative common (PNP)
	EX260-SEC4-X117	EtherCAT M12 connector, 16 outputs, Positive common (NPN)
	EX260-SMJ1-X117	CC-Link M12 connector, 32 outputs, Negative common (PNP)
	EX260-SMJ2-X117	CC-Link M12 connector, 32 outputs, Positive common (NPN)
	EX260-SMJ3-X117	CC-Link M12 connector, 16 outputs, Negative common (PNP)
	EX260-SMJ4-X117	CC-Link M12 connector, 16 outputs, Positive common (NPN)
	EX260-SPN1-X117	PROFINET M12 connector, 32 outputs, Negative common (PNP)
	EX260-SPN2-X117	PROFINET M12 connector, 32 outputs, Positive common (NPN)
	EX260-SPN3-X117	PROFINET M12 connector, 16 outputs, Negative common (PNP)
	EX260-SPN4-X117	PROFINET M12 connector, 16 outputs, Positive common (NPN)
	EX260-SEN1-X117	EtherNet/IP™ M12 connector, 32 outputs, Negative common (PNP)
	EX260-SEN2-X117	EtherNet/IP™ M12 connector, 32 outputs, Positive common (NPN)
	EX260-SEN3-X117	EtherNet/IP™ M12 connector, 16 outputs, Negative common (PNP)
	EX260-SEN4-X117	EtherNet/IP™ M12 connector, 16 outputs, Positive common (NPN)
	EX260-SIL1-X117	IO-Link M12 connector, 32 outputs, Negative common (PNP)
EX126 SI unit	**EX126D-SMJ1-X220**	CC-Link (Terminal block, 16 outputs, Positive common (NPN))

Valve Mounting Screw Part No.

Description	Part no.		Note
	SY5000	**SY7000**	
Round head combination screw	**SY5000-223-1A**	**SY7000-224-1A**	Part numbers shown on the left are for 10 valves. (SY5000: 20 pcs./SY7000: 30 pcs.)

One-touch Fittings Part Nos.

Port size			25A-SY5000	25A-SY7000
A, B port	Metric size	ø4 One-touch fitting (Straight type)	**90-VVQ1000-51A-C4**	—
		ø6 One-touch fitting (Straight type)	**90-VVQ1000-51A-C6**	**25A-KJH06-17-X1607**
		ø8 One-touch fitting (Straight type)	**90-VVQ1000-51A-C8**	**90-VVQ2000-51A-C8**
		ø10 One-touch fitting (Straight type)	—	**90-VVQ2000-51A-C10**
		ø12 One-touch fitting (Straight type)	—	**25A-KQ2H12-17-X1607**
P, E port	Metric size	ø10 One-touch fitting (Straight type)	**90-VVQ2000-51A-C10**	—
		ø12 One-touch fitting (Straight type)	—	**90-VVQ4000-50B-C12**

Manifold Options

How to Order Individual SUP/EXH Spacer Assembly

One-touch fitting Straight type

25A − SY [5] 0M − [38] − 1 A − [C6]

Series

5	SY5000
7	SY7000

Spacer type

38	Individual SUP spacer
39	Individual EXH spacer

Port size (Metric)

Symbol	P, E port	SY5000	SY7000
C4	ø4	●	—
C6	ø6	●	●
C8	ø8	●	●
C10	ø10	—	●
C12	ø12	—	●

Part numbers of mounting screw
SY5000: SY5000-223-2A (2 pcs. of each)
SY7000: SV1000-136-12A (3 pcs. of each)

How to Order Individual SUP/EXH Block Assembly

One-touch fitting Straight type

25A − SY [5] 0M − [78] − 1 A − [C6]

Series

5	SY5000
7	SY7000

Block type

78	Individual SUP block
79	Individual EXH block

Port size (Metric)

Symbol	P, E port	SY5000	SY7000
C4	ø4	●	—
C6	ø6	●	●
C8	ø8	●	●
C10	ø10	—	●
C12	ø12	—	●

Manifold Parts Nos.

Ⓐ Manifold block assembly

25A − SY [5] 0M − 2 − [1] [D] A − [C6]

Series

5	SY5000
7	SY7000

Piping direction

1	Side/Top ported
2	Bottom ported

Wiring type

S	Single wiring
D	Double wiring

A, B port size (One-touch fittings)

Symbol	A, B port	SY5000	SY7000	Note
C4	ø4	●	—	Side/Bottom ported Metric size
C6	ø6	●	●	
C8	ø8	●	●	
C10	ø10	—	●	
C12	ø12	—	●	
00	Plug	●	●	Top ported

Ⓑ SUP/EXH block assembly

① D-sub connector <IP40>

25A − SY [5] 0M − 1 − 11 A [ ] [1] − [C10] − [ ]

Series

5	SY5000
7	SY7000

SUP/EXH block assembly

11	D-sub connector <IP40>

Pilot, Silencer/Piping type

Symbol	Pilot type		Built-in silencer	Piping direction
	Internal	External		
Nil	●	—	—	Side
S	●	—	●	
R	—	●	—	
V	●	—	—	Top
VP	●	—	●∗1	
B	●	—	—	Bottom
BS	●	—	●	
BR	—	●	—	

∗1 For silencer (supply side) E port is plugged.

Connector entry direction

1	Upward
2	Lateral

Mounting

Nil	Direct mounting
D0	DIN rail mounting (Without DIN rail)

∗ For the bottom-ported type, the symbol is nil.

P, E port size (One-touch fittings)

Symbol	P, E port	SY5000	SY7000	Note
C10	ø10	●	—	Side/Bottom/Top ported Metric size
C12	ø12	—	●	
00∗2	Plug	●	●	P/E port entry on one side or Top ported

∗2 It can be selected only if no symbol or “S” or “V” or “B” is selected for the pilot and the piping.

Clamp bracket assembly

Series	Part no.
25A-SY5000/7000	25A-SY50M-15-3A

∗ Part number is for one assembly.

② Terminal block box

25A − SY [5] 0M − 1 − 1A [ ] − [C10] − [ ]

Series

5	SY5000
7	SY7000

Pilot, Silencer/Piping type

Symbol	Pilot type		Built-in silencer	Piping direction
	Internal	External		
Nil	●	—	—	Side
S	●	—	●	
R	—	●	—	
V	●	—	—	Top
VP	●	—	●∗3	
B	●	—	—	Bottom
BS	●	—	●	
BR	—	●	—	

∗3 For silencer (supply side) E port is plugged.

Mounting

Nil	Direct mounting
D0	DIN rail mounting (Without DIN rail)

∗ For the bottom-ported type, the symbol is nil.

P, E port size (One-touch fittings)

Symbol	P, E port	SY5000	SY7000	Note
C10	ø10	●	—	Side/Bottom/Top ported Metric size
C12	ø12	—	●	
00∗4	Plug	●	●	P/E port entry on one side or Top ported

∗4 It can be selected only if no symbol or “S” or “V” or “B” is selected for the pilot and the piping.

Terminal block box housing assembly

25A − VVQC1000 − T0 − 1

Clamp bracket assembly for terminal block box

25A − SY30M − 15 − 6A

∗ Part number is for one assembly.

Clamp bracket assembly

Series	Part no.
25A-SY5000/7000	25A-SY50M-15-3A

∗ Part number is for one assembly.

Manifold Parts Nos.

③Lead wire

25A − SY [5] 0M − 1 − 1A [ ] − [C10] − [ ]

Series

5	SY5000
7	SY7000

Mounting

Nil	Direct mounting
D0	DIN rail mounting (Without DIN rail)

∗ For the bottom-ported type, the symbol is nil.

Pilot, Silencer/Piping type

Symbol	Pilot type		Built-in silencer	Piping direction
	Internal	External		
Nil	●	—	—	Side
S	●	—	●	
R	—	●	—	
V	●	—	—	Top
VP	●	—	●∗1	
B	●	—	—	Bottom
BS	●	—	●	
BR	—	●	—	

∗1 For silencer (supply side) E port is plugged.

P, E port size (One-touch fittings)

Symbol	P, E port	SY5000	SY7000	Note
C10	ø10	●	—	Side/Bottom/Top ported
C12	ø12	—	●	Metric size
00∗2	Plug	●	●	P/E port entry on one side or Top ported

∗2 It can be selected only if no symbol or “S” or “V” or “B” is selected for the pilot and the piping.

Lead wire connector block assembly

25A − SY30M − 14 − 4A − [ ] − [ ]

Number of cores

1	34
2	17
3	9

Lead wire length [m]

1	0.6
2	1.5
3	3

Clamp bracket assembly

Series	Part no.
25A-SY5000/7000	25A-SY50M-15-3A

∗ Part number is for one assembly.

④EX126

25A − SY [5] 0M − 1 − 1A [ ] − [C10] − [ ]

Series

5	SY5000
7	SY7000

Mounting

Nil	Direct mounting
D0	DIN rail mounting (Without DIN rail)

∗ For the bottom-ported type, the symbol is nil.

Pilot, Silencer/Piping type

Symbol	Pilot type		Built-in silencer	Piping direction
	Internal	External		
Nil	●	—	—	Side
S	●	—	●	
R	—	●	—	
V	●	—	—	Top
VP	●	—	●∗3	
B	●	—	—	Bottom
BS	●	—	●	
BR	—	●	—	

∗3 For silencer (supply side) E port is plugged.

P, E port size (One-touch fittings)

Symbol	P, E port	SY5000	SY7000	Note
C10	ø10	●	—	Side/Bottom/Top ported
C12	ø12	—	●	Metric size
00∗4	Plug	●	●	P/E port entry on one side or Top ported

∗4 It can be selected only if no symbol or “S” or “V” or “B” is selected for the pilot and the piping.

Terminal block plate assembly

25A − VVQC1000 − 74A − 2

Clamp bracket assembly for EX126 SI unit

25A − SY30M − 15 − 6A

∗ Part number is for one assembly.

Clamp bracket assembly

Series	Part no.
25A-SY5000/7000	25A-SY50M-15-3A

∗ Part number is for one assembly.

Manifold Parts Nos.

⑤**EX260**

25A − SY [5] 0M − 1 − 1A [ ] − [C10] − [ ]

Series

5	SY5000
7	SY7000

Pilot, Silencer/Piping type

Symbol	Pilot type		Built-in silencer	Piping direction
	Internal	External		
Nil	●	—	—	Side
S	●	—	●	
R	—	●	—	
V	●	—	—	Top
VP	●	—	●∗5	
B	●	—	—	Bottom
BS	●	—	●	
BR	—	●	—	

∗5 For silencer (supply side) E port is plugged.

Mounting

Nil	Direct mounting
D0	DIN rail mounting (Without DIN rail)

∗ For the bottom-ported type, the symbol is nil.

P, E port size (One-touch fittings)

Symbol	P, E port	SY5000	SY7000	Note
C10	ø10	●	—	Side/Bottom/Top ported Metric size
C12	ø12	—	●	
00∗6	Plug	●	●	P/E port entry on one side or Top ported

∗6 It can be selected only if no symbol or “S” or “V” or “B” is selected for the pilot and the piping.

Clamp bracket assembly

Series	Part no.
25A-SY5000/7000	25A-SY50M-15-3A

∗ Part number is for one assembly.

Manifold Parts Nos.

ⓒSUP/EXH block assembly

25A − SY [5] 0M − 3 − 1A [ ] − [C10] − [ ]

Series

5	SY5000
7	SY7000

Pilot, Silencer/Piping type

Symbol	Pilot type		Built-in silencer	Piping direction
	Internal	External		
Nil	●	—	—	Side
S	●	—	●	
R	—	●	—	
V	●	—	—	Top
VP	●	—	●∗1	
B	●	—	—	Bottom
BS	●	—	●	
BR	—	●	—	

∗1 For silencer (supply side) E port is plugged.
∗ "B" for the bottom-ported type can be selected for the SY5000/7000 series.

Mounting

Nil	Direct mounting
D0	DIN rail mounting (Without DIN rail)

∗ For the bottom-ported type, the symbol is nil.

P, E port size (One-touch fittings)

Symbol	P, E port	SY5000	SY7000	Note
C10	ø10	●	—	Side/Bottom/Top ported Metric size
C12	ø12	—	●	
00∗2	Plug	●	●	P/E port entry on one side or Top ported

∗2 It can be selected only if no symbol or "S" or "V" or "B" is selected for the pilot and the piping.

■ Cover assembly/Silencer cover assembly/Port block assembly for SUP/EXH (end) block assembly

Cover assembly
(Internal pilot)

25A − SY [5] 0M − 4 − 1 A

Silencer cover assembly
(Internal pilot, Built-in silencer)

25A − SY [5] 0M − 5 − 1 A

Port block assembly
(Side ported, External pilot)

25A − SY [5] 0M − 6 − 1 AR [ ] − 00 [ ]

A, B port
One-touch fittings piping direction

Nil	Straight (Side ported)

X, PE port One-touch fitting type

Symbol	X, PE port		SY5000	SY7000
Nil	Metric size	ø4	●	—
		ø6	—	●

Port block assembly
(Top ported, Internal pilot, for silencer (supply side))

25A − SY [5] 0M − 6 − 3 AV − [C10]

Port block assembly
(Top ported, Internal pilot)

25A − SY [5] 0M − 6 − 1 A [ ] V − [C10]

Series

5	SY5000
7	SY7000

Pilot type

Nil	Internal pilot

P, E port size (One-touch fittings)

Symbol	P, E port	SY5000	SY7000
C10	ø10	●	—
C12	ø12	—	●

■ Name plate bracket assembly (For SY5000 only)

25A − SY50M − 85 − 1A

25A-SY5000/7000 Series
Valve Replacement Parts

How to Order Pilot Valves

25A − V112 □ □ − 5 A

Pilot valve option

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

Rated voltage

5	24 VDC
6	12 VDC

Coil type

Nil	Standard
T	With power-saving circuit (Made to Order)

Pilot cover

25A − SY50V − 25A

How to Order Port Block Assembly

25A − SY □ 0V − 6A □ − □ − □ □

Series

5	5000
7	7000

Pilot type

Nil	Internal pilot

Option for mounting

Nil	Standard (Valve mounting screw without drop prevention)
1	Drop prevention type valve mounting screw

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

A, B port size

Thread piping

Symbol	Port size	Applicable series
02	1/4	**SY7000**

Metric size (One-touch fitting)

Symbol	Port size	Applicable series	
		SY5000	**SY7000**
C4	ø4	●	—
C6	ø6	●	●
C8	ø8	●	●
C10	ø10	—	●
C12	ø12	—	●

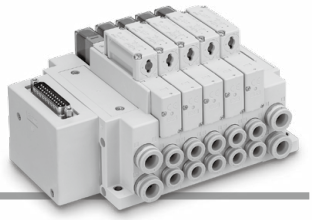
Body Cover Assembly

∗ Used when the top-ported type is changed to the side or bottom-ported type

Series		Part no.	
		Standard (Valve mounting screw without drop prevention)	Drop prevention type valve mounting screw
SY5000	Internal pilot	25A-SY50V-16A	25A-SY50V-16A-1
	External pilot	25A-SY50V-16AR	25A-SY50V-16AR-1
SY7000	Internal pilot	25A-SY70V-16A	25A-SY70V-16A-1
	External pilot	25A-SY70V-16AR	25A-SY70V-16AR-1

∗ The part number is not indicated on the product.

25A-SY5000/7000 Series
With Residual Pressure Release Valve



How to Order (With mounting screw)

25A − SY [5] [3] [0] [0] [ ] [ ] − [5] [ ] [ ] 1 − [E]

❶ ❷ ❸ ❹ ❺ ❻

Series

5	SY5000
7	SY7000

Type of actuation

3	3-position closed center*1

*1 Only the closed center type is available.

Base mounted
(The top-ported type is not available.)

With residual pressure release valve

E	With residual pressure release valve*2

*2 Mounting screw types, hexagon socket head cap screw B and drop prevention type K, H are not available.

⚠ Protective class class Ⅲ (Mark: ⧫)

❶ Seal type

0	Rubber seal

❷ Pilot valve option

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

❸ Coil type

Nil	Standard
T	With power saving circuit (Continuous duty type)

* Be sure to select the power saving circuit type if the valve is to be continuously energized for long periods of time.
* Be careful of the energizing time when the power saving circuit is selected. Refer to the **Web Catalog** for details.

❹ Rated voltage

5	24 VDC
6	12 VDC

* The applicable rated voltage varies depending on the manifold wiring type. Refer to the "How to Order Manifolds" pages.

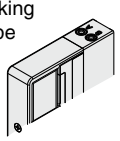
❺ Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification
Nil	—	—	Non-polar
R	—	●	
U	●		
S	—		Positive common
Z	●		
NS	—		Negative common
NZ	●		

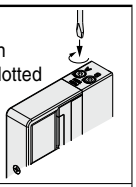
* Only "Z" and "NZ" types are available with a power saving circuit.

❻ Manual override

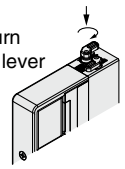
Nil: Non-locking push type



D: Push-turn locking slotted type



E: Push-turn locking lever type



F: Slide locking type

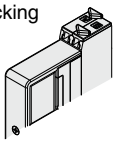


Table 1. Valve mounting screw

SY5000	SY7000
SY5000-221-9A (2 pcs.)	**SY7000-221-14A** (3 pcs.)

25A-SY5000/7000 Series
Made to Order

Please contact SMC for detailed dimensions, specifications, and lead times.

Made to Order

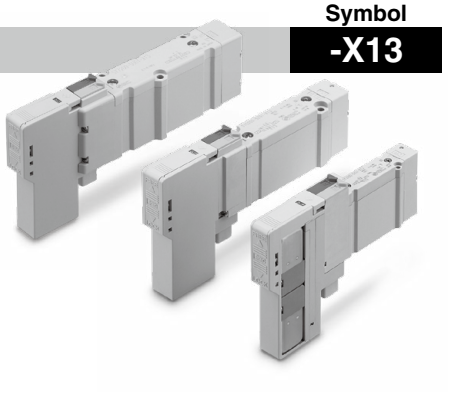
1 With Safety Slide Locking Manual Override

Symbol **-X13**

A safety lock is added to the slide locking manual override.

25A−SY $\frac{5}{7}$ □ $\frac{00}{3}$ □□□□□−□□ **G1−X13**

● **Entry is the same as 25A-standard products. Specifications and performance are the same as standard products.**



2 2-Position Single Solenoid Valve with Built-in Return Spring

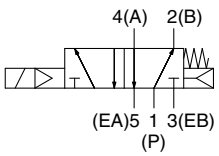
Symbol **-X350**

A 2-position single solenoid valve with a spring built into the main valve
The main valve returns to origin (the OFF position) via the spring when it is not pressurized.

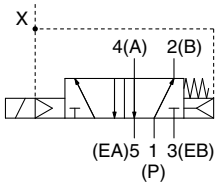
25A−SY $\frac{5}{7}$ **1** $\frac{0}{3}$ **0** □□□□−□□ **1−X350**

● **Entry is the same as 25A-standard products. Specifications and performance are the same as standard products.**

Internal pilot type



External pilot type



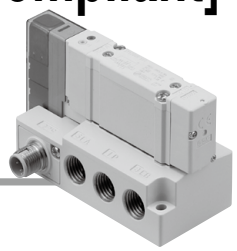
∗ For the external pilot type, exhaust the external pilot (X) port and the main pressure simultaneously.
If the main pressure cannot be exhausted due to the system specifications, please contact SMC separately.

∗ The manual option is only applicable to the non-locking push type.

25A-SY5000/7000 Series

Plug-in Single Unit/Sub-plate Type [IP67 Compliant]

(Side ported, Bottom ported, Top ported)



How to Order

In the case of (Valve) + (Sub-plate) (Built-in valve type part no.)

Side/Bottom ported

25A-SY 5 1 00 ❹ ❺ ❻ ❼ - 5 ❽ ❾ 1 - W5 - ⓮ 02 ⓰

Top ported

25A-SY 5 1 30 ❹ ❺ ❻ ❼ - 5 ❽ ❾ 1 - 02 ⓬ - W5 - ⓮ 02 ⓰

Series compatible with secondary batteries ❶ ❷ ❸

❶ Series

5	SY5000
7	SY7000

❷ Type of actuation

1	2-position	Single
2		Double
3	3-position	Closed center
4		Exhaust center
5		Pressure center
A	4-position dual 3-port	N.C./N.C.
B		N.O./N.O.
C		N.C./N.O.

❸ Seal type

0	Rubber seal

❹ Pilot type

Nil	Internal pilot
R	External pilot

❺ Back pressure check valve (Built-in valve type)

Nil	None
H	Built-in

* The built-in valve type back pressure check valve is not available for the 3-position type or the SY7000.

❻ Pilot valve option

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

❼ Coil type

Nil	Standard
T	With power saving circuit (Continuous duty type)

* Be sure to select the power saving circuit type if the valve is to be continuously energized for long periods of time.
* Be careful of the energizing time when the power saving circuit is selected. For details, refer to the standard product catalog.

❽ Rated voltage

5	24 VDC
6	12 VDC

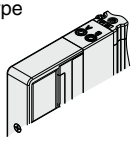
❾ Light/surge voltage suppressor and common specification

Symbol	With light	Surge voltage suppressor	Common specification
Nil	—	—	Non-polar
R	—	●	
U	●		
S	—		Positive common
Z	●		
NS	—		Negative common
NZ	●		

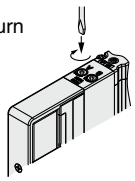
* Only "Z" and "NZ" types are available with a power saving circuit.

❿ Manual override

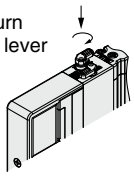
Nil: Non-locking push type



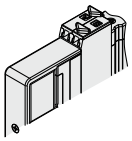
D: Push-turn locking slotted type



E: Push-turn locking lever type



F: Slide locking type



⓫ A, B port size (* Top-ported valve only)

Thread piping

Symbol	Port size	Applicable series
02	1/4	SY7000

Metric size (One-touch fitting)

Symbol	A, B port	SY5000	SY7000
C4	ø4	●	—
C6	ø6	●	●
C8	ø8	●	●
C10	ø10	—	●
C12	ø12	—	●

⓬ A, B port thread type (Thread piping)

Nil	Rc
F	G

⓭ Wiring specifications (Sub-plate)

WO	Without M12 connector cable
W5	With M12 connector cable (3000 mm)

* When ordering a product with M12 connector cable, the connector cable is included.

⓮ Port location (Sub-plate)

Nil	Side ported
B	Bottom ported
V*1	Top ported (1P, 5EA, 3EB port: Side ported)

*1 Only available for the valve piping type "3" top ported

⓯ Port size (Sub-plate)

Symbol	Port size	Applicable series
02	1/4	SY5000
03	3/8	SY7000

⓰ Thread type (Sub-plate)

Nil	Rc
F	G

* The 25A- series specifications and dimensions are the same as those of the standard model.
* When mounting a special order (including Made-to-Order specification) valve or manifold option (spacer, etc.) on the sub-plate, add the valve part number or spacer part number under the sub-plate part number to place an order. For details, refer to the ordering example on page 61.

How to Order

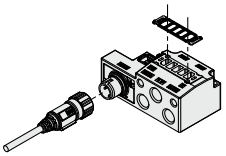
In the case of (Sub-plate) (Sub-plate single unit part no.)

∗ Without valve

25A – SY [5] 0M – 27 – 1 – [W5] – [ ] [02] [ ]

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺



∗ Base gasket is included.
∗ Valve mounting screws are not included.

❶ Series

5	SY5000
7	SY7000

❷ Wiring specifications

WO	Without M12 connector cable
W5	With M12 connector cable (3000 mm)

∗ Refer to the table below for connector cable part numbers.
∗ When ordering a product with M12 connector cable, the connector cable is included.

❸ Port location (Sub-plate)

Nil	Side ported
B	Bottom ported
V	Top ported [1(P), 5(EA), 3(EB) port: Side ported]

❹ Port size (Sub-plate)

Symbol	Port size	Applicable series
02	1/4	SY5000
03	3/8	SY7000

❺ Sub-plate thread type

Nil	Rc
F	G

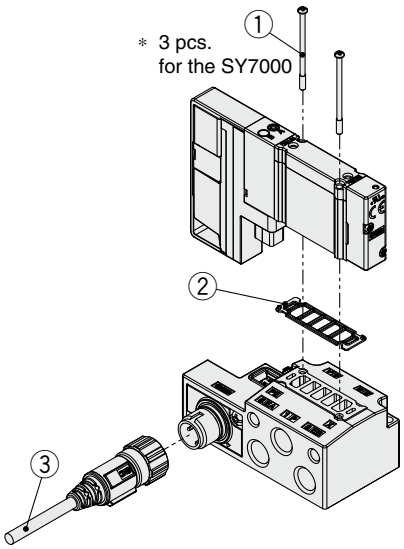
How to Order when mounting a special order (including Made-to-Order specification) valve on the sub-plate (Ordering example: X350)

25A-SY50M-27-1-W5-02····· 1 set (Sub-plate single unit part no.)
∗**25A-SY5100-5U1-X350**····· 1 set (Built-in return spring specification)

Ordering example when mounting a manifold option (spacer, etc.)

25A-SY50M-27-1-W5-02····· 1 set (Sub-plate single unit part no.)
∗**25A-SY5400-5U1** ····· 1 set (3-position exhaust center part no.)
∗**25A-SY50M-39-1A-C6** ····· 1 set (Individual EXH spacer part no.)

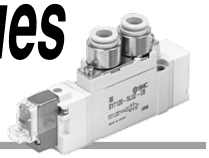
Sub-plate Parts Nos.



No.	Description	Part no.		Note
		SY5000	SY7000	
①	**Round head combination screw**	**SY5000-223-1A** (M3 x 32.5)	**SY7000-224-1A** (M3 x 36.5)	Part numbers shown on the left are for 10 valves (20 pcs.). (30 pcs. for the SY7000)
②	**Base gasket (for sub-plate)**	**SY50M-11-1A**	**SY70M-11-1A**	Part numbers shown on the left are for 10 valves (10 pcs.).
③	**M12 waterproof connector cable**	**90-ZS-37-A-X258**		Cable length: 3000 mm

5-Port Solenoid Valve
Body Ported/Single Unit
25A-SY5000/7000/9000 Series

CE UKCA [Option]



How to Order

25A − SY 5 1 20 □ − 5 L □ □ − 01 □ − □ − □ − □

Series compatible with secondary batteries

Series

5	SY5000
7	SY7000
9	SY9000

Type of actuation

1	2-position	Single
2		Double
3	3-position	Closed center
4		Exhaust center
5		Pressure center
A*1	4-position dual 3-port	N.C./N.C.
B*1		N.O./N.O.
C*1		N.C./N.O.

*1 "A," "B," and "C" are only selectable for the "X701."

Coil specifications

Nil	Standard
T	With power-saving circuit (24, 12 VDC only)

* Power-saving circuit is not available in the case of "D" or "Y" type.

Rated voltage

For DC

5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

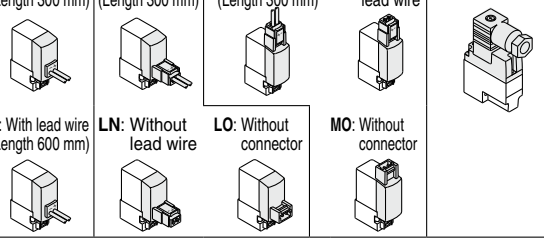
For AC (50/60 Hz)

1	100 VAC
2	200 VAC
3	110 VAC [115 VAC]
4	220 VAC [230 VAC]

* DC specifications of type "D" and "Y" are only available with 12 and 24 VDC.
* AC-type models that are CE/UKCA-compliant have DIN terminals only.

Electrical entry

24, 12, 6, 5, 3 VDC/100, 110, 200, 220 VAC			24, 12 VDC/100, 110, 200, 220 VAC
Grommet	L plug connector	M plug connector	DIN terminal
G: With lead wire (Length 300 mm)	L: With lead wire (Length 300 mm)	M: With lead wire (Length 300 mm)	D,Y: With connector
H: With lead wire (Length 600 mm)	LN: Without lead wire	LO: Without connector	MO: Without connector
		MN: Without lead wire	



* "LN," "MN" type: with 2 sockets.
* "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).
* Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

Thread type

Nil	Rc
F	G

A, B port size

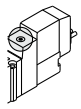
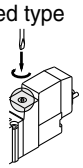
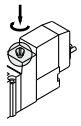
Thread piping

Symbol	Port size	Applicable series
01	1/8	SY5000
02	1/4	SY7000 SY9000
03	3/8	SY9000

One-touch fitting (Metric size)

Symbol	Port size	Applicable series
C4	One-touch fitting for ø4	SY5000
C6	One-touch fitting for ø6	
C8	One-touch fitting for ø8	
C8	One-touch fitting for ø8	SY7000 SY9000
C10	One-touch fitting for ø10	
C12	One-touch fitting for ø12	SY9000

Manual override

Nil: Non-locking push type	D: Push-turn locking slotted type	E: Push-turn locking lever type
		

Light/surge voltage suppressor

Electrical entry for G, H, L, M

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor
R	With surge voltage suppressor (Non-polar type)
U	With light/surge voltage suppressor (Non-polar type)

* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.
* For "R" and "U," DC voltage is only available.
* Power-saving circuit is only available in the "Z" type.

Electrical entry for D, Y

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor

* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

* AC-type models that are CE/UKCA-compliant have DIN terminals only.

Made to order

Nil	—
X701	4-position dual 3-port

Bracket

Nil	Without bracket
F1	With foot bracket (2-position single only)
F2	With side bracket

*2 SY9000 has no bracket.

* When placing an order for body ported solenoid valve as a single unit, mounting screw for manifold and gasket are not attached. Order them separately, if necessary.

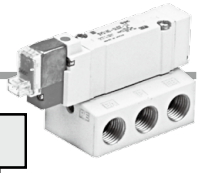
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

5-Port Solenoid Valve
Base Mounted/Single Unit

CE UKCA [Option]

25A-SY5000/7000/9000 Series



How to Order

25A – SY 5 2 40 □ □ – 5 L □ □ – □ □ – □ – □

Series compatible with secondary batteries

Series

5	SY5000
7	SY7000
9	SY9000

Type of actuation

1	2-position	Single
2		Double
3	3-position	Closed center
4		Exhaust center
5		Pressure center
A*1	4-position dual 3-port	N.C./N.C.
B*1		N.O./N.O.
C*1		N.C./N.C.

*1 "A," "B," and "C" are only selectable for the "X701."

Pilot type

Nil	Internal pilot
R	External pilot

* Only the internal pilot type is selectable for the "X701."

Coil specifications

Nil	Standard
T	With power-saving circuit (24, 12 VDC only)

* Power-saving circuit is not available in the case of "D" or "Y" type.

Rated voltage

For DC

5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

For AC (50/60Hz)

1	100 VAC
2	200 VAC
3	110 VAC [115 VAC]
4	220 VAC [230 VAC]

* DC specifications of type "D" and "Y" are only available with 12 and 24 VDC.
* AC-type models that are CE/UKCA-compliant have DIN terminals only.

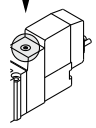
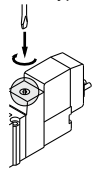
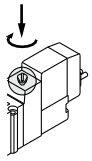
Thread type

Nil	Rc
F	G

Port size

Symbol	Port size	Applicable series
Nil	Without sub-plate	
02	1/4 With sub-plate	SY5000 SY7000
03	3/8 With sub-plate	SY7000 SY9000
04	1/2 With sub-plate	SY9000

Manual override

Nil: Non-locking push type	D: Push-turn locking slotted type	E: Push-turn locking lever type
		

Light/surge voltage suppressor

Electrical entry for G, H, L, M

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor
R	With surge voltage suppressor (Non-polar type)
U	With light/surge voltage suppressor (Non-polar type)

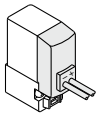
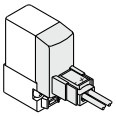
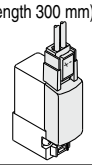
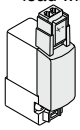
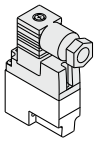
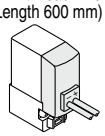
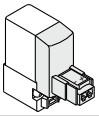
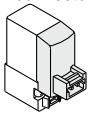
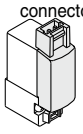
* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.
* For "R" and "U," DC voltage is only available.
* Power-saving circuit is only available in the "Z" type.

Electrical entry for D, Y

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor (Non-polar type)
Z	With light/surge voltage suppressor (Non-polar type)

* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

Electrical entry

24, 12, 6, 5, 3 VDC / 100, 110, 200, 220 VAC				24, 12 VDC/ 100, 110, 200, 220 VAC
Grommet	L plug connector	M plug connector		DIN terminal
G: With lead wire (Length 300 mm)	L: With lead wire (Length 300 mm)	M: With lead wire (Length 300 mm)	MN: Without lead wire	D,Y: With connector
				
H: With lead wire (Length 600 mm)	LN: Without lead wire	LO: Without connector	MO: Without connector	
				

* "LN," "MN" type: with 2 sockets.
* "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).
* Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

* AC-type models that are CE/UKCA-compliant have DIN terminals only.

Made to order

Nil	—
X701	4-position dual 3-port

* The 25A- series specifications and dimensions are the same as those of the standard model.

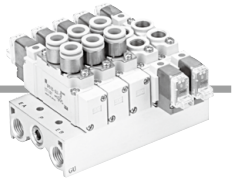
For details, refer to the Web Catalog.

5-Port Solenoid Valve
Body Ported Manifold
Bar Stock Type/Individual Wiring

CE UKCA [Option]

Type 20

25A-SY5000/7000 Series



How to Order Manifolds

25A – SS5Y [5] – 20 – [05] – [ ] – [ ]

Series compatible with secondary batteries

Manifold series

5	SY5000
7	SY7000

Thread type

Nil	Rc
00F	G

Stations

02	2 stations
⋮	⋮
20	20 stations

* The blanking plate assembly is included in this number.

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

* AC-type models that are CE/UKCA-compliant have DIN terminals only.

* The 25A- series specifications and dimensions are the same as those of the standard model. However, the blanking plate assembly has different dimensions. Refer to page 71.

For details, refer to the Web Catalog.

How to Order Valves

[Option]

25A – SY [5][1]20 [ ] – [5][L][ ][ ] – [01][ ] – [ ]

Series compatible with secondary batteries

Series

5	SY5000
7	SY7000

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center

Coil specifications

Nil	Standard
T	With power-saving circuit (24 VDC, 12 VDC only)

∗ Power-saving circuit is not available in the case of "D" or "Y" type.

Rated voltage

For DC

5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

For AC (50/60Hz)

1	100 VAC
2	200 VAC
3	110 VAC [115 VAC]
4	220 VAC [230 VAC]

∗ DC specifications of type "D" and "Y" are only available with 12 and 24 VDC.
∗ AC-type models that are CE/UKCA-compliant have DIN terminals only.

Manual override

Nil	Non-locking push type
D	Push-turn locking slotted type
E	Push-turn locking lever type

Light/surge voltage suppressor

Electrical entry for G, H, L, M

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor
R	With surge voltage suppressor (Non-polar type)
U	With light/surge voltage suppressor (Non-polar type)

∗ There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.
∗ For "R" and "U," DC voltage is only available.
∗ Power-saving circuit is only available in the "Z" type.

Electrical entry for D, Y

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor (Non-polar type)
Z	With light/surge voltage suppressor (Non-polar type)

∗ There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

Electrical entry

24, 12, 6, 5, 3 VDC/100, 110, 200, 220 VAC			24, 12 VDC/ 100, 110, 200, 220 VAC
Grommet	L plug connector	M plug connector	DIN terminal
G: With lead wire (Length 300 mm) **H**: With lead wire (Length 600 mm)	**L**: With lead wire (Length 300 mm) **LN**: Without lead wire **LO**: Without connector	**M**: With lead wire (Length 300 mm) **MN**: Without lead wire **MO**: Without connector	**D**: With connector **Y**: With connector

∗ "LN," "MN" type: with 2 sockets.
∗ "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).
∗ Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

Thread type

Nil	Rc
F	G

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

∗ AC-type models that are CE/UKCA-compliant have DIN terminals only.

A, B port size

Thread piping

Symbol	Port size	Applicable series
01	1/8	SY5000
02	1/4	SY7000

One-touch fitting (Metric size)

Symbol	Port size	Applicable series
C4	One-touch fitting for ø4	SY5000
C6	One-touch fitting for ø6	
C8	One-touch fitting for ø8	
C8	One-touch fitting for ø8	SY7000
C10	One-touch fitting for ø10	

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

5-Port Solenoid Valve
Body Ported Manifold
Stacking Type/Individual Wiring

Type 23

25A-SY9000 Series

CE UKCA [Option]

How to Order Manifold

Type 23/External pilot capable

25A – SS5Y 9 – 23 – 05 – ☐ – ☐

Series compatible with secondary batteries

Manifold series

9	SY9000

Valve stations

Symbol	Stations
02	2 stations
⋮	⋮
20	20 stations

∗ This also includes the number of blanking plate assemblies.

Thread type

Nil	Rc
00F	G

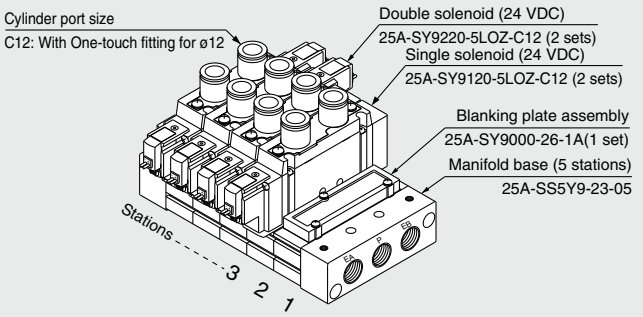
CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

Note) AC-type models that are CE/UKCA-compliant have DIN terminals only.

How to Order Manifold Assembly (Example)

Example



25A-SS5Y9-23-05 ····· **1 set (Type 23, 5-station manifold base part no.)**
∗ **25A-SY9000-26-1A** ····· **1 set (Blanking plate assembly part no.)**
∗ **25A-SY9120-5LOZ-C12** ··· **2 sets (Single solenoid part no.)**
∗ **25A-SY9220-5LOZ-C12** ··· **2 sets (Double solenoid part no.)**
→ The asterisk denotes the symbol for assembly. Prefix it to the part nos. of the solenoid valve, etc.

Add the valve and option part number under the manifold base part number. In the case of complex arrangement, specify them on the manifold specification sheet.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

How to Order Valve

Note) AC-type models that are CE/UKCA-compliant have DIN terminals only.

[Option]

25A − SY 9 1 20 □ □ − 5 L □ □ − 02 □ − □

Series compatible with secondary batteries

Series

9	SY9000

Type of actuation

1	2 position single
2	2 position double
3	3 position closed center
4	3 position exhaust center
5	3 position pressure center

Pilot specifications

Nil	Internal pilot
R	External pilot

∗ In the case of external pilot specifications, it cannot be used as a single unit.

Coil specifications

Nil	Standard
T	With power saving circuit (24 VDC, 12 VDC only)

∗ Power saving circuit is not available in the case of D or Y type.

Rated voltage

For DC

5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

For AC (50/60 Hz)

1	100 VAC
2	200 VAC
3	110 VAC [115 VAC]
4	220 VAC [230 VAC]

∗ DC specifications of type D and Y is only available with 12 and 24 VDC.

Note) AC-type models that are CE/UKCA-compliant have DIN terminals only.

Electrical entry

24, 12, 6, 5, 3 VDC/100, 110, 200, 220 VAC			24, 12 VDC/ 100, 110, 200, 220 VAC
Grommet	L plug connector	M plug connector	DIN terminal
G: With lead wire (Length 300 mm) **H**: With lead wire (Length 600 mm)	**L**: With lead wire (Length 300 mm) **LN**: Without lead wire **LO**: Without connector	**M**: With lead wire (Length 300 mm) **MN**: Without lead wire **MO**: Without connector	**D**: With connector **Y**: With connector

∗ "LN," "MN" type: with 2 sockets.
∗ "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).
∗ Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

Light/Surge voltage suppressor

Electrical entry for G, H, L, M, W

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor
R	With surge voltage suppressor (Non-polar type)
U	With light/surge voltage suppressor (Non-polar type)

∗ For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.
∗ For "R" and "U", DC voltage is only available.
∗ Power saving circuit is only available in the "Z" type.

Electrical entry for D, Y

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor

∗ For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.

Manual override

Nil	Non-locking push type
D	Push-turn locking slotted type
E	Push-turn locking lever type

A, B port size

Thread piping

Symbol	Port size
02	1/4
03	3/8

One-touch fitting (Metric size)

Symbol	Port size
C8	One-touch fitting for ø8
C10	One-touch fitting for ø10
C12	One-touch fitting for ø12

Thread type

Nil	Rc
F	G

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

Note) AC-type models that are CE/UKCA-compliant have DIN terminals only.

Note) When placing an order for body ported solenoid valve as a single unit, mounting screw for manifold and gasket are not attached. Order them separately, if necessary.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

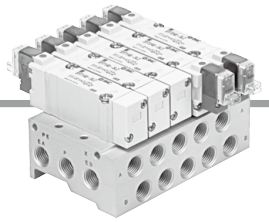
For details, refer to the Web Catalog.

Type 41
Type 42

5-Port Solenoid Valve Base Mounted Manifold Bar Stock Type/Individual Wiring

25A-SY5000/7000 Series

CE UKCA [Option]



How to Order Manifolds

Type 41/Compact type

25A − SS5Y 5 − 41 − 05 − C8 □ − □

Series compatible with secondary batteries

Manifold series

5	SY5000

Stations

02	2 stations
⋮	⋮
20	20 stations

∗ The blanking plate assembly is included in this number.

A, B port size

Thread piping

Symbol	Port size	Applicable series
01	1/8	SY5000

One-touch fitting (Metric size)

Symbol	Port size	Applicable series
C6	One-touch fitting for ø6	SY5000
C8	One-touch fitting for ø8	

One-touch fitting (Inch size)

Symbol	Port size	Applicable series
N7	One-touch fitting for ø1/4"	SY5000
N9	One-touch fitting for ø5/16"	

Thread type

Nil	Rc
F	G

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

∗ AC-type models that are CE/UKCA-compliant have DIN terminals only.

Type 42/External pilot capable

25A − SS5Y 5 − 42 − 05 − C8 □ − □

Series compatible with secondary batteries

Manifold series

5	SY5000
7	SY7000

Stations

02	2 stations
⋮	⋮
20	20 stations

∗ The blanking plate assembly is included in this number.

A, B port size

Thread piping

Symbol	Port size	Applicable series
02	1/4	SY5000
02	1/4	SY7000

One-touch fitting (Metric size)

Symbol	Port size	Applicable series
C6	One-touch fitting for ø6	SY5000
C8	One-touch fitting for ø8	
C10	One-touch fitting for ø10	SY7000

One-touch fitting (Inch size)

Symbol	Port size	Applicable series
N7	One-touch fitting for ø1/4"	SY5000
N9	One-touch fitting for ø5/16"	
N11	One-touch fitting for ø3/8"	SY7000

Thread type

Nil	Rc
F	G

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

∗ AC-type models that are CE/UKCA-compliant have DIN terminals only.

∗ The 25A- series specifications and dimensions are the same as those of the standard model. However, the blanking plate assembly has different dimensions. Refer to page 71.

For details, refer to the Web Catalog.

How to Order Valves

[Option]

25A – SY 5 2 40 □ □ – 5 L □ □ – □

Series compatible with secondary batteries

Series

5	SY5000
7	SY7000

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center

Pilot type

Nil	Internal pilot
R	External pilot

Coil specifications

Nil	Standard
T	With power-saving circuit (24 VDC, 12 VDC only)

* Power-saving circuit is not available in the case of "D" or "Y" type.

Rated voltage

For DC

5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

For AC (50/60Hz)

1	100 VAC
2	200 VAC
3	110 VAC [115 VAC]
4	220 VAC [230 VAC]

* DC specifications of type "D" and "Y" are only available with 12 and 24 VDC.
* AC-type models that are CE/UKCA-compliant have DIN terminals only.

Electrical entry

24, 12, 6, 5, 3 VDC/100, 110, 200, 220 VAC			24, 12 VDC/ 100, 110, 200, 220 VAC
Grommet	L plug connector	M plug connector	DIN terminal
G: With lead wire (Length 300 mm) **H**: With lead wire (Length 600 mm)	**L**: With lead wire (Length 300 mm) **LN**: Without lead wire **LO**: Without connector	**M**: With lead wire (Length 300 mm) **MN**: Without lead wire **MO**: Without connector	**D**: With connector **Y**: With connector

* "LN," "MN" type: with 2 sockets.
* "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).
* Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

Light/surge voltage suppressor

Electrical entry for G, H, L, M

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor
R	With surge voltage suppressor (Non-polar type)
U	With light/surge voltage suppressor (Non-polar type)

* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.
* For "R" and "U," DC voltage is only available.
* Power-saving circuit is only available in the "Z" type.

Electrical entry for D, Y

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor (Non-polar type)
Z	With light/surge voltage suppressor (Non-polar type)

* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

Manual override

Nil	Non-locking push type
D	Push-turn locking slotted type
E	Push-turn locking lever type

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

* AC-type models that are CE/UKCA-compliant have DIN terminals only.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

5-Port Solenoid Valve
Base Mounted Manifold
Stacking Type/Individual Wiring

Type 43

25A-SY9000 Series

[Option]
Note) AC-type models that are CE/UKCA-compliant have DIN terminals only.

How to Order Manifold

25A-SS5Y 9 -43- 05 U [ ] -C8 [ ] - [ ]

Series compatible with secondary batteries

Manifold series

9	SY9000

Valve stations

Symbol	Stations
02	2 stations
⋮	⋮
20	20 stations

∗ This also includes the number of blanking plate assemblies.

P, R port outlets

Symbol	Port outlet	Applicable stations
U	U side	2 to 10 stations
D	D side	
B	Both sides	2 to 20 stations

SUP/EXH block assembly specifications

Symbol	Specifications
Nil	Standard/Internal pilot specification
R	External pilot specification
S	Internal pilot/Built-in silencer
RS	External pilot/Built-in silencer

Thread type

Nil	Rc
F	G

∗ When One-touch fittings are selected for "A, B port size", the symbol is nil.

A, B port size

Thread piping

Symbol	Port size
02	1/4
03	3/8

One-touch fitting (Metric size)

Symbol	Port size
C8	One-touch fitting for ø8
C10	One-touch fitting for ø10
C12	One-touch fitting for ø12
M	Mixed

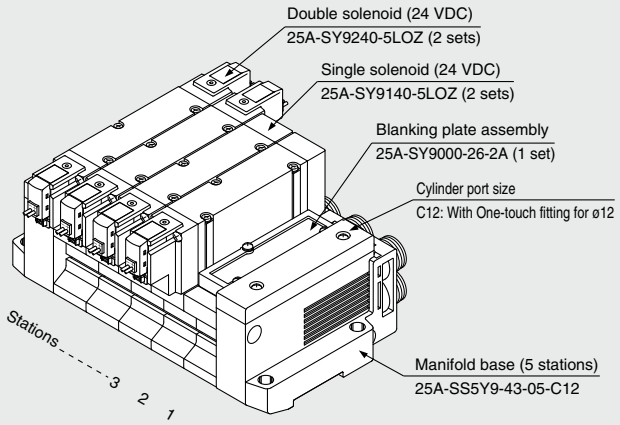
CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

Note) AC-type models that are CE/UKCA-compliant have DIN terminals only.

How to Order Manifold Assembly (Example)

Example



25A-SS5Y9-43-05B-C12 ··· **1 set (Type 43, 5-station manifold base part no.)**
∗ **25A-SY9000-26-2A** ····· **1 set (Blanking plate assembly part no.)**
∗ **25A-SY9140-5LOZ** ····· **2 sets (Single solenoid part no.)**
∗ **25A-SY9240-5LOZ** ····· **2 sets (Double solenoid part no.)**

The asterisk denotes the symbol for assembly.
Prefix it to the part nos. of the solenoid valve, etc.

Add the valve and option part number under the manifold base part number. In the case of complex arrangement, specify them on the manifold specification sheet.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

How to Order Valve

Note) AC-type models that are CE/UKCA-compliant have DIN terminals only.

[Option]

25A – SY 9 2 40 □ □ – 5 L □ □ – □

Series compatible with secondary batteries

Series

9	SY9000

Type of actuation

1	2 position single
2	2 position double
3	3 position closed center
4	3 position exhaust center
5	3 position pressure center

Pilot type

Nil	Internal pilot
R	External pilot

Coil specifications

Nil	Standard
T	With power saving circuit (24, 12 VDC only)

∗ Power saving circuit is not available in the case of D or Y type.

Rated voltage

For DC

5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

For AC (50/60 Hz)

1	100 VAC
2	200 VAC
3	110 VAC [115 VAC]
4	220 VAC [230 VAC]

∗ DC specifications of Type D and Y is only available with 12 and 24 VDC.

Note) AC-type models that are CE/UKCA-compliant have DIN terminals only.

Electrical entry

24, 12, 6, 5, 3 VDC/100, 110, 200, 220 VAC			24, 12 VDC/ 100, 110, 200, 220 VAC
Grommet	L plug connector	M plug connector	DIN terminal
G: With lead wire (Length 300 mm) **H**: With lead wire (Length 600 mm)	**L**: With lead wire (Length 300 mm) **LN**: Without lead wire **LO**: Without connector	**M**: With lead wire (Length 300 mm) **MN**: Without lead wire **MO**: Without connector	**D**: With connector **Y**: With connector

∗ "LN," "MN" type: with 2 sockets.
∗ "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).
∗ Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

Light/Surge voltage suppressor

Electrical entry for G, H, L, M, W

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With indicator light and surge voltage suppressor
R	With surge voltage suppressor (Non-polar type)
U	With light/surge voltage suppressor (Non-polar type)

∗ For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.
∗ For "R" and "U", DC voltage is only available.
∗ Power saving circuit is only available in the "Z" type.

Electrical entry for D, Y

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor (Non-polar type)
Z	With light/surge voltage suppressor (Non-polar type)

∗ For AC voltage valves there is no "S" option. It is already built-in to the rectifier circuit.

Manual override

Nil	Non-locking push type
D	Push-turn locking slotted type
E	Push-turn locking lever type

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

Note) AC-type models that are CE/UKCA-compliant have DIN terminals only.

Note) When ordering single unit of the base mounted type solenoid valve, the mounting screws and gaskets for the manifold are included.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

How to Order Pilot Valve Assembly (With two mounting screws)

25A − V111 □ − 5 G □

Coil specifications

Nil	Standard
T	With power-saving circuit (24 VDC, 12 VDC only)

∗ Power-saving circuit is not available in the case of D or Y type.

Rated voltage

5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC
1	100 VAC 50/60 Hz
2	200 VAC 50/60 Hz
3	110 VAC 50/60 Hz [115 VAC 50/60 Hz]
4	220 VAC 50/60 Hz [230 VAC 50/60 Hz]

∗ CE/UKCA-compliant: For DC only.

Light/Surge voltage suppressor

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor
R	With surge voltage suppressor (Non-polar type)
U	With light/surge voltage suppressor (Non-polar type)

∗ For AC voltage valves there is no “S” option. It is already built-in to the rectifier circuit.
∗ For “R” and “U”, DC voltage is only available.
∗ Power-saving circuit is only available in the “Z” type.

Electrical entry

G	Grommet, 300 mm lead wire	
H	Grommet, 600 mm lead wire	
L	L plug connector	With lead wire
LN		Without lead wire
LO		Without connector
M	M plug connector	With lead wire
MN		Without lead wire
MO		Without connector

DIN terminal type

25A − V115 − 5 D □

Rated voltage

5	24 VDC
6	12 VDC
1	100 VAC 50/60 Hz
2	200 VAC 50/60 Hz
3	110 VAC 50/60 Hz [115 VAC 50/60 Hz]
4	220 VAC 50/60 Hz [230 VAC 50/60 Hz]

∗ DC specifications of type D and Y is only available with 12 and 24 VDC.

Light/Surge voltage suppressor

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor (Non-polar type)
Z	With light/surge voltage suppressor (Non-polar type)

∗ DOZ and YOZ are not available.
∗ For AC voltage valves there is no “S” option. It is already built-in to the rectifier circuit.

Electrical entry

D	DIN terminal (Type D)	With connector
DO		Without connector
Y	DIN terminal (Type Y)	With connector
YO		Without connector

∗ Do not replace V111 (G, H, L, M) to V115 (DIN terminal) and vice versa when replacing pilot valve assembly only.

∗ Since V111 and V115 are CE/UKCA-compliant as standard, the suffix “-Q” is not necessary.

One-touch Fittings Part Nos. for Body Ported

Port size			25A-SY5000	25A-SY7000	25A-SY9000
Cylinder port	Metric size	ø4 One-touch fitting (Straight type)	**90-VVQ1000-51A-C4**		—
		ø6 One-touch fitting (Straight type)	**90-VVQ1000-51A-C6**		—
		ø8 One-touch fitting (Straight type)	**90-VVQ1000-51A-C8**	**90-VVQ2000-51A-C8**	**90-VVQ4000-50B-C8**
		ø10 One-touch fitting (Straight type)		**90-VVQ2000-51A-C10**	**90-VVQ4000-50B-C10**
		ø12 One-touch fitting (Straight type)	—	—	**90-VVQ4000-50B-C12**

Gasket Assembly Part Nos.

Valve model	Manifold type	25A-SY5000	25A-SY7000	25A-SY9000
Body ported	Type 20/23	**SY5000-GS-3**	**SY7000-GS-3**	**SY9000-GS-3**
Base mounted	Type 41/42/43	**SY5000-GS-4 (-Q)**	**SY7000-GS-4 (-Q)**	**SY9000-GS-4**

∗ The gasket assembly includes 10 sets of a gasket and mounting screws.

Bracket Assembly Part Nos.

Description	Part no.
Bracket (For F1)	**25A-SX$^{5}_{7}$000-16-2A** (With mounting screw)
Bracket (For F2)	**25A-SX$^{5}_{7}$000-16-1A** (With mounting screw)

Port Block Assembly Part Nos.

25A−SY 5 000−6A− 01 □

Series

5	SY5000
7	SY7000
9	SY9000

Thread type

Nil	Rc
F	G

A, B port size
Thread piping

Symbol	Port size	Applicable series
01	1/8	SY5000
02	1/4	SY7000 SY9000
03	3/8	SY9000

One-touch fitting (Metric size)

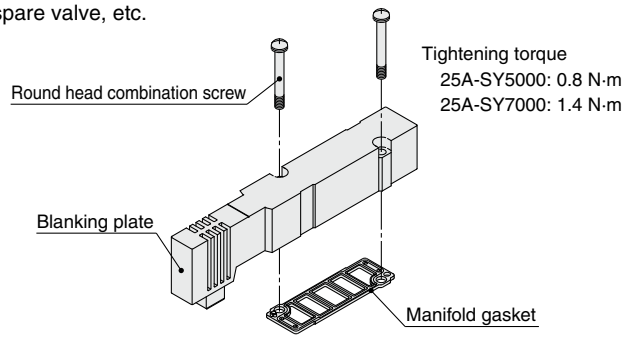
Symbol	Port size	Applicable series
C4	One-touch fitting for ø4	SY5000
C6	One-touch fitting for ø6	
C8	One-touch fitting for ø8	
C8	One-touch fitting for ø8	SY7000 SY9000
C10	One-touch fitting for ø10	
C12	One-touch fitting for ø12	SY9000

Manifold Options

■Blanking plate assembly (For 25A-SY5000/7000)

(Mounting screw: 2 pcs., with gasket)

It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.



How to Order (For 25A-SY5000/7000)

25A − SY [5] 000 − 26 − 1A

Series

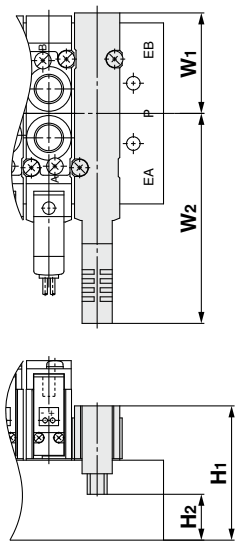
5	SY5000
7	SY7000

⚠ Caution

When mounted on a type 20 manifold, only the P port is plugged. In addition, it cannot be used for the type 20 CE/UKCA-compliant manifold.

Dimensions (For 25A-SY5000/7000)

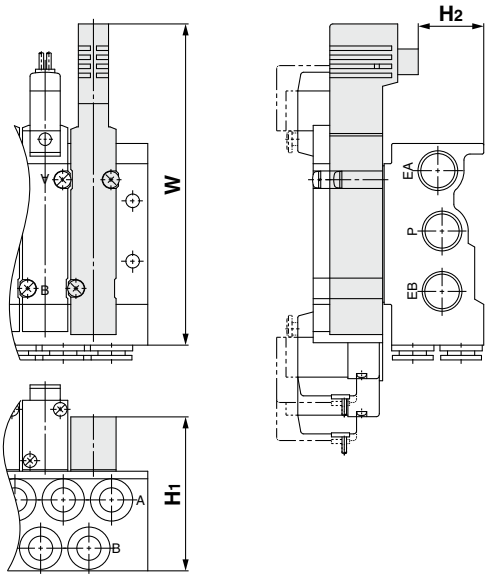
Manifold type/For type 20



Dimensions [mm]

Series	Manifold type	W1	W2	H1	H2
25A-SY5000	Type 20	33.3	69.6	44.5	15.2
25A-SY7000	Type 20	39.4	76.4	41.1	18.3

Manifold type/For type 41/42



Dimensions [mm]

Series	Manifold type	W	H1	H2
25A-SY5000	Type 41	106.4	51	21.7
	Type 42	107.6	56	26.7
25A-SY7000	Type 42	118.1	55.6	32.8

Manifold Option

How to Order Blanking Plate Assembly (For 25A-SY9000)

25A − SY9000 − 26 − [1] A(-Q)

Manifold type

1	Body ported
2	Base mounted

∗ Dimensions are the same as those of the standard model.

Replacement Parts

Description	Part no.	Manifold model no.
Manifold block assembly	**25A-SY9000-50-1A**	Type 23
	25A-SY9000-50-2A-C8	Type 43
	25A-SY9000-50-2A-C10	
	25A-SY9000-50-2A-C12	
Hexagon nut	**SY9000-25-3**	Type 23/43

How to Order SUP/EXH Block Assembly

D side mounting

25A-SY9000-70-□A-□

P, R port

C12	One-touch fitting for ø12
00	Plug

Specifications

1	Internal pilot type
3	External pilot type
4	Internal pilot / Built-in silencer type
5	External pilot / Built-in silencer type

U side mounting

25A-SY9000-71-□A-□

P, R port

C12	One-touch fitting for ø12
00	Plug

Specifications

1	Internal pilot type
3	External pilot type
4	Internal pilot / Built-in silencer type
5	External pilot / Built-in silencer type

Plug-in Unit/Base Mounted
F Kit (D-sub connector kit)
25A-VQ2000 Series

How to Order Manifolds

∗ For CE/UKCA-compliant models, DC-type only. [Option]

25A − VV5Q 2 1 − 08 C6 F U 1 − □ − □

Series compatible with secondary batteries

Series

2	VQ2000

Manifold

1	Plug-in unit

Stations

02	2 stations
⋮	⋮
24	24 stations

Cylinder port

Symbol	Port size
C4	With ø4 One-touch fitting
C6	With ø6 One-touch fitting
C8	With ø8 One-touch fitting
L4	Top ported elbow with ø4 One-touch fitting
L6	Top ported elbow with ø6 One-touch fitting
L8	Top ported elbow with ø8 One-touch fitting

Connector entry direction

U	Top entry
S	Side entry

Cable (Length)

0	Without cable
1	With cable (1.5 m)
2	With cable (3 m)
3	With cable (5 m)

Option

Symbol	Option
Nil	None
2	200/220 VAC models
B∗1	With back pressure check valve
D	DIN rail mounting
D0	With DIN rail bracket (Without DIN rail)
D□∗2	DIN rail length specified (□: Stations 02 to 24)
K∗3	Special wiring specifications (Except double wiring)
N	With name plate
R∗4	External pilot
S	Direct EXH outlet with built-in silencer

∗1 Models with a suffix "-B" have check valves for prevention of back pressure at all manifold stations. When a back pressure check valve is desired, and is to be installed only in certain manifold stations, specify the mounting position by means of the manifold specification sheet.
∗2 The number of stations that may be displayed is longer than the manifold number of stations.
∗3 Specify the wiring specifications by means of the manifold specification sheet.
∗4 Indicate "R" for the valve with external pilot.
∗ When two or more symbols are specified, indicate them alphabetically.
Example) -BRS

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

∗ For CE/UKCA-compliant models, DC-type only.

How to Order Valves

∗ For CE/UKCA-compliant models, DC-type only. [Option]

25A − VQ 2 1 0 1 □ − 5 □ □ 1 − □

Series compatible with secondary batteries

Series

2	VQ2000

Seal type

1	Rubber seal

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual port (N.C./N.C.)
B	4-position dual port (N.O./N.O.)
C	4-position dual port (N.C./N.O.)

Function

Symbol	Specifications	DC	AC
Nil	Standard	(0.4 W) ○	○
B	High speed response type	(0.95 W) ○	—
N	Negative common	○	—
R	External pilot	○	○

∗ When two or more symbols are specified, indicate them alphabetically.

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

∗ For CE/UKCA-compliant models, DC-type only.

Manual override

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)
C	Locking type (Manual)
D	Slide locking type (Manual)

Light/surge voltage suppressor

Nil	Yes
E	None

Coil voltage

		CE/UKCA-compliant
1	100 VAC (50/60 Hz)	—
2	200 VAC (50/60 Hz)	—
3	110 VAC (50/60 Hz)	—
4	220 VAC (50/60 Hz)	—
5	24 VDC	●
6	12 VDC	●

⚠ Caution

Use the standard (DC) specification when continuously energizing for long periods of time.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Plug-in Unit/Base Mounted
T Kit (Terminal block box kit)
25A-VQ2000 Series

How to Order Manifolds

∗ For CE/UKCA-compliant models, DC-type only. [Option]

25A − VV5Q 2 1 − 08 C6 T 0 − □ − □

Series compatible with secondary batteries

Series

2	VQ2000

Manifold

1	Plug-in unit

Stations

02	2 stations
⋮	⋮
20	20 stations

Cylinder port

Symbol	Port size
C4	With ø4 One-touch fitting
C6	With ø6 One-touch fitting
C8	With ø8 One-touch fitting
L4	Top ported elbow with ø4 One-touch fitting
L6	Top ported elbow with ø6 One-touch fitting
L8	Top ported elbow with ø8 One-touch fitting

Option

Symbol	Option
Nil	None
B∗1	With back pressure check valve
D	DIN rail mounting
D0	With DIN rail bracket (Without DIN rail)
D□∗2	DIN rail length specified (□: Stations 02 to 20)
K∗3	Special wiring spec. (Except double wiring)
N	With name plate
R∗4	External pilot
S	Direct EXH outlet with built-in silencer
W	Enclosure: Dust-tight, Water-jet-proof (IP65)

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

∗ For CE/UKCA-compliant models, DC-type only.

∗1 Models with a suffix "-B" have check valves for prevention of back pressure at all manifold stations. When a back pressure check valve is desired, and is to be installed only in certain manifold stations, specify the mounting position by means of the manifold specification sheet.
∗2 The number of stations that may be displayed is longer than the manifold number of stations.
∗3 Specify the wiring specifications by means of the manifold specification sheet.
∗4 Indicate "R" for the valve with external pilot.
∗ When two or more symbols are specified, indicate them alphabetically.
Example) -BRS
∗ Specify the mounting position by means of the manifold specification sheet.

How to Order Valves

∗ For CE/UKCA-compliant models, DC-type only. [Option]

25A − VQ 2 1 0 1 □ − 5 □ □ □ 1 − □

Series compatible with secondary batteries

Series

2	VQ2000

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual port (N.C./N.C.)
B	4-position dual port (N.O./N.O.)
C	4-position dual port (N.C./N.O.)

Seal type

1	Rubber seal

Function

Symbol	Specifications	DC	AC
Nil	Standard	(0.4 W) ○	○
B	High speed response type	(0.95 W) ○	—
N	Negative common	○	—
R	External pilot	○	○

∗ When two or more symbols are specified, indicate them alphabetically. Combination of "B" and "K" is not possible.

Coil voltage

		CE/UKCA-compliant
1	100 VAC (50/60 Hz)	—
3	110 VAC (50/60 Hz)	—
5	24 VDC	●
6	12 VDC	●

Light/surge voltage suppressor

Nil	Yes
E	None

Manual override

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)
C	Locking type (Manual)
D	Slide locking type (Manual)

Enclosure

Nil	Dustproof
W	Dust-tight/Water-jet-proof type (IP65)

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

∗ For CE/UKCA-compliant models, DC-type only.

⚠ Caution
Use the standard (DC) specification when continuously energizing for long periods of time.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Plug-in Unit/Base Mounted
L Kit (Lead wire)
25A-VQ2000 Series

How to Order Manifolds

∗ For CE/UKCA-compliant models, DC-type only. [Option]

25A−VV5Q 2 1− 06 C6 L 1 −□−□

Series compatible with secondary batteries

Series

2	VQ2000

Manifold

1	Plug-in unit

Stations

01	1 station
⋮	⋮
08	8 stations

Cylinder port

Symbol	Port size
C4	With ø4 One-touch fitting
C6	With ø6 One-touch fitting
C8	With ø8 One-touch fitting
L4	Top ported elbow with ø4 One-touch fitting
L6	Top ported elbow with ø6 One-touch fitting
L8	Top ported elbow with ø8 One-touch fitting

Cable (Length)

0	Cable length 0.6 m
1	Cable length 1.5 m
2	Cable length 3 m

Option

Symbol	Option
Nil	None
2	200/220 VAC models
B∗1	With back pressure check valve
D	DIN rail mounting
D0	With DIN rail bracket (Without DIN rail)
D□∗2	DIN rail length specified (□: Stations 02 to 08)
N	With name plate
R∗3	External pilot
S	Direct EXH outlet with built-in silencer
W	Enclosure: Dust-tight, Water-jet-proof (IP65)

∗1 Models with a suffix "-B" have check valves for prevention of back pressure at all manifold stations. When a back pressure check valve is desired, and is to be installed only in certain manifold stations, specify the mounting position by means of the manifold specification sheet.
∗2 The number of stations that may be displayed is longer than the manifold a number of stations.
∗3 Indicate "R" for the valve with external pilot.
∗ When two or more symbols are specified, indicate them alphabetically.
Example) -BRS

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

∗ For CE/UKCA-compliant models, DC-type only.

How to Order Valves

∗ For CE/UKCA-compliant models, DC-type only. [Option]

25A− VQ 2 1 0 1 □− 5 □ □ □ 1 −□

Series compatible with secondary batteries

Series

2	VQ2000

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual port (N.C./N.C.)
B	4-position dual port (N.O./N.O.)
C	4-position dual port (N.C./N.O.)

Seal type

1	Rubber seal

Function

Symbol	Specifications	DC	AC
Nil	Standard	(0.4 W) ○	○
B	High speed response type	(0.95 W) ○	—
N	Negative common	○	—
R	External pilot	○	○

∗ When two or more symbols are specified, indicate them alphabetically.

Light/surge voltage suppressor

Nil	Yes
E	None

Coil voltage

		CE/UKCA-compliant
1	100 VAC (50/60 Hz)	—
2	200 VAC (50/60 Hz)	—
3	110 VAC (50/60 Hz)	—
4	220 VAC (50/60 Hz)	—
5	24 VDC	●
6	12 VDC	●

Manual override

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)
C	Locking type (Manual)
D	Slide locking type (Manual)

Enclosure

Nil	Dustproof
W	Dust-tight/Water-jet-proof type (IP65)

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

∗ For CE/UKCA-compliant models, DC-type only.

∗ The 25A- series specifications and dimensions are the same as those of the standard model. **For details, refer to the Web Catalog.**

Plug-in Unit/Base Mounted
S Kit (Serial transmission)
25A-VQ2000 Series

How to Order Manifolds

∗ Refer to "SI Unit Part Nos." when ordering the CE/UKCA-compliant SI unit.

[Option]

25A−VV5Q 2 1 − 08 C6 S V − □ − □

Series compatible with secondary batteries

Series

2	VQ2000

Manifold

1	Plug-in unit

Stations

02	2 stations
⋮	⋮
16∗1	16 stations

∗1 Max. 16 stations. (Specify a model with 9 to 16 stations by means of the manifold specification sheet.)

Cylinder port

Symbol	Port size
C4	With ø4 One-touch fitting
C6	With ø6 One-touch fitting
C8	With ø8 One-touch fitting
L4	Top ported elbow with ø4 One-touch fitting
L6	Top ported elbow with ø6 One-touch fitting
L8	Top ported elbow with ø8 One-touch fitting

SI unit specifications

Symbol	Protocol	Stations
0	Without SI unit	—
Q	DeviceNet®	Max.16 stations
V	CC-Link	

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

∗ Refer to "SI Unit Part Nos." when ordering the CE/UKCA-compliant SI unit.

Option

Symbol	Option
Nil	None
B∗1	With back pressure check valve
D	DIN rail mounting
D□∗2	DIN rail length specified (□: Stations 02 to 16)
K∗3	Special wiring specifications (Except double wiring)
N	With name plate
R∗4	With external pilot
S	Direct EXH outlet with built-in silencer
W∗5	Enclosure: Dust-tight, Water-jet-proof (IP65)

∗1 Models with a suffix "-B" have check valves for prevention of back pressure at all manifold stations. When a back pressure check valve is desired, and is to be installed only in certain manifold stations, specify the mounting position by means of the manifold specification sheet.
∗2 The number of stations that may be displayed is longer than the manifold number of stations.
∗3 Specify the wiring specifications by means of the manifold specification sheet.
∗4 Indicate "R" for the valve with external pilot.
∗5 Refer to "Dimensions" of the standard products for SI unit and valve, in case of "W" (Dust-tight, Water-jet-proof).
∗ When two or more symbols are specified, indicate them alphabetically.
Example) -BRS.

SI Unit Part Nos.

Symbol	Protocol	SI unit part no.
Q	DeviceNet®	EX120-SDN1-X220
V	CC-Link	EX120-SMJ1-X220

SI Unit Part Nos. (With option W)

Symbol	Protocol	SI unit part no.
Q	DeviceNet®	EX124D-SDN1-X220
V	CC-Link	EX124D-SMJ1-X220

How to Order Valves

[Option]

25A−VQ 2 1 0 1 □ − 5 □ □ 1 − □

Series

2	VQ2000

Series compatible with secondary batteries

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual port (N.C./N.C.)
B	4-position dual port (N.O./N.O.)
C	4-position dual port (N.C./N.O.)

Seal type

1	Rubber seal

Function

Symbol	Specifications	DC
Nil	Standard	(0.4 W) ○
B	High speed response type	(0.95 W) ○
N∗1	Negative common	○
R∗1	External pilot	○

∗1 External pilot and negative common specifications are the same as standard products.
∗ When two or more symbols are specified, indicate them alphabetically.

Coil voltage

5	24 VDC; With indicator light/ surge voltage suppressor

Manual override

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)
C	Locking type (Manual)
D	Slide locking type (Manual)

Enclosure

Nil	Dustproof
W	Dust-tight/Water-jet-proof type (IP65)

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Sub-plate Single Unit
25A-VQ2000 Series

How to Order

∗ For CE/UKCA-compliant models, DC-type only. [Option]

In the case of (Valve) + (Sub-plate)

25A − VQ2 [1] 0 [1] − [5] [W] 1 − 02 [ ] − [ ]

Series compatible with secondary batteries

The entry is the same as that of the standard model.

Enclosure

Nil	Dustproof
W∗1	Dust-tight/Water-jet-proof type (IP65)

∗1 Valves are IP65 specifications.
∗ When the valve is a standard (dust-protected) specification, it is not compatible with 200 or 220 VAC.

Thread type

Nil	Rc
N	NPT
T	NPTF
F	G

Port size

02	1/4

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

∗ For CE/UKCA-compliant models, DC-type only.

In the case of (Sub-plate) alone

25A − VQ2000 − PW − 02

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

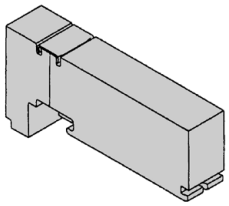
For details, refer to the Web Catalog.

Manifold Options

Blanking plate assembly

25A-VVQ2000V-10A-1

It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.



∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

SI Unit Part Nos.

Description	SI unit part no.	Note
EX124 SI unit	**EX124D-SMJ1-X220**	CC-Link
	EX124D-SDN1-X220	DeviceNet®
EX120 SI unit	**EX120-SMJ1-X220**	CC-Link (VQ2000/Without option "W")
	EX120-SDN1-X220	DeviceNet® (VQ2000/Without option "W")

One-touch Fittings Part Nos.

Port size			One-touch fitting part no.
Cylinder port	Metric size	ø4 One-touch fitting (Straight type)	**90-VVQ1000-51A-C4**
		ø6 One-touch fitting (Straight type)	**90-VVQ1000-51A-C6**
		ø8 One-touch fitting (Straight type)	**90-VVQ1000-51A-C8**
1 (P), 3 (R) port	Metric size	ø10 One-touch fitting (Straight type)	**90-VVQ2000-51A-C10**

Plug-in/Plug Lead: Single Unit Base Mounted

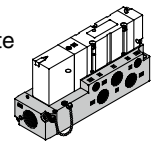
25A-VQ4000 Series

How to Order Valves

[Option]

Body

0: Plug-in sub-plate



Port size

Nil	Without sub-plate (For manifold)
02	Rc 1/4
03	Rc 3/8

∗ Thread standard is the same as standard products.

Porting specifications

Nil	Side ported
B	Bottom ported

Plug-in	25A−VQ4	1	0	1		–					1	–			–					
Plug lead	25A−VQ4	2	5	1		–					1	–			–					

Series compatible with secondary batteries

Type of actuation

1	2-position single
2	Rubber/2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
6∗1	3-position double check

∗1 For double check type, refer to the **Web Catalog**.

Enclosure

Nil	Dustproof
W	Dust-tight/ Water-jet-proof type (IP65)

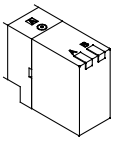
CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

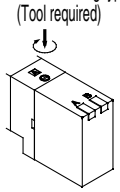
∗ CE/UKCA-compliant: For DC only.

Manual override

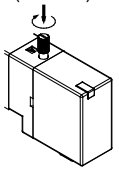
Nil: Non-locking push type (Tool required)



B: Slotted locking type (Tool required)

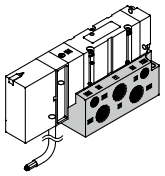


C: Locking type (Manual)



Body

5: Plug lead sub-plate



Seal type

1	Rubber seal

Function

Nil∗1	Standard type (0.95 W)
Y∗2	Low wattage type (0.4 W)
R∗3	External pilot

∗1 When the unit is energized continuously, refer to "Specific Product Precautions 1" in the **Web Catalog** (VQ4000 series).
∗2 Only DC is available with Y.
∗3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.
∗ When two or more symbols are specified, indicate them alphabetically.

Light/Surge voltage suppressor

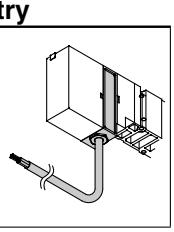
Nil	Yes
E	Without light, with surge voltage suppressor

Coil voltage

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC (50/60 Hz)
4	220 VAC (50/60 Hz)
5	24 VDC
6	12 VDC

Electrical entry

Grommet	G	Lead wire length 0.6 m
	H	Lead wire length 1.5 m



[Option]

How to Order Sub-plates

25A − VQ4000 − | | – | | | – | |

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

Series compatible with secondary batteries

Electrical entry

P	Plug-in conduit terminal
S	Plug lead

Porting specifications

Nil	Side ported
B	Bottom ported∗1

∗1 For bottom ported port size is Rc 1/4 only.
∗ Thread standard is the same as standard products.

Port size

02	Rc1/4
03	Rc3/8

Enclosure

Nil	Dustproof
W∗1	Dust-tight/Water-jet-proof type

∗1 It is not necessary for plug lead type.

∗ The 25A- series specifications and dimensions are the same as those of the standard model. **For details, refer to the Web Catalog.**

Plug-in Unit/Base Mounted
F Kit (D-sub connector kit)
25A-VQ4000 Series

How to Order Manifolds

[Option]

25A – VV5Q 4 1 – 08 C8 F U 1 – ☐ – ☐

Series compatible with secondary batteries

Series

4	VQ4000

Manifold

1	Plug-in unit

Stations

01	1 station
⋮	⋮
18	18 stations

Cylinder port

C6	With One-touch fitting for ø6
C8	With One-touch fitting for ø8
C10	With One-touch fitting for ø10
C12	With One-touch fitting for ø12
02	Rc 1/4
03	Rc 3/8
B	Bottom ported Rc 1/4
CM	Mixed

∗ As a semi-standard specification, the maximum number of stations can be increased by special wiring specifications.

Connector entry direction

D	D side entry
U	U side entry

Cable (Length)

0	Without cable
1	Cable length 1.5 m
2	Cable length 3 m
3	Cable length 5 m

Option

Symbol	Option
Nil	None
K∗1	Special wiring specifications (Except double wiring)

∗1 Specify the wiring specifications on the manifold specification sheet.

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

How to Order Valves

[Option]

25A – VQ 4 1 0 1 ☐ – 5 ☐ ☐ 1 – ☐

Series compatible with secondary batteries

Series

4	VQ4000

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
6	3-position double check

Seal type

1	Rubber seal

Function

Nil∗1	Standard (0.95 W)
Y∗2	Low wattage type (0.4 W)
R∗3	External pilot

∗1 When the unit is energized continuously, refer to "Specific Product Precautions 1" in the **Web Catalog** (VQ4000 series).
∗2 Only DC is available with Y.
∗3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.
∗ When two or more symbols are specified, indicate them alphabetically.

Coil voltage

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC (50/60 Hz)
4	220 VAC (50/60 Hz)
5	24 VDC
6	12 VDC

Light/Surge voltage suppressor

Nil	Yes
E	Without light, with surge voltage suppressor

Manual override

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)
C	Locking type (Manual)

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

∗ CE/UKCA-compliant: For DC only.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Plug-in Unit/Base Mounted
T Kit (Terminal block box kit)
25A-VQ4000 Series

How to Order Manifolds

[Option]

25A – VV5Q 4 1 – 08 C8 T O – □ – □

Series compatible with secondary batteries

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

Series

4	VQ4000

Manifold

1	Plug-in unit

Stations

03	3 stations
⋮	⋮
18	18 stations

∗ 2 stations are used for mounting the terminal block box. The number of stations is the number of manifold valves plus 2 stations for the terminal block box. For 13 stations or more, specify the wiring specifications by means of the manifold specification sheet.

Box mounting position

O	U side mounting
D	D side mounting

Cylinder port

C6	With One-touch fitting for ø6
C8	With One-touch fitting for ø8
C10	With One-touch fitting for ø10
C12	With One-touch fitting for ø12
02	Rc 1/4
03	Rc 3/8
B	Bottom ported Rc 1/4
CM	Mixed

∗ As a semi-standard specification, the maximum number of stations can be increased by special wiring specifications.

Option

Symbol	Option
Nil	None
K∗1	Special wiring specifications (Except double wiring, for 13 stations or more)
N∗2	Name plate
W	IP65 enclosure

∗1 Specify the wiring specifications on the manifold specification sheet.
∗2 Name plate is inlaid in the terminal block cover.
∗ When two or more symbols are specified, indicate them alphabetically.
Example) -KM

How to Order Valves

[Option]

25A – VQ 4 1 0 1 □ – 5 □ □ □ 1 – □

Series compatible with secondary batteries

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

∗ CE/UKCA-compliant: For DC only.

Series

4	VQ4000

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
6	3-position double check

Seal type

1	Rubber seal

Function

Nil∗1	Standard (0.95 W)
Y∗2	Low wattage type (0.4 W)
R∗3	External pilot

∗1 When the unit is energized continuously, refer to "Specific Product Precautions 1" in the **Web Catalog** (VQ4000 series).
∗2 Only DC is available with Y.
∗3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.
∗ When two or more symbols are specified, indicate them alphabetically.

Coil voltage

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC (50/60 Hz)
4	220 VAC (50/60 Hz)
5	24 VDC
6	12 VDC

Light/Surge voltage suppressor

Nil	Yes
E	Without light, with surge voltage suppressor

Manual override

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)
C	Locking type (Manual)

Enclosure

Nil	Dustproof
W	Dust-tight/Water-jet-proof type (IP65)

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Plug-in Unit/Base Mounted
L Kit (Lead wire cable)
25A-VQ4000 Series

How to Order Manifolds

[Option]

25A – VV5Q 4 1 – 08 C8 L D □ – □ – □

Series compatible with secondary batteries

Series

4	VQ4000

Manifold

1	Plug-in unit

Stations

01	1 station
⋮	⋮
16	16 stations

Cylinder port

C6	With One-touch fitting for ø6
C8	With One-touch fitting for ø8
C10	With One-touch fitting for ø10
C12	With One-touch fitting for ø12
02	Rc 1/4
03	Rc 3/8
B	Bottom ported Rc 1/4
CM	Mixed

Connector locations

D	D side entry
U	U side entry

Cable (Length)

0	Cable length 0.6 m
1	Cable length 1.5 m
2	Cable length 3 m

Option

Symbol	Option
Nil	None
W	IP65 enclosure

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

How to Order Valves

[Option]

25A – VQ 4 1 0 1 □ – 5 □ □ □ 1 – □

Series compatible with secondary batteries

Series

4	VQ4000

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
6	3-position double check

Seal type

1	Rubber seal

Function

Nil*1	Standard (0.95 W)
Y*2	Low wattage type (0.4 W)
R*3	External pilot

*1 When the unit is energized continuously, refer to "Specific Product Precautions 1" in the **Web Catalog** (VQ4000 series).
*2 Only DC is available with Y.
*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.
* When two or more symbols are specified, indicate them alphabetically.

Coil voltage

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC (50/60 Hz)
4	220 VAC (50/60 Hz)
5	24 VDC
6	12 VDC

Light /Surge voltage suppressor

Nil	Yes
E	Without light, with surge voltage suppressor

Manual override

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)
C	Locking type (Manual)

Enclosure

Nil	Dustproof
W	Dust-tight/Water-jet-proof type (IP65)

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

* CE/UKCA-compliant: For DC only.

* The 25A- series specifications and dimensions are the same as those of the standard model. **For details, refer to the Web Catalog.**

Plug-in Unit/Base Mounted
S Kit (Serial transmission unit)
25A-VQ4000 Series

How to Order Manifolds

∗ Refer to "SI Unit Part Nos." when ordering the CE/UKCA-compliant SI unit.

[Option]

25A – VV5Q 4 1 – 08 C8 S D V – □ – □

Series compatible with secondary batteries

Series

4	VQ4000

Manifold

1	Plug-in unit

Stations

03	3 stations
⋮	⋮
18	18 stations

∗ 2 stations are used for mounting SI unit. The number of stations is the number of manifold valves plus 2 stations for SI unit. For 11 stations or more, specify the wiring specifications by means of the manifold specification sheet.

Cylinder ports

C6	With One-touch fitting for ø6
C8	With One-touch fitting for ø8
C10	With One-touch fitting for ø10
C12	With One-touch fitting for ø12
02	Rc 1/4
03	Rc 3/8
B	Bottom ported Rc 1/4
CM	Mixed

SI unit mounting position

Nil	U side mounting
D	D side mounting

SI unit

0	Without SI unit
Q	DeviceNet®
V	CC-Link

Option

Symbol	Option
Nil	None
K∗1	Special wiring specifications (Except double wiring, for 11 stations or more)
W	IP65 enclosure

∗1 Specify the wiring specifications on the manifold specification sheet.

∗ When two or more symbols are specified, indicate them alphabetically. Example) -KW

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

How to Order Valves

[Option]

25A – VQ 4 1 0 1 □ – 5 □ □ □ 1 – □

Series compatible with secondary batteries

Series

4	VQ4000

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
6	3-position double check

Seal type

1	Rubber seal

Function

Nil∗1	Standard (0.95 W)
Y∗2	Low wattage type (0.4 W)
R∗3	External pilot

∗1 When the unit is energized continuously, refer to "Specific Product Precautions 1" in the **Web Catalog** (VQ4000 series).

∗2 Only DC is available with Y.

∗3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.

∗ When two or more symbols are specified, indicate them alphabetically.

Coil voltage

5	24 VDC

Light /Surge voltage suppressor

Nil	Yes
E	Without light, with surge voltage suppressor

Manual override

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)
C	Locking type (Manual)

Enclosure

Nil	Dustproof
W	Dust-tight/Water-jet-proof type (IP65)

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

∗ CE/UKCA-compliant: For DC only.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Plug Lead Unit/Base Mounted C Kit (Connector kit)

25A-VQ4000 Series

CE UKCA [Option]

How to Order Manifolds

25A – VV5Q 4 5 – 08 C8 C – W –

Series compatible with secondary batteries

Series

4	VQ4000

Manifold

5	Plug lead unit

Stations

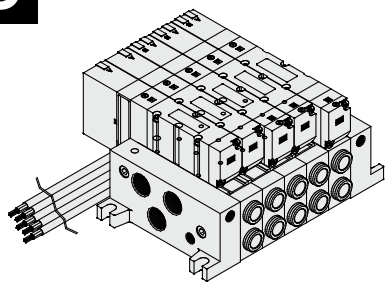
01	1 station
⋮	⋮
16	16 stations

Cylinder port

C6	With One-touch fitting for ø6
C8	With One-touch fitting for ø8
C10	With One-touch fitting for ø10
C12	With One-touch fitting for ø12
02	Rc 1/4
03	Rc 3/8
B	Bottom ported Rc 1/4
CM	Mixed

Kit type

C kit (Connector)



C	Connector kit	Max. 16 stations

Refer to the **Web Catalog** for wiring specifications.

Option

Symbol	Option
Nil	None
W	IP65 enclosure

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

How to Order Valves

25A – VQ 4 1 5 1 – 5 G 1 –

Series compatible with secondary batteries

Series

4	VQ4000

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
6	3-position double check

Seal type

1	Rubber seal

Function

Nil*1	Standard (0.95 W)
Y*2	Low wattage type (0.4 W)
R*3	External pilot

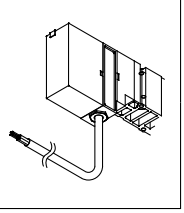
*1 When the unit is energized continuously, refer to "Specific Product Precautions 1" in the **Web Catalog** (VQ4000 series).
*2 Only DC is available with Y.
*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.
* When two or more symbols are specified, indicate them alphabetically.

Coil voltage

1	100 VAC (50/60 Hz)	4	220 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)	5	24 VDC
3	110 VAC (50/60 Hz)	6	12 VDC

Electrical entry

Grommet	G	Lead wire length 0.6 m
	H	Lead wire length 1.5 m

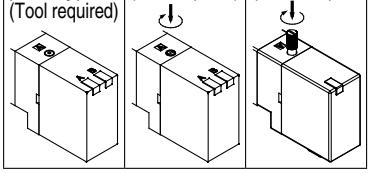


Light/Surge voltage suppressor

Nil	Yes
E	Without light, with surge voltage suppressor

Manual override

Nil:	B:	C:
Non-locking push type (Tool required)	Locking type (Tool required)	Locking type (Manual)



Enclosure

Nil	Dustproof
W	Dust-tight/Water-jet-proof type (IP65)

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

* CE/UKCA-compliant: For DC only.

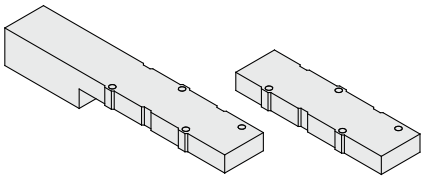
* The 25A- series specifications and dimensions are the same as those of the standard model. **For details, refer to the Web Catalog.**

Manifold Options

Blanking plate assembly

25A-VVQ4000-10A-1 (Plug-in type)
25A-VVQ4000-10A-5 (Plug lead type)

It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.



∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

SI Unit Part Nos.

Description	SI unit part no.	Note
EX124 SI unit	**EX124D-SMJ1-X220**	CC-Link/D side mounting
	EX124D-SDN1-X220	DeviceNet®/D side mounting
	EX124U-SMJ1-X220	CC-Link/U side mounting
	EX124U-SDN1-X220	DeviceNet®/U side mounting

One-touch Fittings Part Nos.

Port size			One-touch fittings part no.
Cylinder port	Metric size	ø6 One-touch fitting (Straight type)	**90-VVQ4000-50B-C6**
		ø8 One-touch fitting (Straight type)	**90-VVQ4000-50B-C8**
		ø10 One-touch fitting (Straight type)	**90-VVQ4000-50B-C10**
		ø12 One-touch fitting (Straight type)	**90-VVQ4000-50B-C12**

Plug-in Unit
25A-SQ2000 Series

CE UKCA [Option]

How to Order Manifolds

25A – SS5Q23 – [08] [FD2] – [D] [ ] – [ ] – [ ]

Series compatible with secondary batteries

Stations

01	1 station
⋮	⋮
16∗1	16 stations

∗1 The maximum number of stations depends on the type of electrical entries.

Manifold mounting

D	DIN rail mounting
E	Direct mounting

Option

Nil	None
02 to 16∗1	DIN rail length specified
B∗2	Back pressure check valve
K∗3	Special wiring specifications (Except double wiring)
N	With name plate (Side ported only)
R	External pilot specifications
S	Built-in silencer, direct exhaust

∗1 Specify DIN rail length with "D□" at the end. (Enter the number of stations inside □.) The number of stations that may be displayed is longer than the manifold number of stations. Example: -D09

∗2 When "-B" is selected, a back pressure check valve is included in all stations of the manifold. If the back pressure check valve is used only for the station that need it, then specify the station location in the manifold specification. ("-B" is not necessary)

∗3 Specify "-K" for wiring specification for cases below. (Except L kit)
- All single wiring - Single and double mixed wiring
- When there are stations which do not require wiring (e.g. single SUP spacer)
Specify the wiring specification in the manifold specification so that the number of solenoids is the maximum number of solenoids or less. (Standard wiring specification is double wiring)

∗ For specifying two or more options, enter them alphabetically. Example: -BKN

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

1(P), 3(R) port size

Nil	1(P), 3(R) port One-touch fittings for ø10
00T	1(P), 3(R) port One-touch fittings for ø3/8"

Electrical entry

Kit type		Lead wire connector location	Cable specifications	Station	Max. number of stations for special wiring specifications	∗1 Max. number of solenoids
F kit D-sub connector kit (The electric parts are made of copper. Mounting screw: Stainless steel. D side. U side. One-touch fitting Body: Stainless steel)	**FD0**	D side	D-sub connector (25P) kit, without cable	1 to 12 stations	16 stations	24
	FD1		D-sub connector (25P) kit, with 1.5 m cable			
	FD2		D-sub connector (25P) kit, with 3.0 m cable			
	FD3		D-sub connector (25P) kit, with 5.0 m cable			
T kit Terminal block box kit	**TD0**	D side	Terminal block box kit	1 to 10 stations	16 stations	16
L kit Lead wire kit (Mounting screw: Stainless steel. One-touch fitting Body: Stainless steel)	**LD0**	D side	Lead wire kit with 0.6 m cable	1 to 12 stations	—	—
	LU0	U side				
	LD1	D side	Lead wire kit with 1.5 m cable			
	LU1	U side				
	LD2	D side	Lead wire kit with 3.0 m cable			
	LU2	U side				
S kit Serial transmission kit EX140 integrated-type (for output) serial transmission system∗2 (Mounting screw:Stainless steel. The electric parts are made of copper. One-touch fitting Body: Stainless steel)	**SDQ**	D side	DeviceNet®	1 to 8 stations	16 stations	16
	SDV		CC-Link	1 to 8 stations	16 stations	16

∗1 The maximum number of stations should not be more than the maximum number of solenoids. (The number of solenoids are counted as: 1 for single solenoids and 2 for type 3P and 4P double solenoids.)

∗2 Refer to the **Web Catalog** for the details of EX140 integrated-type (for output) serial transmission system. Refer to "SI unit part nos." below when ordering the CE/UKCA-compliant SI unit.

SI unit part nos.

Symbol	Protocol type	SI unit part no.	Page
SDQ	DeviceNet®	EX140-SDN1-X220	88
SDV	CC-Link	EX140-SMJ1-X220	

Blanking plate assembly

25A-SSQ2000-10A-3

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

SMC

How to Order Valves

[Option]

25A−SQ2 [1] 3 [1] [ ] − [5] [ ] 1 − [C6] − [ ] − [ ] − [ ]

Series compatible with secondary batteries

Type of actuation

1	2-position single
2	2-position double (Double solenoid)∗1
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

∗1 For double solenoid specification, the function symbol below is “D.”

Seal type

1	Rubber seal

Function

Nil	Standard (0.4 W DC)
B	Quick response type (0.95 W)
D∗1	2-position double (Double solenoid specifications)
N∗2	Negative common
R∗3	External pilot specifications

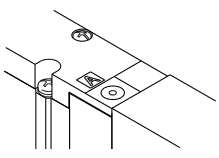
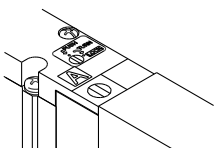
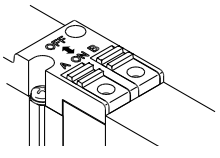
∗1 “D” is specified for 2-position double.
∗2 For L kit, when the manifold specifies negative common, the valve common should also be negative.
∗3 Except dual 3-port valves.
∗ When two or more symbols are specified, indicate them alphabetically.

Coil voltage

5	24 VDC
6	12 VDC

∗ Light/Surge voltage suppressor is built-in.
∗ S kit: 24 VDC only

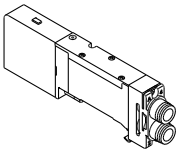
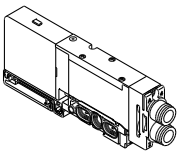
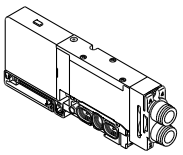
Manual override

Nil	B	D
Non-locking push type (Tool required)	Locking type (Tool required)	Slide locking type (Manual type) ∗ Only side ported type applicable
		

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

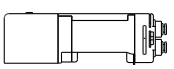
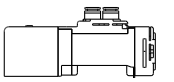
With/Without manifold block

Nil	M	MB
Without manifold block	With manifold block	With manifold block, built-in back pressure check valve
	 ∗ Lead wire is not included.	 ∗ Lead wire is not included.
• When ordering with manifolds • When only valves are required.	For adding stations	

Port plug mounting port

Nil	None
A	Port 4(A)
B	Port 2(B)

Cylinder port

C4	One-touch fittings for ø4	Side ported	
C6	One-touch fittings for ø6		
C8	One-touch fittings for ø8		
L4	One-touch fittings for ø4	Top ported ∗1	
L6	One-touch fittings for ø6		
L8	One-touch fittings for ø8		

∗1 Can be changed to side ported configuration.

SI Unit Part Nos.

Description	SI unit part no.	Note
EX140 SI unit	**EX140-SMJ1-X220**	CC-Link
	EX140-SDN1-X220	DeviceNet®

One-touch Fittings Part Nos.

Port size			One-touch fittings part no.
Cylinder port	Metric size	ø4 One-touch fitting (Straight type)	**90-VVQ1000-51A-C4**
		ø6 One-touch fitting (Straight type)	**90-VVQ1000-51A-C6**
		ø8 One-touch fitting (Straight type)	**90-VVQ1000-51A-C8**
1 (P), 3 (R) port	Metric size	ø10 One-touch fitting (Straight type)	**90-VVQ2000-51A-C10**

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Plug Lead Unit
25A-SQ2000 Series

[Option]

How to Order Manifolds

25A – SS5Q24 – [08] [FD2] – [D] [ ] – [ ] – [ ]

Series compatible with secondary batteries

Stations

01	1 station
⋮	⋮
16∗1	16 stations

∗1 The maximum number of stations depends on the type of electrical entries.

Manifold mounting

D	DIN rail mounting
E∗1	Direct mounting

∗1 Type "E" is only available with a C kit.

Option

Nil	None
02 to 16∗1	DIN rail length specified
B∗2	Back pressure check valve
K∗3	Special wiring specifications (Except double wiring)
N	With name plate (Side ported only)
R	External pilot specifications
S	Built-in silencer, direct exhaust

∗1 Specify DIN rail length with "D□" at the end. (Enter the number of stations inside □.)
The number of stations that may be displayed is longer than the manifold number of stations. Example: -D09

∗2 When "-B" is selected, a back pressure check valve is included in all stations of the manifold. If the back pressure check valve is used only for the station that need it, then specify the station location in the manifold specification. ("-B" is not necessary)

∗3 Specify "-K" for wiring specification for cases below. (Except C kit)
- All single wiring
- Single and double mixed wiring
Specify the wiring specification in the manifold specification so that the number of solenoids is the maximum number of solenoids or less. (Standard wiring specification is double wiring)

∗ For specifying two or more options, enter them alphabetically. Example: -BKN

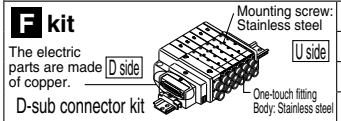
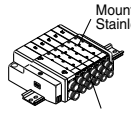
1(P), 3(R) port size

Nil	1(P), 3(R) port, One-touch fittings for ø10
00T	1(P), 3(R) port, One-touch fittings for ø3/8"

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

Electrical entry

Kit type		Lead wire connector location	Cable specifications	Stations	Max. number of stations for special wiring specifications	∗1 Max. number of solenoids
F kit 	**FD0**	D side	D-sub connector (25P) kit, without cable	1 to 12 stations	16 stations	24
	FD1		D-sub connector (25P) kit, with 1.5 m cable			
	FD2		D-sub connector (25P) kit, with 3.0 m cable			
	FD3		D-sub connector (25P) kit, with 5.0 m cable			
C kit 	**C**	—	Connector kit	1 to 16 stations	—	—

∗1 The maximum number of stations should not be more than the maximum number of solenoids. (The number of solenoids are counted as: 1 for single solenoids and 2 for type 3P and 4P double solenoids.)

∗ Refer to the **Web Catalog** for manifold spare parts.

Blanking plate assembly

25A-SSQ2000-10A-4

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

SMC

[Option]

How to Order Valves

25A−SQ2 [1] 4 [1] [ ] − [5] [L] [ ] 1 − [C6] − [ ] − [ ] − [ ]

Series compatible with secondary batteries

Type of actuation

1	2-position single
2	2-position double (Double solenoid)∗1
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

∗1 For double solenoid specification, the function symbol below is “D.”

Seal type

1	Rubber seal

Function

Nil	Standard (0.4 W DC)
B	Quick response type (0.95 W)
D∗1	2-position double (Double solenoid specifications)
N	Negative COM
R∗2	External pilot specifications

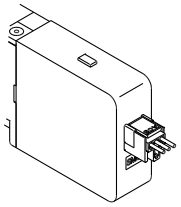
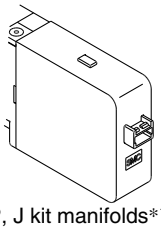
∗1 “D” is specified for 2-position double.
∗2 Except dual 3-port valves.
∗ When two or more symbols are specified, indicate them alphabetically.

Coil voltage

5	24 VDC
6	12 VDC

∗ Light/Surge voltage suppressor is built-in.

Electrical entry

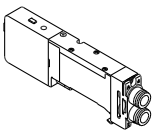
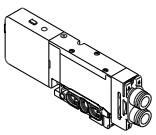
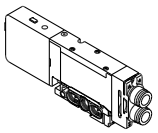
L	**LO**
Plug connector type with 300 mm lead wire	Plug connector type without connector
	 For F, P, J kit manifolds∗1

∗1 Indicate “LO” when ordering centralized wiring type manifolds, F, P, and J kits, since the lead wire will be attached to the manifold side.

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

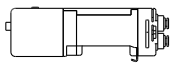
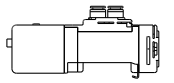
With/Without manifold block

Nil	**M**	**MB**
Without manifold block	With manifold block	With manifold block, built-in back pressure check valve
	 ∗ Lead wire is not included.	 ∗ Lead wire is not included.
• When ordering with manifolds • When only valves are required.	For adding stations	

Port plug mounting port

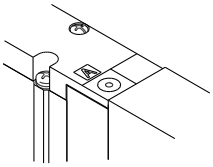
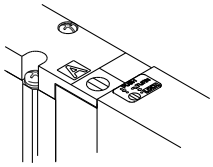
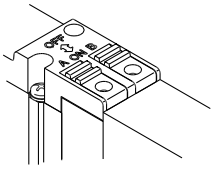
Nil	None
A	Port 4(A)
B	Port 2(B)

Cylinder port

C4	One-touch fitting for ø4	Side ported	
C6	One-touch fitting for ø6		
C8	One-touch fitting for ø8		
L4	One-touch fitting for ø4	Top ported ∗1	
L6	One-touch fitting for ø6		
L8	One-touch fitting for ø8		

∗1 Can be changed to side ported configuration.

Manual override

Nil	**B**	**D**
Non-locking push type (Tool required)	Locking type (Tool required)	Slide locking type (Manual type) ∗ Only side ported type applicable
		

One-touch Fittings Part Nos.

Port size			One-touch fittings part no.
Cylinder port	Metric size	ø4 One-touch fitting (Straight type)	**90-VVQ1000-51A-C4**
		ø6 One-touch fitting (Straight type)	**90-VVQ1000-51A-C6**
		ø8 One-touch fitting (Straight type)	**90-VVQ1000-51A-C8**
1 (P), 3 (R) port	Metric size	ø10 One-touch fitting (Straight type)	**90-VVQ2000-51A-C10**

∗ The 25A- series specifications and dimensions are the same as those of the standard model.
For details, refer to the Web Catalog.

5-Port Solenoid Valve
25A-VQZ1000 Series
Single Unit

[Option]

How to Order Valves

25A – VQZ 1 [ ] 5 [ ] [ ] – 5 [M] [ ] 1 – [01] – [ ]

Series compatible with secondary batteries

Series

1	VQZ1000 body width 10 mm

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
8	3-port for mixture mounting N.C.
9	3-port for mixture mounting N.O.

Body type

5	Base mounted

Seal type

1	Rubber seal

Function

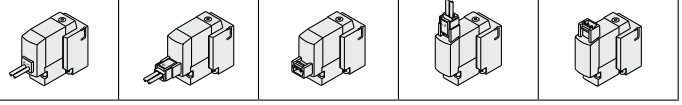
Symbol	Specifications	DC	AC
Nil	Standard	(0.35 W) ○	○
B	High speed response type	(0.9 W) ○	—
R	External pilot type	○	○
BR	High speed response/External pilot type	(0.9 W) ○	—

Coil voltage

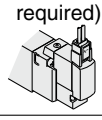
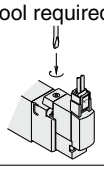
1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC [115 VAC] (50/60 Hz)
4	220 VAC [230 VAC] (50/60 Hz)
5	24 VDC
6	12 VDC

Electrical entry

G: Grommet (DC specification)	L: L-type plug connector with lead wire	LO: L-type plug connector without connector	M: M-type plug connector with lead wire	MO: M-type plug connector without connector
	With light/ surge voltage suppressor	With light/ surge voltage suppressor	With light/ surge voltage suppressor	With light/ surge voltage suppressor



Manual override

Nil: Non-locking push type (Tool required)	B: Locking type (Tool required)
	

Port size

Symbol	Port size
Nil	Without sub-plate
01	Rc1/8

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

∗ CE/UKCA-compliant: For DC only.

⚠ Caution

Use standard (DC) specification for continuous duty.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Base Mounted

Plug Lead Unit

5-Port Solenoid Valve

25A-VQZ1000 Series

Manifold Connector Kit

[Option]

How to Order Manifolds

25A – VV5QZ 1 5 – 08 C6 C – R – ☐

Series compatible with secondary batteries

Series

1	VQZ1000

Manifold type

5	Base mounted

Stations

02	2 stations
⋮	⋮
20	20 stations

Port size [4(A), 2(B) port]

Symbol	Port size
C4	ø4 One-touch fitting
C6	ø6 One-touch fitting
M5	M5 thread
CM*1	Mixture of port sizes

*1 Specify port mixture/with port plug by the manifold specification sheet.
Port mixture and port plug are available only for One-touch fitting type.

Kit type

C	Connector

Option

Nil	None
R	External pilot type

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

How to Order Valves

25A – VQZ 1 1 5 1 ☐ – 5 M ☐ 1 – ☐

Series compatible with secondary batteries

Series

1	VQZ1000 body width 10 mm

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
8	3-port for mixture mounting N.C.
9	3-port for mixture mounting N.O.

Body type

5	Base mounted

Seal type

1	Rubber seal

Function

Symbol	Specifications	DC	AC
Nil	Standard	(0.35 W) ○	○
B	High speed response type	(0.9 W) ○	—
R	External pilot type	○	○
BR	High speed response/ External pilot type	(0.9 W) ○	—

Coil voltage

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC [115 VAC] (50/60 Hz)
4	220 VAC [230 VAC] (50/60 Hz)
5	24 VDC
6	12 VDC

Electrical entry

Symbol	Electrical entry	Light/surge voltage suppressor
G	Grommet (DC specification)	None
L	L-type plug connector with lead wire	Yes
LO	L-type plug connector without connector	
M	M-type plug connector with lead wire	
MO	M-type plug connector without connector	

Manual override

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

* CE/UKCA-compliant: For DC only.

⚠ Caution

Use standard (DC) specification for continuous duty.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Body Ported

Plug Lead Unit

5-Port Solenoid Valve

25A-VQZ1000 Series

Single Unit

[Option]

How to Order Valves

25A – VQZ 1 [1] 2 1 [ ] – 5 [M] [ ] 1 – [C6] – [ ] – [ ]

Series compatible with secondary batteries

Series

1	VQZ1000 body width 10 mm

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
8	3-port for mixture mounting N.C.
9	3-port for mixture mounting N.O.

∗ 3-port for mixture mounting is only available for port size C4 or C6.

Body type

2	Body ported

Seal type

1	Rubber seal

Function

Symbol	Specifications	DC	AC
Nil	Standard	(0.35 W) ○	○
B	High speed response type	(0.9 W) ○	—

Coil voltage

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC [115 VAC] (50/60 Hz)
4	220 VAC [230 VAC] (50/60 Hz)
5	24 VDC
6	12 VDC

Electrical entry

G: Grommet (DC specification)	**L:** L-type plug connector with lead wire	**LO:** L-type plug connector without connector	**M:** M-type plug connector with lead wire	**MO:** M-type plug connector without connector
	With light/ surge voltage suppressor	With light/ surge voltage suppressor	With light/ surge voltage suppressor	With light/ surge voltage suppressor

Manual override

Nil: Non-locking push type (Tool required)	**B:** Locking type (Tool required)

Port size [4(A), 2(B) port]

Symbol	Port size
C4	ø4 One-touch fitting
C6	ø6 One-touch fitting
M5	M5 thread

Option

Nil: None
F: With bracket (2-position single type only)

Bracket

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

∗ CE/UKCA-compliant: For DC only.

⚠ Caution

Use standard (DC) specification for continuous duty.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Body Ported

Plug Lead Unit

5-Port Solenoid Valve

25A-VQZ1000 Series

Manifold Connector Kit

[Option]

How to Order Manifolds

25A-VV5QZ 1 2-08 C-

Series compatible with secondary batteries

Series

1	VQZ1000

Manifold type

2	Body ported

Stations

02	2 stations
⋮	⋮
20	20 stations

Kit type

C	Connector

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

How to Order Valves

25A-VQZ 1 1 2 1 □ – 5 M □ 1 – C6 – □

Series compatible with secondary batteries

Series

1	VQZ1000 body width 10 mm

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5*1	3-position pressure center
8*1	3-port for mixture mounting N.C.
9*1	3-port for mixture mounting N.O.

*1 3-port for mixture mounting is only available for port size C4 or C6.

Body type

2	Body ported

Seal type

1	Rubber seal

Function

Symbol	Specifications	DC	AC
Nil	Standard	(0.35 W) ○	○
B	High speed response type	(0.9 W) ○	—

Coil voltage

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC [115 VAC] (50/60 Hz)
4	220 VAC [230 VAC] (50/60 Hz)
5	24 VDC
6	12 VDC

Manual override

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)

Electrical entry

Symbol	Electrical entry	Light/surge voltage suppressor
G	Grommet (DC specification)	None
L	L-type plug connector with lead wire	Yes
LO	L-type plug connector without connector	
M	M-type plug connector with lead wire	
MO	M-type plug connector without connector	

Port size [4(A), 2(B) port]

Symbol	Port size
C4	ø4 One-touch fitting
C6	ø6 One-touch fitting
M5	M5 thread

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

* CE/UKCA-compliant: For DC only.

⚠ Caution

Use standard (DC) specification for continuous duty.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Plug-in Unit
Base Mounted
25A-VQ1000/2000 Series
Double check block (Separated)

How to Order

Double check block

25A-VQ1000-FPG-C4M5-F

- **25A**: Series compatible with secondary batteries
- **C4**: IN side port size
- **M5**: OUT side port size
- **F**: Option

IN side port size

M5	M5 thread
C3	ø3.2 One-touch fitting
C4	ø4 One-touch fitting
C6	ø6 One-touch fitting

OUT side port size

M5	M5 thread
C3	ø3.2 One-touch fitting
C4	ø4 One-touch fitting
C6	ø6 One-touch fitting

Option

Nil	None
F	With bracket
D	DIN rail mounting (For manifold)
N	Name plate

* When two or more symbols are specified, indicate them alphabetically. Example) -DN

Manifold (DIN rail mounting)

25A-VVQ1000-FPG-06

- **25A**: Series compatible with secondary batteries
- **06**: Stations

When ordering a double check block, order the DIN rail mounting [-D].

Stations

01	1 station
⋮	⋮
16	16 stations

<Ordering example>
25A-VVQ1000-FPG-06…6-station manifold
* **25A-VQ1000-FPG-C4M5-D; 3 sets**
* **25A-VQ1000-FPG-C6M5-D; 3 sets**

Double check block

Bracket Assembly

Part no.	Tightening torque
25A-VQ1000-FPG-FB	0.22 to 0.25 N·m

Double check block

25A-VQ2000-FPG-01 01-F

- **25A**: Series compatible with secondary batteries
- **01**: IN side port size
- **01**: OUT side port size
- **F**: Option

IN side port size

01	Rc 1/8
02	Rc 1/4
C6	ø6 One-touch fitting
C8	ø8 One-touch fitting

OUT side port size

01	Rc 1/8
02	Rc 1/4
C6	ø6 One-touch fitting
C8	ø8 One-touch fitting

Option

Nil	None
D	DIN rail mounting (For manifold)
F	With bracket
N	Name plate

* When two or more symbols are specified, indicate them alphabetically. Example) -DN

Manifold (DIN rail mounting)

25A-VVQ2000-FPG-06

- **25A**: Series compatible with secondary batteries
- **06**: Stations

When ordering a double check block, order the DIN rail mounting [-D].

Stations

01	1 station
⋮	⋮
16	16 stations

<Ordering Example>
25A-VVQ2000-FPG-06…6-station manifold
* **25A-VQ2000-FPG-C6C6-D; 3 sets**
* **25A-VQ2000-FPG-C8C8-D; 3 sets**

Double check block

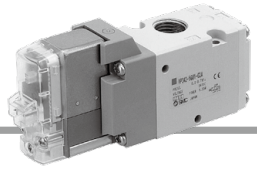
Bracket Assembly

Part no.	Tightening torque
25A-VQ2000-FPG-FB	0.8 to 1.0 N·m

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Rubber Seal
3-Port/Pilot Poppet Type
25A-VP342/542/742 Series



How to Order

CE UKCA

∗ Only DIN and conduit terminal types are available for AC mode. Refer to the electrical entry for details.

Body ported 25A – VP 3 4 2 □ □ □ – 5 D □ □ 1 – 01 □ A – □

Series compatible with secondary batteries

Series

3	VP300
5	VP500
7	VP700

Pilot type

Nil	Internal pilot
R	External pilot

Pressure specification

Nil	Standard (0.7 MPa)
K	High pressure type (1.0 MPa)

Coil specification

Nil	Standard
T	With power-saving circuit (DC only)

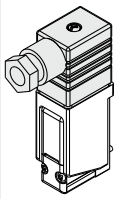
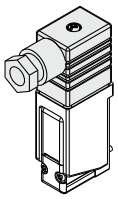
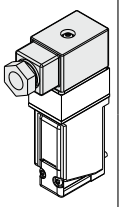
∗ Be sure to select the power-saving circuit type if it is to be continuously energized for long periods of time.
∗ "T" type is only available for DC mode. When "T" is selected, only "Z" type of light/surge voltage suppressor is available.

Rated voltage

DC	
5	24 VDC
6	12 VDC

AC (50/60 Hz)	
1	100 VAC
2	200 VAC
3	110 VAC [115 VAC]
4	220 VAC [230 VAC]
7	240 VAC
B	24 VAC

Electrical entry

	DIN terminal	DIN (EN175301-803) terminal	Conduit terminal
	[IP65 compatible]	[IP65 compatible]	[IP65 compatible]
			
	D: With connector	Y: With connector	T: Conduit terminal
CE/UKCA-compliant DC	CE UKCA	CE UKCA	CE UKCA
CE/UKCA-compliant AC	CE UKCA	CE UKCA	CE UKCA

Thread type

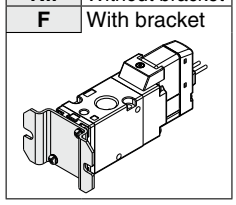
Nil	Rc
F	G
N	NPT
T	NPTF

Type of actuation

A	N.C. (Normally closed)
B	N.O. (Normally open)

Bracket

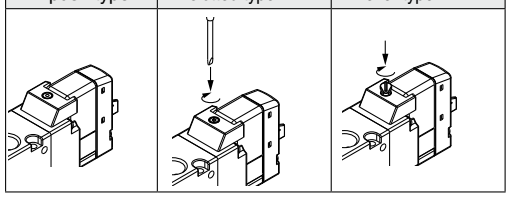
Nil	Without bracket
F	With bracket



Port size

Symbol	Port size	VP300	VP500	VP700
01	1/8	○	—	—
02	1/4	○	○	—
03	3/8	—	○	○
04	1/2	—	—	○

Manual override

Nil: Non-locking push type	D: Push-turn locking slotted type	E: Push-turn locking lever type
		

Light/surge voltage suppressor

		DC	AC
Nil	Without light/surge voltage suppressor	○	○
S	With surge voltage suppressor	○	—∗1
Z	With light/surge voltage suppressor	○	○
R	With surge voltage suppressor (Non-polar)	○	—
U	With light/surge voltage suppressor (Non-polar)	○	—

∗1 There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the **Web Catalog**.

Rubber Seal
3-Port/Pilot Poppet Type
25A-VP344/544/744 Series

How to Order

∗ Only DIN and conduit terminal types are available for AC mode. Refer to the electrical entry for details.

Base mounted **25A−VP [3] 4 4 [ ][ ][ ] − [5] [D] [ ][ ] 1− [01] [ ] [A]**

Series compatible with secondary batteries

Series

3	VP300
5	VP500
7	VP700

Pilot type

Nil	Internal pilot
R	External pilot

Pressure specifications

Nil	Standard (0.7 MPa)
K	High pressure type (1.0 MPa)

Coil specifications

Nil	Standard
T	With power-saving circuit (DC only)

∗ Be sure to select the power-saving circuit type if it is to be continuously energized for long periods of time.
∗ "T" type is only available for DC mode. When "T" is selected, only "Z" type of light/surge voltage suppressor is available.

Rated voltage

DC

5	24 VDC
6	12 VDC

AC (50/60 Hz)

1	100 VAC
2	200 VAC
3	110 VAC [115 VAC]
4	220 VAC [230 VAC]
7	240 VAC
B	24 VAC

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

Type of actuation

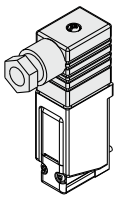
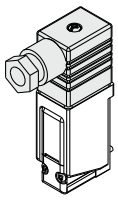
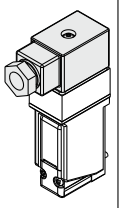
A	N.C. (Normally closed)
B	N.O. (Normally open)

Port size (Sub-plate)

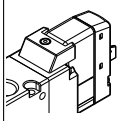
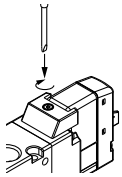
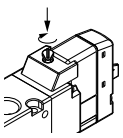
Symbol	Port size	VP300	VP500	VP700
Nil	Without sub-plate∗1			
01	1/8	○	—	—
02	1/4	○	○	—
03	3/8	—	○	○
04	1/2	—	—	○

∗1 With a gasket and two mounting bolts.

Electrical entry

		DIN terminal	DIN (EN175301-803) terminal	Conduit terminal
		[IP65 compatible]	[IP65 compatible]	[IP65 compatible]
				
		D: With connector	Y: With connector	T: Conduit terminal
CE/UKCA-compliant	DC	CE UKCA	CE UKCA	CE UKCA
	AC	CE UKCA	CE UKCA	CE UKCA

Manual override

Nil: Non-locking push type	D: Push-turn locking slotted type	E: Push-turn locking lever type
		

Light/surge voltage suppressor

		DC	AC
Nil	Without light/surge voltage suppressor	○	○
S	With surge voltage suppressor	○	—∗1
Z	With light/surge voltage suppressor	○	○
R	With surge voltage suppressor (Non-polar)	○	—
U	With light/surge voltage suppressor (Non-polar)	○	—

∗1 There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Safety Standard ISO 13849-1 Compliant (Corresponding to Categories 3 and 4)

Safety Exhaust Valve/ Modular Connection Type 25A-VPX400 Series



How to Order

25A – VPX406 K T – 5 KO NZ – D – A4 ☐

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

❶ Pressure specifications

K	High pressure (0.25 to 1.0 MPa)

❷ Coil specifications

T	With power-saving circuit

❸ Rated voltage

5	24 VDC

❹ Electrical entry

KO	M12 connector, Without connector cable
K	With M12 connector, Cable length: 3000 mm

∗ When option "K" (With M12 connector cable) is selected, 2 cables are included.

❺ Light/surge voltage suppressor and common specification

NZ	With light/surge voltage suppressor Negative common

❻ Pressure sensor wiring specifications

D	Double common
N1	Negative common, Wiring type 1
N2	Negative common, Wiring type 2

❼ Connected AC size

Symbol	Connected AC size 1/2 port	Flow rate characteristics (2 ⇒ 3)		Port size 3 port
		C [dm³/(s·bar)]	b	
A3	AC30	25.0	0.20	G1"
A4	AC40	31.0	0.15	
A6	AC50/60	35.8	0.10	

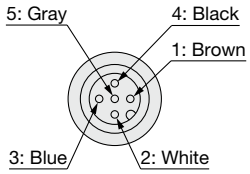
❽ Thread type

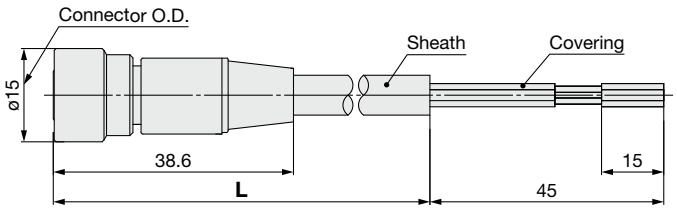
[Pressure gauge connection thread (1/8")]

Symbol	Thread type
Nil	Rc
N	NPT
F	G

∗ Port (exhaust port) is only G thread regardless of thread type.

M12 Connector Cable





Part no.	Lead wire length (**L**)
V100-200-6-10	1000 mm
V100-200-6-30	3000 mm
V100-200-6-50	5000 mm

Sheath O.D.	ø6.5 mm
Cover diameter	ø1.8 mm
Conductor cross section	0.5 mm²

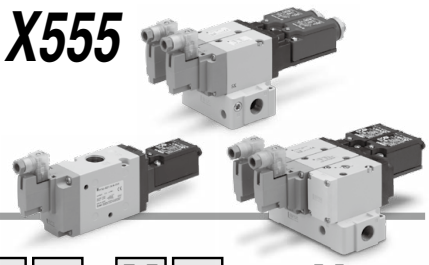
∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Safety Standard ISO 13849-1 Certified

3-Port Solenoid Valve/Residual Pressure Release Valve with Detection of Main Valve Position

25A-VP500/700-X536, X538, X555



How to Order

Residual pressure release valve	25A-VP[5]42[R]-5DZ1-[03][ ]-M[ ] -X536
Dual residual pressure release valve	25A-VP[5]44[R]-5DZ1-[03][ ]-M[A] -X538
Dual residual pressure release valve with soft start-up function	25A-VP[5]44[ ]-5DZ1-[03][ ]-M[ ][ ] -X555

Series

5	VP500
7	VP700

Body

2	Body ported
4	Base mounted

Pilot

Nil	Internal pilot
R	External pilot

Voltage

5	24 VDC

Electrical entry

D	DIN terminal

Light/surge voltage suppressor

Z	With light/surge voltage suppressor

Port size

	Port size	VP500	VP700
03	3/8"	●	—
04	1/2"	—	●

Thread

Nil	Rc
F	G
N	NPT

Safety limit switch/Wiring

Nil	G1/2 (Made by OMRON)
M	M12 connector (Made by OMRON)
S1	M12 connector (Made by Rockwell Automation)

With check valve (Only external pilot)

	Check valve	Applicable tube O.D.	Thread		
			Rc	G	NPT
Nil	None	—	●	●	●
A	Yes	ø6	●	—	—
B		ø1/4"	—	—	●

∗ For the internal pilot, the symbol is nil.

Throttle

Nil	Variable throttle
10	ø1 fixed orifice
15	ø1.5 fixed orifice
20∗1	ø2 fixed orifice

∗1 VP700 only

Internal Pilot Type

⚠ Caution

Valve may not operate properly when air supply to P port is not adequate and the supply pressure to the valve is lower than 0.25 MPa, the minimum operating pressure. Be careful with insufficient supply pressure.

Piping for External Pilot Type

⚠ Caution

The product may not operate when the external pilot pressure is insufficient due to simultaneous operation or restricted air piping. In this case, use the check valve (AKH series) with the external pilot port, change the piping size or adjust the set pressure to provide a constant pressure of 0.25 MPa or more.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

3-Port Solenoid Valve
Direct Operated Poppet Type
25A-VT317 Series
Rubber Seal

[Option]
∗ CE/UKCA-compliant:
For DIN terminal type.

How to Order

25A-V T 317 ☐ - 1 G ☐ - 02 ☐ - ☐

Body type

T	Body ported
O	Manifold

Series compatible with secondary batteries

Valve option

Nil	Standard
E∗1	Continuous duty type
V∗1	For vacuum

∗1 Semi-standard

Rated voltage

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3∗1	110 VAC (50/60 Hz)
4∗1	220 VAC (50/60 Hz)
5	24 VDC
6∗1	12 VDC
7∗1	240 VAC (50/60 Hz)

∗1 Semi-standard
∗ Applicable only for DIN terminal type.

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant∗1

∗1 Applicable only for DIN terminal type.

Port size

Nil	Without port (For manifold)
02	1/4 (8A)

Electrical entry

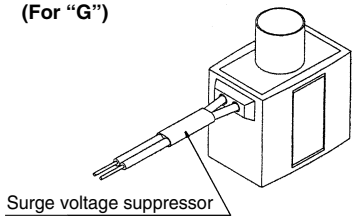
		CE/UKCA-compliant
G	Grommet, 300 mm lead wire	—
H	Grommet, 600 mm lead wire	—
C	Conduit	—
D	DIN terminal	●

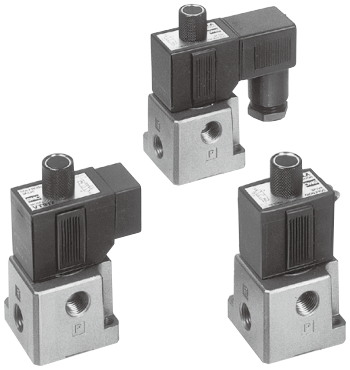
Light/Surge voltage suppressor

Symbol \ Electrical entry	G	H	C	D	CE/UKCA-compliant: D Only
Nil	●	●	●	●	●
S	●∗1	●∗1	●∗1	●	●
Z	—	—	—	●	●

S: With surge voltage suppressor
∗1 Refer to the figure below.
Z: With light/surge voltage suppressor

Surge voltage suppressor mounting part (For "G")





Accessory

Model	Applicable manifold type	Description (Part no.)
25A-VO317	Common or individual exhaust	O-ring (KA00066, 4 pcs.)∗1 Bolts (CA01161, 2 pcs.)

∗1 It is not applied to "Continuous duty type." Refer to the accessories in the **Web Catalog**.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.
For details, refer to the Web Catalog.

How to Order Manifold

25A – VV317 – 02 – 05 1 – 02 – A – ☐

Valve stations

02	2 stations
⋮	⋮
20	20 stations

Max. 20 stations

Symbol

Symbol	Passage		Porting specifications
	P	R	A
1	Common	Common	Side
3	Common	Individual	Side

Option

Nil	Without mounting bracket
A	With mounting bracket*1

*1 Common exhaust type only

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant

How to Order Valve

25A – VO317 ☐ – 1 D ☐ – ☐

Valve option

Nil	Standard
E	Continuous duty type
V	For vacuum

Rated voltage

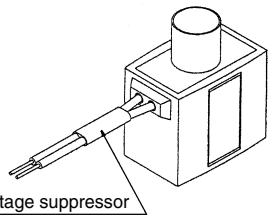
1	100 VAC 50/60 Hz
2	200 VAC 50/60 Hz
3	110 VAC 50/60 Hz
4	220 VAC 50/60 Hz
5	24 VDC
6	12 VDC
7	240 VAC 50/60 Hz

Light/Surge voltage suppressor

Symbol \ Electrical entry	G	H	C	D	CE/UKCA-compliant: D Only
Nil	●	●	●	●	●
S	*1 ●	*1 ●	*1 ●	●	●
Z	–	–	–	●	●

S: With surge voltage suppressor
*1 Refer to the figure below.
Z: With light/surge voltage suppressor

Surge voltage suppressor mounting part (For "G")



Electrical entry

		CE/UKCA-compliant
G	Grommet, 300 mm lead wire	—
H	Grommet, 600 mm lead wire	—
C	Conduit	—
D	DIN terminal	●

CE/UKCA-compliant

Nil	—
Q	CE/UKCA-compliant*2

*2 Applicable only for DIN terminal type.

Blanking plate assembly part no.: **PVT317-53-3A** (With bolt, O-ring)

3-Port Solenoid Valve
Direct Operated Poppet Type
25A-VG342 Series
Rubber Seal

Low power consumption
4.8 W DC (Standard type)
2 W DC (Energy-saving type)

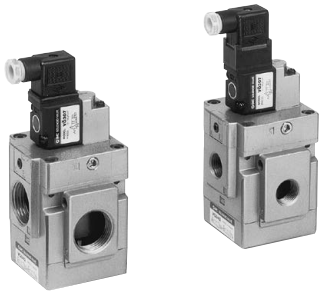
No lubrication required

Possible to use in vacuum or under low pressures
External pilot
Vacuum: Up to –101.2 kPa
Low pressure: 0 to 0.2 MPa

Changeable actuation:

N.C., N.O., or external pilot

Can be used as a selector or divider valve (External pilot)



How to Order

25A-VG342 □ - 5 D □ - 04 □ A - □

Series compatible with secondary batteries

Valve option

Nil	Internal pilot
R	External pilot

Rated voltage

5	24 VDC
6∗1	12 VDC

∗1 Semi-standard

Electrical entry

D	DIN terminal

Light/Surge voltage suppressor

Nil	None
Z	With light/surge voltage suppressor (Except grommet type)

Port size

04	1/2
06	3/4
10	1

Thread type

Nil	Rc

Passage symbol

Nil	External pilot
A	N.C. (Normally closed)
B	N.O. (Normally open)

Pilot valve option

Nil	Standard type
Y∗1	Energy-saving type (DC only)
E∗1	Continuous duty type

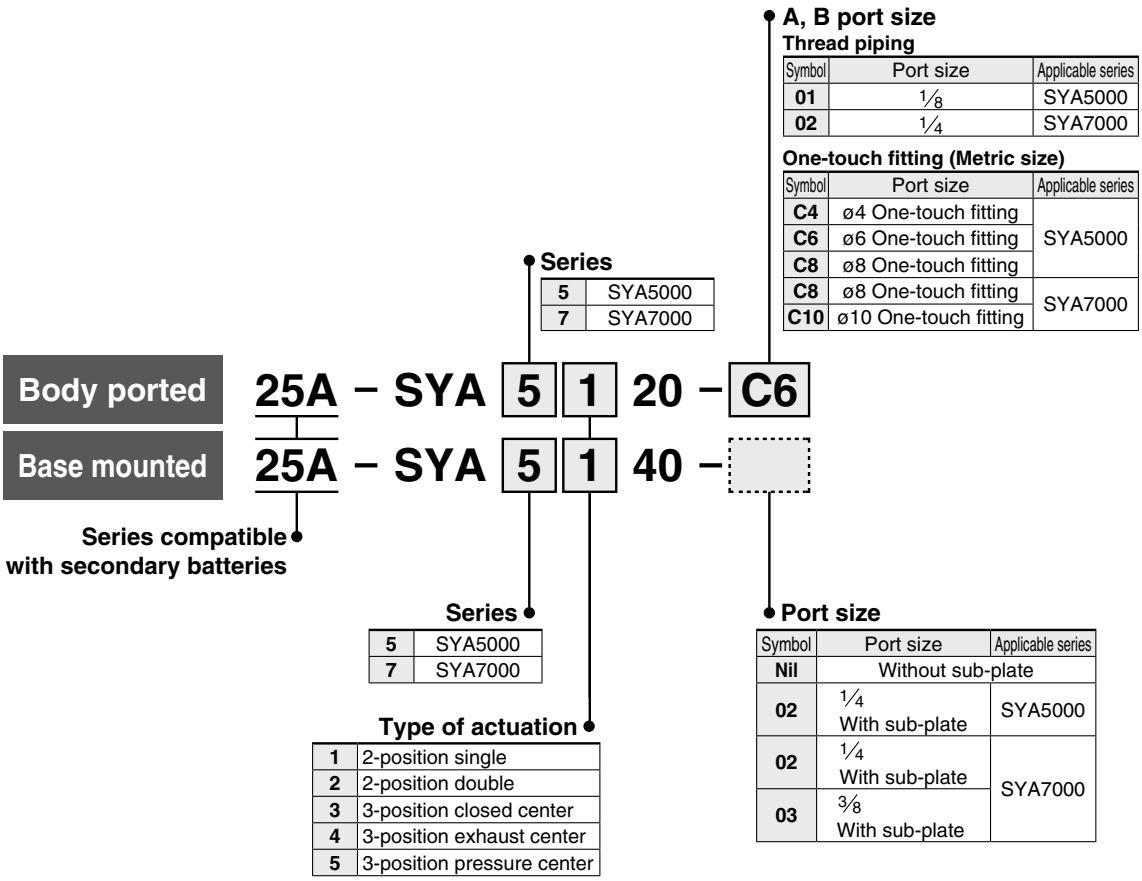
∗1 Semi-standard

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

5-Port Air Operated Valve
25A-SYA5000/7000 Series

How to Order



How to Order Manifold Base

Same manifolds as the SY series (Non plug-in type) are prepared.
(For 20, 41 and 42 Types)

25A-SS5YA$^{5}_{7}$- Fill the same as 25A-SS5Y $^{5}_{7}$.

(Refer to pages 65 and 67.)

* Specify the part numbers for valves and options together beneath the manifold base part number.

<Example>

25A-SS5YA5-42-03-02···· 1 set (Type 42, 3-station manifold base part no.)
* 25A-SYA5140 ····· 1 set (Single air operated valve part no.)
* 25A-SYA5240 ····· 1 set (Double air operated valve part no.)
* 25A-SY5000-26-1A ····· 1 set (Blanking plate the assembly part no.)

└►The asterisk denotes the symbol for the assembly.
Prefix it to the part nos. of the solenoid valve, etc.

* When single body ported air operated valves are ordered, manifold mounting screws and gaskets are not included. Order them separately if necessary.
(For details, refer to page 70.)

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

3-Port Air Operated Valve

25A-SYJA500/700 Series



How to Order

Port size

Symbol	Port size	Applicable series
M5	M5 x 0.8	SYJA500
01	1/8	SYJA700

Body ported 25A-SYJA 5 1 2-M5 □-□

Base mounted 25A-SYJA 5 1 4-□□

Series compatible with secondary batteries

Series

5	SYJA500
7	SYJA700

Type of actuation

1	Normally closed
2	Normally open

Port size

Symbol	Port size	Applicable series
Nil	Without sub-plate	
01	1/8 With sub-plate	SYJA500 SYJA700
02	1/4 With sub-plate	SYJA700

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

∗ Excludes M5

Bracket

Nil	Without bracket
F	With bracket

∗ The bracket is not mounted.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Manifold Type for the SYJA500

Type 20

How to Order

25A – SS3YJA5 – 20 – 05

Stations

02	2 stations
:	:
20	20 stations

Applicable valve
25A-SYJA5□2

Applicable blanking plate assembly
25A-SYJ500-10-1A

∗ For more than 6 stations, supply air to both sides of P port and exhaust air from both sides of R port.

Type 40

How to Order

25A – SS3YJA5 – 40 – 05 M5

Stations

02	2 stations
:	:
20	20 stations

A port size

M5	M5 x 0.8
01	1/8

Applicable valve
25A-SYJA5□4

Applicable blanking plate assembly
25A-SYJ500-10-3A

∗ For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

Type 41

How to Order

25A – SS3YJA5 – 41 – 05 – C6

Stations

02	2 stations
:	:
20	20 stations

A port size

M5	M5 x 0.8
01	1/8
C4	ø4 One-touch fitting
C6	ø6 One-touch fitting

Applicable valve
25A-SYJA5□4

Applicable blanking plate assembly
25A-SYJ500-10-3A

∗ For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

Manifold Type for the SYJA700

Type 20/21

How to Order

25A – SS3YJA7 – 20 – 05

Manifold type

20	Type 20
21	Type 21

Stations

02	2 stations
:	:
20	20 stations

Applicable valve
25A-SYJA7□2

Applicable blanking plate assembly
25A-SYJ700-10-1A

∗ If there are more than 6 stations for type 20, or more than 9 stations for type 21, supply air to both sides of P port and exhaust air from both sides of R port.

Type 40/41

How to Order

25A – SS3YJA7 – 40 – 05 – 01

Manifold type

40	Type 40
41	Type 41

A port size

01	1/8

Stations

02	2 stations
:	:
20	20 stations

Applicable valve
25A-SYJA7□4

Applicable blanking plate assembly
25A-SYJ700-10-2A

∗ If there are more than 6 stations for type 40, or more than 9 stations for type 41, supply air to both sides of P port and exhaust air from both sides of R port.

Type 42

How to Order

25A – SS3YJA7 – 42 – 05 – C6

Stations

02	2 stations
:	:
20	20 stations

A port size

01	1/8
C6	ø6 One-touch fitting
C8	ø8 One-touch fitting

Applicable valve
25A-SYJA7□4

Applicable blanking plate assembly
25A-SYJ700-10-2A

∗ For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

Finger Valve

RoHS

25A-VHK□A Series

How to Order

25A–VHK 2 A – 04F – 04F □ □

Series compatible with secondary batteries

Valve model

2	2-port valve
3	3-port valve

1(P) port size

04F	ø4
06F	ø6
08F	ø8
01S	R1/8
02S	R1/4
03S	R3/8

2(A) port size

04F	ø4
06F	ø6
08F	ø8
01S	R1/8
02S	R1/4
03S	R3/8

Knob color

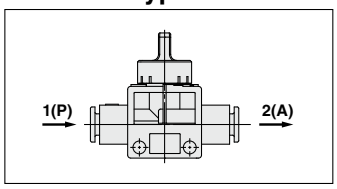
Nil (Standard)	2-port valve	Gray
	3-port valve	Blue
R (Option)	2-port valve	Red
	3-port valve	

Bracket

Nil	None
L	With L-bracket

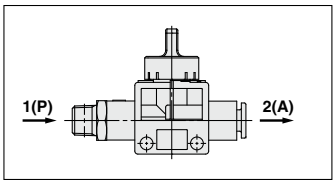
* Bracket and screws are attached.

Standard Type



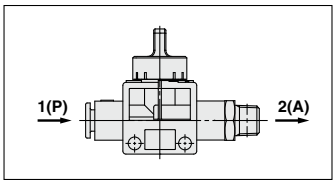
1(P): One-touch fitting
2(A): One-touch fitting

1(P) \ 2(A)	Applicable tubing O.D. [mm] ø4	ø6	ø8
Applicable tubing O.D. [mm] ø4	●		
ø6	●	●	
ø8		●	●



1(P): Male thread
2(A): One-touch fitting

1(P) \ 2(A)	Applicable tubing O.D. [mm] ø4	ø6	ø8
Port size R 1/8	●	●	●
1/4		●	●
3/8		●	●



1(P): One-touch fitting
2(A): Male thread

1(P) \ 2(A)	Port size R 1/8	1/4	3/8
Applicable tubing O.D. [mm] ø4	●		
ø6	●	●	●
ø8	●	●	●

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

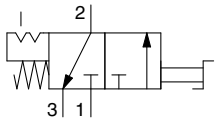
OSHA Standard Compliant Pressure Relief 3-Port Valve with Locking Holes

Single Action
25A-VHS20/30/40/50-D Series

RoHS

Double Action
25A-VHS20W/30W/40W/50W-D Series

Symbol



How to Order

25A – VHS 30 ❶ ❷ – ❸ 03 ❹ – ❺ – ❻ – D

Series compatible with secondary batteries

- Option/Semi-standard: Select one each for **a to f**.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.

Example) 25A-VHS30-N03-BS-RZ-D

			Symbol	Description	❶ Body size 20	30	40	50
❷	Handle operation		**Nil**	Single action	●	●	●	●
			W	Double action	●	●	●	●
			+					
❸	Pipe thread type		**Nil**	Rc*1	●	●	●	●
			N	NPT	●	●	●	●
			F	G	●	●	●	●
			+					
❹	Port size		**01**	1/8	●	—	—	—
			02	1/4	●	●	●	—
			03	3/8	—	●	●	—
			04	1/2	—	—	●	—
			06	3/4	—	—	●	●
			10	1	—	—	—	●
			+					
❺	Option	**a** Mounting	**Nil**	Without mounting option	●	●	●	●
			B	With bracket	●	●	●	●
			+					
		b Silencer	**Nil**	Without silencer	●	●	●	●
			S	With built-in silencer (for EXH port)	●	●	●	●
			+					
❻	Semi-standard	**c** Handle color	**Nil**	Red	●	●	●	●
			K	Black	●	●	●	●
			+					
		d Handle material	**Nil**	Resin	●	●	●	●
			M	Metal	●	●	●	●
			+					
		e Flow direction	**Nil**	Flow direction: Left to right	●	●	●	●
			R	Flow direction: Right to left	●	●	●	●
			+					
		f Pressure unit	**Nil**	Product label in SI units: MPa	●	●	●	●
			Z*2	Product label in imperial units: psi	○*3	○*3	○*3	○*3

*1 The pipe thread type for the EXH port is G.
*2 For the pipe thread type: NPT only. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)
*3 ○: For the pipe thread type: NPT only

Option/Part Nos.

Optional specifications	Model				
	25A-VHS20-D	**25A-VHS30-D**	**25A-VHS40-D**	**25A-VHS40-06-D**	**25A-VHS50-D**
Bracket assembly*1	25A-VHS24P-180AS	25A-VHS34P-180AS	25A-VHS44P-180AS	25A-VHS44P-180AS	25A-VHS54P-180AS
Silencer assembly*2	VHS24P-190AS	VHS34P-190AS	VHS44P-190AS	VHS54P-190AS	VHS54P-190AS

*1 The assembly consists of a bracket A/B and 2 mounting screws.
*2 The assembly consists of the element assembly and an O-ring.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Conforming to OSHA Standard

Pressure Relief 3-Port Valve with Locking Holes (Single Action)

25A-VHS20/30/40/50 Series

RoHS

How to Order

Single action **25A – VHS 40 – □ 04 A – B – □ – □**

Series compatible with secondary batteries

Pressure relief 3-port valve

Body size

Symbol
20
30
40
50

Thread type

Nil	Rc
N	NPT
F	G

Port size

Symbol	Port size	Body size			
		20	30	40	50
01	1/8	●	—	—	—
02	1/4	●	●	●	—
03	3/8	—	●	●	—
04	1/2	—	—	●	—
06	3/4	—	—	●	●
10	1	—	—	—	●

Handle/Bonnet material

Symbol	Material
A	Flame-resistant PBT
B	Aluminum

Made to order

Symbol	Description
X1	Body: Red

Semi-standard specifications

Symbol	Description
Nil	—
K	Handle color: Black
R	Flow direction: Right → Left
Z*1	psi as unit displayed on label

*1 Only for the NPT thread
This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

Options

Symbol	Description
Nil	—
B	With bracket

Option Part Nos.

Model	Bracket assembly part no.*1
25A-VHS20	VHS20PW-180AS-6
25A-VHS30	VHS30PW-180AS-6
25A-VHS40	VHS40PW-180AS-6
25A-VHS40-06	VHS40PW-180-06AS-6
25A-VHS50	VHS50PW-180AS-6

*1 Bracket/1 pc., Mounting screw/2 pcs.

OSHA standard (Occupational Safety and Health Administration Department of Labor)

For safety control, OSHA rule requires energy sources for certain equipment be turned off or disconnected and that the device either be locked or labelled with a warning tag.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Conforming to OSHA Standard

Pressure Relief 3-Port Valve with Locking Holes (Double Action)

25A-VHS2510/3510/4510/5510 Series

RoHS

How to Order

Double action 25A – VHS 4 510 – □ 04 A – B – □ – □

Series compatible with secondary batteries

Pressure relief 3-port valve

Body size

Symbol
2
3
4
5

Double action

Thread type

Nil	Rc
N	NPT
F	G

Port size

Symbol	Port size	Body size			
		2	3	4	5
01	1/8	●	—	—	—
02	1/4	●	●	●	—
03	3/8	—	●	●	—
04	1/2	—	—	●	—
06	3/4	—	—	●	●
10	1	—	—	—	●

Handle/Bonnet material

Symbol	Material
A	Flame-resistant PBT
B	Aluminum

Options

Symbol	Description
Nil	—
B	With bracket

Semi-standard specifications

Symbol	Description
Nil	—
K	Handle color: Black
R	Flow direction: Right → Left
Z*1	psi as unit displayed on label

*1 Only for the NPT thread
This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

Made to order

Symbol	Description
X1	Body: Red

Option Part Nos.

Model	Bracket assembly part no.*1
25A-VHS2510	VHS20PW-180AS-6
25A-VHS3510	VHS30PW-180AS-6
25A-VHS4510	VHS40PW-180AS-6
25A-VHS4510-06	VHS40PW-180-06AS-6
25A-VHS5510	VHS50PW-180AS-6

*1 Bracket/1 pc., Mounting screw/2 pcs.

OSHA standard (Occupational Safety and Health Administration Department of Labor)
For safety control, OSHA rule requires energy sources for certain equipment be turned off or disconnected and that the device either be locked or labelled with a warning tag.

* The 25A- series specifications and dimensions are the same as those of the standard model.

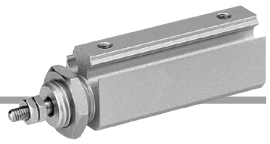
For details, refer to the Web Catalog.

Pin Cylinder: Double Acting, Single Rod

25A-CJP2 Series

ø4, ø6, ø10, ø16

RoHS



How to Order

25A – CDJP2 F 10 – 15 D – □ – M9BW S

Series compatible with secondary batteries

With auto switch (Built-in magnet)

Mounting

Symbol	Mounting	Standard	Built-in magnet
B	Basic	●	●
F	Flange	●	●
L	Foot	●	●
D	Clevis	●	●
T	Trunnion	●	●

∗ Bore size of 4 mm is available with basic mounting only.
∗ Mounting brackets are shipped together with the product but do not come assembled.
∗ Trunnion mounting type is shipped after assembled.

Bore size

4	4 mm
6	6 mm
10	10 mm
16	16 mm

Double acting

Cylinder standard stroke

Bore size [mm]	Stroke [mm]
4	5, 10, 15, 20∗1
6	5, 10, 15, 20, 25
10, 16	5, 10, 15, 20, 25, 30, 35, 40

∗1 20 stroke of bore size 4 mm is standard type only.

Rod end thread

Nil	With thread
B	Without thread

Auto switch

Nil	Without auto switch

∗ **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDJP2F10-15D

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Flange	Foot	Trunnion
6	25A-CP-F006A	25A-CP-L006A	25A-CP-T006A
10	25A-CP-F010A	25A-CP-L010A	25A-CP-T010A
16	25A-CP-F016A	25A-CP-L016A	25A-CP-T016A

Accessory Bracket Part Nos. for the 25A- Series

Bore size [mm]	Single knuckle joint	Double knuckle joint	Knuckle joint pin	Trunnion pin	Mounting nut	Rod end nut
4	—	—	—	—	25A-SNPS-004	25A-NTJ-004
6	25A-I-P006A	25A-Y-P006A	25A-IY-P006	25A-CT-P006	25A-SNP-006	25A-NTP-006
10	25A-I-P010A	25A-Y-P010A	25A-IY-P010	25A-CT-P010	25A-SNP-010	25A-NTP-010
16	25A-I-P016A	25A-Y-P016A	25A-IY-P016	25A-CT-P016	25A-SNP-016	25A-NTP-016

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Air Cylinder: Standard Type
Double Acting, Single Rod
25A-CJ2 Series
ø10, ø16

RoHS



How to Order

25A – C D J2 L 16 – 60 A Z – M9BW – B

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Basic
E	Double-side bossed
D	Double clevis
L	Single foot
M	Double foot
F	Rod flange
G	Head flange

* Mounting brackets are shipped together with the product but do not come assembled.

Bore size

10	10 mm
16	16 mm

Cylinder standard stroke [mm]

10	15, 30, 45, 60, 75, 100, 125, 150
16	15, 30, 45, 60, 75, 100, 125, 150, 175, 200

* The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

Cushion

Nil	Rubber bumper
A	Air cushion

Head cover port location

Symbol \ Bore size [mm]	ø10, ø16	
Nil	Perpendicular to axis	
R	Axial	

* Double clevis is only available for being perpendicular to axis.
* Double-side bossed type is only available for being perpendicular to axis.

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.
* Enter the auto switch mounting type (B) even when a built-in magnet cylinder without an auto switch is required.

Number of auto switches

Nil	2
S	1
n	n

Auto switch mounting type

B	Band mounting

* Refer to page 323 for auto switch mounting brackets.

Mounting Bracket Part Nos. for the 25A- Series

Mounting bracket	Bore size [mm]	
	10	16
Foot bracket	25A-CJ-L010B	CJ-L016SUS
Flange bracket	25A-CJ-F010B	CJ-F016SUS

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Air Cylinder: Non-rotating Rod Type
Double Acting, Single Rod
25A-CJ2K Series
ø10, ø16

RoHS



How to Order

25A – C D J2K L 16 – 60 Z – M9BW – B

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Basic
E	Double-side bossed
D	Double clevis
L	Single foot
M	Double foot
F	Rod flange
G	Head flange

* Mounting brackets are shipped together with the product but do not come assembled.

Bore size

10	10 mm
16	16 mm

Cylinder standard stroke [mm]

10	15, 30, 45, 60, 75, 100, 125, 150
16	15, 30, 45, 60, 75, 100, 125, 150, 175, 200

* The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

Head cover port location

Symbol \ Bore size [mm]	ø10, ø16	
Nil	Perpendicular to axis	
R	Axial	

* Double clevis is only available for being perpendicular to axis.
* Double-side bossed type is only available for being perpendicular to axis.

Auto switch

Nil	Without auto switch

* **Click here** for details on applicable auto switch models.
* Enter the auto switch mounting type (B) even when a built-in magnet cylinder without an auto switch is required.

Number of auto switches

Nil	2
S	1
n	n

Auto switch mounting type

B	Band mounting

* Refer to page 323 for auto switch mounting brackets.

Mounting Bracket Part Nos. for the 25A- Series

Mounting bracket	Bore size [mm]	
	10	16
Foot bracket	CJ-L016SUS	CJK-L016SUS
Flange bracket	CJ-F016SUS	CJK-F016SUS

* The 25A- series specifications and dimensions are the same as those of the standard model. (Excluding the foot and flange plate thickness)

For details, refer to the Web Catalog.

Air Cylinder: With End Lock

25A-CBJ2 Series

ø16

RoHS



How to Order

	25A-		CBJ2	L	16-	60	-	H	N				
With auto switch	25A-	C	DBJ2	L	16-	60	-	H	N	-	M9BW		

Series compatible with secondary batteries

With auto switch (Built-in magnet)

Mounting

B	Basic
L	Axial foot
F	Rod flange
D	Double clevis*1

*1 Rod end lock only

* Foot/Flange brackets are shipped together with the product but do not come assembled.

Cylinder standard stroke [mm]

Bore size	Standard stroke
16	15, 30, 45, 60, 75, 100, 125, 150, 175, 200

* The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

Lock position

H	Head end lock
R	Rod end lock

Manual release

N	Non-locking type

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

How to order built-in magnet type (Without auto switch)

Suffix the symbol "-B" (Band mounting) to the end of part number for cylinder with auto switch.

Example	25A-CDBJ2B16-60-HN-B

Mounting Bracket Part Nos. for the 25A- Series

Mounting bracket	Bore size [mm]
	16
Foot bracket	CJ-L016SUS
Flange bracket	CJ-F016SUS

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Air Cylinder: Standard Type
Double Acting, Single Rod
25A-CM2 Series
ø20, ø25, ø32, ø40

RoHS



How to Order

25A – C D M2 L 40 ☐ – 150 A ☐ Z1 – M9BW ☐

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Basic (Double-side bossed)
L	Axial foot
F	Rod flange
G	Head flange
C	Single clevis
D	Double clevis
U	Rod trunnion
T	Head trunnion
E	Integrated clevis
V	Integrated clevis (90°)
BZ	Boss-cut/Basic
FZ	Boss-cut/ Rod flange
UZ	Boss-cut/ Rod trunnion

Bore size

20	20 mm
25	25 mm
32	32 mm
40	40 mm

Port thread type

Nil	Rc
TN	NPT
TF	G

Rod end thread

Nil	Male rod end
F	Female rod end

Cushion

Nil	Rubber bumper
A	Air cushion

Cylinder Stroke [mm]

Bore size	Standard stroke*1	Manufacturable stroke
20	25, 50, 75, 100, 125, 150 200, 250, 300	5 to 1000
25		5 to 1500
32		5 to 2000
40		

*1 Other intermediate strokes can be manufactured upon receipt of order. The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

* Applicable strokes should be confirmed according to the usage. For details, refer to the “Air Cylinders Model Selection” in the **Web Catalog**. In addition, the products that exceed the standard stroke might not be able to fulfill the specifications due to deflection, etc.

* Using a stroke of a length which is smaller than the effective cushion length may result in reduced air cushion performance. Refer to “Technical Data 1” in the **Web Catalog** for details on the effective cushion length.

Auto switch

Nil	Without auto switch

* **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDM2F32-100AZ1

Mounting Bracket Part Nos. for the 25A- Series

Mounting bracket	Min. order	Bore size [mm]				Description (for min. order)
		20	**25**	**32**	**40**	
Axial foot*1	2	CM-L020B-XB12	CM-L032B-XB12		CM-L040B-XB12	2 foot brackets, 1 mounting nut
Flange	1	CM-F020BSUS	CM-F032BSUS		CM-F040BSUS	1 flange
Single clevis*2	1	CM-C020B	CM-C032B		CM-C040B	1 single clevis, 3 liners
Double clevis*2*3 (with pin)	1	25A-CM-D020B	25A-CM-D032B		25A-CM-D040B	1 double clevis, 3 liners, 1 clevis pin, 2 retaining rings
Trunnion (with nut)	1	25-CM-T020B	25-CM-T032B		25-CM-T040B	1 trunnion, 1 trunnion nut

*1 Order 2 foot brackets for each cylinder unit.
*2 3 liners are attached with a clevis bracket for adjusting the mounting angle.
*3 A clevis pin and retaining rings (split pins for ø40) are attached.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Air Cylinder: Standard Type
Double Acting, Single Rod
25A-CM2 Series
ø20, ø25, ø32, ø40

RoHS



How to Order

25A-C D M2 L 40 [ ] - 150 A [ ] Z - M9BW [ ]

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Basic
L	Axial foot
F	Rod flange
G	Head flange
C	Single clevis
D	Double clevis
U	Rod trunnion
T	Head trunnion
E	Integrated clevis
V	Integrated clevis (90°)
BZ	Boss-cut/Basic
FZ	Boss-cut/ Rod flange
UZ	Boss-cut/ Rod trunnion

Bore size

20	20 mm
25	25 mm
32	32 mm
40	40 mm

Port thread type

Nil	Rc
TN	NPT
TF	G

Rod end thread

Nil	Male rod end
F	Female rod end

Cushion

Nil	Rubber bumper
A	Air cushion

Cylinder Stroke [mm]

Bore size	Standard stroke*1	Maximum stroke
20	25, 50, 75, 100, 125, 150 200, 250, 300	1000
25		1500
32		2000
40		2000

*1 Other intermediate strokes can be manufactured upon receipt of order. The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

* When exceeding 300 strokes, the allowable maximum stroke length is determined by the stroke selection table (**Web Catalog**).

Auto switch

Nil	Without auto switch

* **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDM2F32-100AZ

Mounting Bracket Part Nos. for the 25A- Series

Mounting bracket	Min. order	Bore size [mm]				Description (for min. order)
		20	25	32	40	
Axial foot*1	2	CM-L020B-XB12	CM-L032B-XB12		CM-L040B-XB12	2 foot brackets, 1 mounting nut
Flange	1	CM-F020BSUS	CM-F032BSUS		CM-F040BSUS	1 flange
Single clevis*2	1	CM-C020B	CM-C032B		CM-C040B	1 single clevis, 3 liners
Double clevis*2*3 (with pin)	1	25A-CM-D020B	25A-CM-D032B		25A-CM-D040B	1 double clevis, 3 liners, 1 clevis pin, 2 retaining rings
Trunnion (with nut)	1	25-CM-T020B	25-CM-T032B		25-CM-T040B	1 trunnion, 1 trunnion nut

*1 Order 2 foot brackets for each cylinder unit.
*2 3 liners are attached with a clevis bracket for adjusting the mounting angle.
*3 A clevis pin and retaining rings (split pins for ø40) are attached.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Air Cylinder: Standard Type
Double Acting, Single Rod

RoHS

25A-CG1 Series
ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100



How to Order

25A- C D G1 L N 25 □ -100 □ Z- M9BW □

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Basic
Z*1	Basic (without trunnion mounting female thread)
L	Axial foot
F	Rod flange
G	Head flange
U*1	Rod trunnion
T*1	Head trunnion
D	Clevis

*1 Not available for ø80 or ø100.
* Mounting brackets are shipped together with the product but do not come assembled.
* The cylinder for F, G, L, D mounting types is Z: Basic (without trunnion mounting female thread).

Type

N	Rubber bumper
A	Air cushion

Bore size

20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

Port thread type

		Rubber bumper	Air cushion	
Nil	Rc	ø20 to ø100	M5 x 0.8	ø20, ø25
TN	NPT	ø20 to ø100	Rc	ø32 to ø100
TF	M5 x 0.8	ø20, ø25	NPT*1	ø32 to ø100
	G	ø32 to ø100	G*1	ø32 to ø100

*1 Not available for ø20 and ø25.

Cylinder stroke [mm]

Bore size [mm]	Standard stroke*1 [mm]	Long stroke*2 [mm]
20	25, 50, 75, 100, 125, 150, 200	201 to 1500
25	25, 50, 75, 100, 125, 150, 200, 250, 300	301 to 1500
32		
40		
50, 63		
80		
100		

*1 Other intermediate strokes can be manufactured upon receipt of order. The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)
*2 For details on the maximum stroke that can be used for each mounting bracket, refer to the stroke selection table (**Web Catalog**).

Rod end thread

Nil	Rod end male thread
F	Rod end female thread

Auto switch

Nil	Without auto switch

* **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDG1FN32-100Z

Mounting Bracket Part Nos. for the 25A- Series

* The rod end brackets are the same as those of the CG5-S series. Refer to the **Web Catalog** for details.

Mounting bracket	Min. order	Bore size [mm] 20	25	32	40	50	63	80	100	Description
Foot	2*1	90-CG-L020	90-CG-L025	90-CG-L032	90-CG-L040	90-CG-L050	25-CG-L063	25-CG-L080	25-CG-L100	Foot x 2, Mounting bolt x 8
Flange	1	90-CG-F020	90-CG-F025	90-CG-F032	90-CG-F040	90-CG-F050	25-CG-F063	25-CG-F080	25-CG-F100	Flange x 1, Mounting bolt x 4
Trunnion pin	1	25-CG-T020	25-CG-T025	25-CG-T032	25-CG-T040	25-CG-T050	25-CG-T063	—	—	Trunnion pin x 2, Trunnion bolt x 2, Flat washer x 2
Clevis	1	25-CG-D020	25-CG-D025	25-CG-D032	25-CG-D040	25-CG-D050	25-CG-D063	25-CG-D080	25-CG-D100	Clevis x 1, Mounting bolt x 4, Clevis pin x 1, Retaining ring x 2
Pivot bracket	1	25-CG-020-24A	25-CG-025-24A	25-CG-032-24A	25-CG-040-24A	25-CG-050-24A	25-CG-063-24A	25-CG-080-24A	25-CG-100-24A	Pivot bracket x 1

*1 Order two foot brackets per cylinder.

* The 25A- series specifications and dimensions are the same as those of the standard model.
For details, refer to the Web Catalog.

Air Cylinder: With End Lock

RoHS

25A-CBG1 Series

ø20, ø25, ø32, ø40, ø50, ø63



How to Order

25A- **CBG1** **L** **N** **25** **-** **100** **-** **H** **N**

25A- **CDBG1** **L** **N** **25** **-** **100** **-** **H** **N** **-** **M9BW** **□**

Series compatible with secondary batteries

With auto switch (Built-in magnet)

Mounting

B	Basic
L	Axial foot
F	Rod flange
G	Head flange
U∗1	Rod trunnion
T∗1	Head trunnion
D	Clevis

∗1 The trunnion cannot be attached on the side to which an end lock is attached.

∗ Mounting brackets are shipped together with the product but do not come assembled.

Type

N	Rubber bumper

Bore size

20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm

Cylinder stroke [mm]

Bore size	Standard stroke∗1	Long stroke∗2
20	25, 50, 75, 100, 125, 150, 200	201 to 1500
25	25, 50, 75, 100, 125, 150, 200, 250, 300	301 to 1500
32		
40		
50, 63		

∗1 Other intermediate strokes can be manufactured upon receipt of order. The manufacturing of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

∗2 For details on the maximum stroke that can be used for each mounting bracket, refer to the stroke selection table (**Web Catalog**).

Lock position

H	Head end lock
R	Rod end lock
W	Double end lock

Manual release

N	Non-locking type

Auto switch

Nil	Without auto switch

∗ **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDBG1FN32-100-RN

Mounting Bracket Part Nos. for the 25A- Series

∗ The rod end brackets are the same as those of the CG5-S series. Refer to the **Web Catalog** for details.

Mounting bracket	Min. order	Bore size [mm]						Description
		20	**25**	**32**	**40**	**50**	**63**	
Foot	2∗1	90-CG-L020	90-CG-L025	90-CG-L032	90-CG-L040	90-CG-L050	25-CG-L063	Foot x 2, Mounting bolt x 8
Flange	1	90-CG-F020	90-CG-F025	90-CG-F032	90-CG-F040	90-CG-F050	25-CG-F063	Flange x 1, Mounting bolt x 4
Trunnion pin	1	25-CG-T020	25-CG-T025	25-CG-T032	25-CG-T040	25-CG-T050	25-CG-T063	Trunnion pin x 2, Trunnion bolt x 2, Flat washer x 2
Clevis	1	25-CG-D020	25-CG-D025	25-CG-D032	25-CG-D040	25-CG-D050	25-CG-D063	Clevis x 1, Mounting bolt x 4, Clevis pin x 1, Retaining ring x 2
Pivot bracket	1	25-CG-020-24A	25-CG-025-24A	25-CG-032-24A	25-CG-040-24A	25-CG-050-24A	25-CG-063-24A	Pivot bracket x 1

∗1 Order two foot brackets per cylinder. ∗ The 25A- series specifications and dimensions (excluding the cap) are the same as those of the standard model.

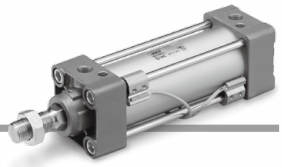
For details, refer to the Web Catalog.

Air Cylinder: Single Rod

25A-MB Series

ø32, ø40, ø50, ø63, ø80, ø100

RoHS



How to Order

25A – M D B L 32 ☐ – 50 Z – M9BW ☐

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Basic
L	Axial foot
F	Rod flange
G	Head flange
C	Single clevis
D	Double clevis
T	Center trunnion

Bore size

32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

Port thread type

Nil	Rc
TN	NPT
TF	G

Cylinder stroke [mm]

Bore [mm]	Standard stroke [mm]
32	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500
40	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500
50	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600
63	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600
80	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800
100	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800

* Intermediate strokes are available. (No spacer is used.)

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
3	3
n	n

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-MDBB40-100Z

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	32	40	50	63	80	100
Foot*1	25-MB-L03	25-MB-L04	25-MB-L05	25-MB-L06	25-MB-L08	25-MB-L10
Flange	MB-F03-XC7	MB-F04-XC7	MB-F05-XC7	MB-F06-XC7	MB-F08-XC7	MB-F10-XC7
Single clevis	25-MB-C03	25-MB-C04	25-MB-C05	25-MB-C06	25-MB-C08	25-MB-C10
Double clevis	25-MB-D03	25-MB-D04	25-MB-D05	25-MB-D06	25-MB-D08	25-MB-D10
Single knuckle joint	25A-I-03M	25A-I-04M	25A-I-05M	25A-I-05M	25A-I-08M	25A-I-10M
Double knuckle joint	25A-Y-03M	25A-Y-04M	25A-Y-05M	25A-Y-05M	25A-Y-08M	25A-Y-10M
Double clevis pin Double knuckle joint pin	25-CD-M03	25-CD-M03	25-CD-M05	25-CD-M05	25-CD-M08	25-CD-M08
Rod end nut	NT-03SUS	NT-04SUS	NT-05SUS	NT-05SUS	NT-08SUS	NT-10SUS
Trunnion pivot bracket	25A-MB-S03	25A-MB-S04	25A-MB-S04	25A-MB-S06	25A-MB-S06	25A-MB-S10
Double clevis bracket	25A-MB-B03	25A-MB-B03	25A-MB-B05	25A-MB-B05	25A-MB-B08	25A-MB-B08

*1 Two foot brackets required for one cylinder.
* Accessories for each mounting bracket are as follows.
Foot, Flange, Single clevis: Body mounting bolt
Double clevis: Body mounting bolt, Pin, Flat washers and Split pins
Double knuckle joint: Pin, Flat washers and Split pins
Double clevis pin, Double knuckle joint pin: Flat washers and Split pins

Air Cylinder: Standard Type
Double Acting, Single Rod
25A-CA2 Series
ø40, ø50, ø63, ø80, ø100

RoHS



How to Order

25A- C D A2 L 50 [ ] - 100 Z - M9BW [ ]

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Basic
L	Axial foot
F	Rod flange
G	Head flange
C	Single clevis
D	Double clevis
T	Center trunnion

Bore size

40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

Port thread type

Nil	Rc
TN	NPT
TF	G

Cylinder stroke [mm]

40	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500
50, 63	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 500, 600
80, 100	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700

* Intermediate strokes not listed above are produced upon receipt of order.

Auto switch

Nil	Without auto switch

* **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
3	3
n	n

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch
(Example) 25A-CDA2L40-100Z

* The 25A- series specifications and dimensions are the same as those of the standard model.

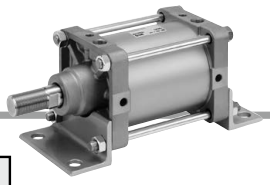
For details, refer to the Web Catalog.

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	40	50	63	80	100
Axial foot*1	90-CA2-L04	90-CA2-L05	90-CA2-L06	90-CA2-L08	90-CA2-L10
Flange	25A-CA2-F04	25A-CA2-F05	25A-CA2-F06	25A-CA2-F08	25A-CA2-F10
Single clevis	25A-CA2-C04	25A-CA2-C05	25A-CA2-C06	25A-CA2-C08	25A-CA2-C10
Double clevis	25A-CA2-D04	25A-CA2-D05	25A-CA2-D06	25A-CA2-D08	25A-CA2-D10
Single knuckle joint	I-04A	I-05A	I-05A	I-08A	I-10A
Double knuckle joint	25A-Y-04D	25A-Y-05D	25A-Y-05D	25A-Y-08D	25A-Y-10D
Clevis pin	25A-CDP-2A	25A-CDP-3A	25A-CDP-4A	25A-CDP-6A	25A-CDP-7A
Knuckle pin	25A-CDP-3A	25A-CDP-3A	25A-CDP-3A	25A-CDP-5A	25A-CDP-6A
Rod end nut	NT-04SUS	NT-05SUS	NT-05SUS	NT-08SUS	NT-10SUS
Trunnion pivot bracket	25A-CA2-S04	25A-CA2-S04	25A-CA2-S06	25A-MB-S10	25A-MB-S10
Double clevis bracket	25A-CA2-B04	25A-CA2-B05	25A-CA2-B06	25A-CA2-B08	25A-CA2-B10

*1 When axial foot brackets are used, two pieces should be ordered for each cylinder.
* Accessories for each mounting bracket are as follows.
Axial foot, Flange, Single clevis: Hexagon nut, Spring washer
Double clevis: Hexagon nut, Spring washer, Pin, Flat washers and Split pins
Double knuckle joint: Pin, Flat washers and Split pins
Clevis pin, Knuckle pin: Flat washers and Split pins

Air Cylinder: Standard Type
Double Acting, Single Rod
25A-CS2 Series RoHS
ø125, ø140, ø160, ø180, ø200, ø250



How to Order

25A- C D S2 L 125 [ ] -300- M9BW [ ]

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Basic
L	Foot
F	Rod flange
G	Head flange
C	Single clevis
D	Double clevis
T	Center trunnion

Bore size

125	125 mm
140	140 mm
160	160 mm
180	180 mm
200	200 mm
250	250 mm

Port thread type

Nil	Rc
TN	NPT
TF	G

Number of auto switches

Nil	2
3	3
S	1
n	n

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Cylinder stroke [mm]

Mounting bracket / Bore size	Maximum stroke	
	Basic, Head flange, Single clevis,Double clevis, Center trunnion	Foot, Rod flange
125	1000 or less	1600 or less
140		
160	1200 or less	
180		1569 or less
200	998 or less	
250	813 or less	

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without auto switch is required, there is no need to enter the symbol for auto switch.
(Example) 25A-CDS2B125-100

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	125	140	160	180	200	250
Axial foot*1	CS2-L12	CS2-L14	CS2-L16	CS2-L18	CS2-L20	CS2-L25
Flange	CS2-F12	CS2-F14	CS2-F16	CS2-F18	CS2-F20	CS2-F25
Single clevis	CS2-C12	CS2-C14	CS2-C16	CS2-C18	CS2-C20	CS2-C25
Double clevis*2	25A-CS2-D12	25A-CS2-D14	25A-CS2-D16	25A-CS2-D18	25A-CS2-D20	25A-CS2-D25

*1 Order two foot brackets per cylinder.
*2 A clevis pin and split pins are shipped together with double clevis.

Cylinder with Lock
Double Acting, Single Rod
25A-MWB Series
ø32, ø40, ø50, ø63, ø80, ø100

RoHS



How to Order

With auto switch **25A-M D WB B 40 □ - 50 - M9BW □**

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Number of auto switches

Nil	2
S	1
3	3
n	n

Mounting

B	Basic
L	Axial foot
F	Rod flange
G	Head flange
C	Single clevis
D	Double clevis
T	Center trunnion

* Mounting brackets other than center trunnion type are shipped together.

Bore size

32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Port thread type

Nil	Rc
TN	NPT
TF	G

Cylinder stroke [mm]

Bore size	Standard stroke	
	Stroke range ①	Stroke range ②
32	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500	Up to 1000
40	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500	Up to 1800
50	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600	
63	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600	
80	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800	
100	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800	

* The manufacturing of intermediate strokes is possible. (Spacers are not used.)

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	32	40	50	63	80	100
Foot*1	25-MB-L03	25-MB-L04	25-MB-L05	25A-MWB-L06	25-MB-L08	25-MB-L10
Flange	25A-MWB-F03	25A-MWB-F04	25A-MWB-F05	25A-MWB-F06	MB-F08-XC7	MB-F10-XC7
Single clevis	25-MB-C03	25-MB-C04	25-MB-C05	25-MB-C06	25-MB-C08	25-MB-C10
Double clevis	25-MB-D03	25-MB-D04	25-MB-D05	25-MB-D06	25-MB-D08	25-MB-D10
Single knuckle joint	25A-I-03M	25A-I-04M	25A-I-05M	25A-I-05M	25A-I-08M	25A-I-10M
Double knuckle joint	25A-Y-03M	25A-Y-04M	25A-Y-05M	25A-Y-05M	25A-Y-08M	25A-Y-10M
Double clevis pin Double knuckle joint pin	25-CD-M03	25-CD-M03	25-CD-M05	25-CD-M05	25-CD-M08	25-CD-M08
Rod end nut	NT-03SUS	NT-04SUS	NT-05SUS	NT-05SUS	NT-08SUS	NT-10SUS
Trunnion pivot bracket	25A-MB-S03	25A-MB-S04	25A-MB-S04	25A-MB-S06	25A-MB-S06	25A-MB-S10
Double clevis bracket	25A-MB-B03	25A-MB-B03	25A-MB-B05	25A-MB-B05	25A-MB-B08	25A-MB-B08

*1 Two foot brackets required for one cylinder.

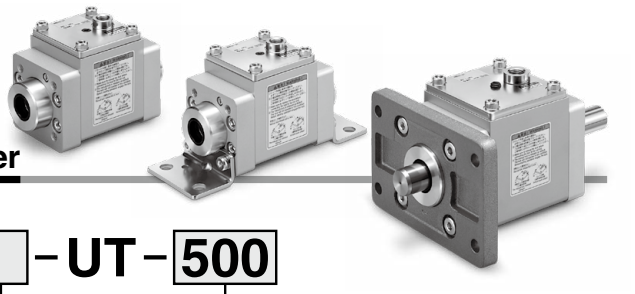
* Accessories for each mounting bracket are as follows.
Foot, Flange, Single clevis: Body mounting bolt
Double clevis: Body mounting bolt, Pin, Flat washers and Split pins
Double knuckle joint: Pin, Flat washers and Split pins
Double clevis pin, Double knuckle joint pin: Flat washers and Split pins

Lock Unit

RoHS

25A-MWB-UT Series

32, 40, 50, 63, 80, 100



How to Order

25A – MWB [B] [40] [ ] – UT – [500]

Series compatible with secondary batteries

Mounting

B	Basic
L	Axial foot
F	Flange

∗ Mounting bracket is shipped together with the product.

Model

Model	Applicable rod size
32	12 mm
40	16 mm
50	20 mm
63	20 mm
80	25 mm
100	30 mm

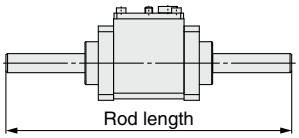
Port thread type

Nil	Rc
TN	NPT
TF	G

Rod length [mm]

Nil		Without accessory rod	
Min. length	Max. length	Applicable model	Note
250	2500	**32**	Can be manufactured in increments of 1 mm up to the maximum length.
		40	
		50	
300		**63**	
		80	
		100	

∗ The rod length indicates the overall length of the rod.



∗ Rod is shipped together with the product.

∗ This product uses lithium-based grease (standard grease).

Mounting Brackets/Part Nos.

Bore size [mm]	32	40	50	63	80	100
Foot	25-MB-L03	25-MB-L04	25-MB-L05	25A-MWB-L06	25-MB-L08	25-MB-L10
Flange	25A-MWB-F03	25A-MWB-F04	25A-MWB-F05	25A-MWB-F06	MB-F08-XC7	MB-F10-XC7

∗ Order two foot brackets per lock unit.
∗ Accessories for each mounting bracket are as follows.
Foot, Flange: Body mounting bolt

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Cylinder with Lock
Double Acting, Single Rod
25A-CNS Series
ø125, ø140, ø160

RoHS



How to Order

25A- C D NS L 125 □ -300- D -M9BW □

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Basic
L	Foot
F	Rod flange
G	Head flange
C	Single clevis
D	Double clevis
T	Center trunnion

Mounting brackets are assembled before shipping.

Bore size

125	125 mm
140	140 mm
160	160 mm

Port thread type

Nil	Rc
TN	NPT
TF	G

Cylinder stroke [mm]

Bore size (mm)	Basic type, Head side flange type, Single clevis type, Double clevis type, Center trunnion type	Foot type, Rod side flange type
125, 140	Up to 1000	Up to 1400
160	Up to 1200	Up to 1400

Locking direction

D	Both directions

Auto switch

Nil	Without auto switch

* Refer to page 256 for applicable auto switch models.

Number of auto switches

Nil	2
3	3
S	1
n	n

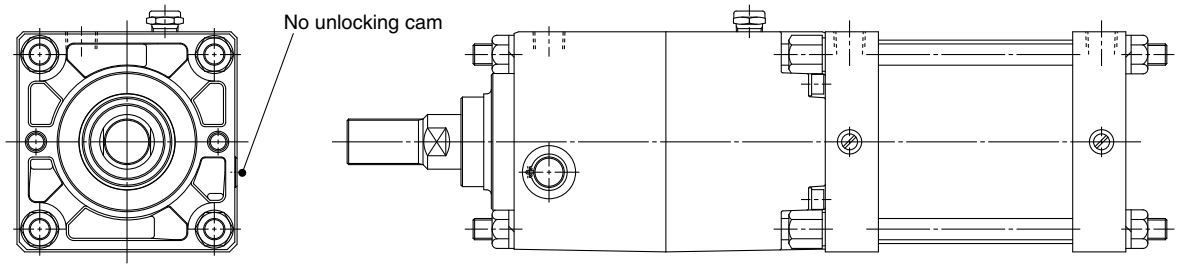
Built-in Magnet Cylinder Model

If a built-in magnet cylinder without auto switch is required, there is no need to enter the symbol for auto switch.
(Example) 25A-CDNSL140-100-D

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

⚠There is no built-in unlocking cam.



Compact Cylinder with Lock
Double Acting, Single Rod
25A-CLQ Series
ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100



How to Order

25A – C D LQ B 40 ☐ – 30 D ☐ – F – M9BW ☐

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting type

ø20, ø25		ø32 to ø100	
B	Through-hole/ Both ends tapped common (Standard)	B	Through-hole (Standard)
L	Foot type	A	Both ends tapped type
F	Rod side flange type	L	Foot type
G	Head side flange type	F	Rod side flange type
D	Double clevis type	G	Head side flange type
		D	Double clevis type

* Mounting brackets are shipped together (but not assembled).
* Cylinder mounting bolts are not included.

Bore size

20	20 mm	50	50 mm
25	25 mm	63	63 mm
32	32 mm	80	80 mm
40	40 mm	100	100 mm

Port thread type

Nil	Rc, M (ø20, ø25)
TN	NPT
TF	G

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Locking direction

F	Extension locking
B	Retraction locking

Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

Body option

Nil	Standard (Rod end female thread)
C	With rubber bumper
M	Rod end male thread
CM	With rubber bumper, Rod end male thread

Action

D	Double acting

Cylinder stroke [mm]

Bore size [mm]	Standard stroke [mm]
20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
32, 40, 50, 63, 80, 100	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100

Manufacture of Intermediate Stroke

Description	Spacer is installed in the standard stroke body.	
Part no.	Refer to "How to Order" for the standard model no. shown above.	
Method	Dealing with the stroke in 1 mm increments is available by installing spacer with standard stroke cylinder.	
Stroke range	Bore size [mm]	Stroke range [mm]
	20, 25	1 to 50
	32, 40, 50, 63, 80, 100	1 to 100
Example	Part no.: CLQB40-47D-B 3 mm spacer is installed in standard cylinder CLQB40-50D-B. B dimension is 79.5 mm.	

* ø40 to ø100 bumper spacers with intermediate strokes can be manufactured in 5 mm increments from 55 to 95 mm.

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDLQL32-30D-B

* This product uses lithium-based grease (standard grease).

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot	Flange	Double clevis
20	25A-CLQ-L020	25A-CLQ-F020	25A-CLQ-D020
25	25A-CLQ-L025	25A-CLQ-F025	25A-CLQ-D025
32	25A-CLQ-L032	25A-CLQ-F032	25A-CLQ-D032
40	25A-CLQ-L040	25A-CLQ-F040	25A-CLQ-D040
50	25A-CLQ-L050	25A-CLQ-F050	25A-CLQ-D050
63	25A-CLQ-L063	25A-CLQ-F063	25A-CLQ-D063
80	25A-CLQ-L080	25A-CLQ-F080	25A-CLQ-D080
100	25A-CLQ-L100	25A-CLQ-F100	25A-CLQ-D100

* When ordering foot bracket, order 2 pieces per cylinder.
* Parts belonging to each bracket are as follows. Foot, Flange: Body mounting screws, Double clevis: Clevis pin, type C retaining ring for shaft, Body mounting screws, Flat washer.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mini Free Mount Cylinder

25A-CUJ Series

ø6, ø8, ø10

RoHS

How to Order



	25A		CUJ	B	6	–	10	D				
With auto switch	25A	–	CDUJ	B	6	–	10	D		–	F8N	

Series compatible with secondary batteries

With auto switch (Built-in magnet)

Mounting

B	Basic (Through-hole)

Bore size

6	6 mm
8	8 mm
10	10 mm

Standard stroke [mm]

Bore size	Standard stroke
6, 8, 10	4, 6, 8, 10, 15, 20 25, 30

Action

D	Double acting

Rod end thread

Nil	Rod end female thread
M	Rod end male thread

Auto switch

Nil	Without auto switch

∗ Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1

∗ M9□: With 1 pc.

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDUJB8-15DM

∗ The 25A- series specifications are the same as those of the standard model.

For details, refer to the Web Catalog.

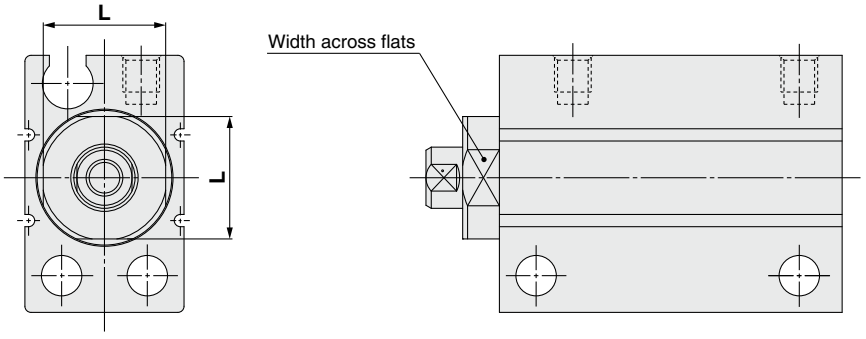
Dimensions (Dimensions other than those shown below are the same as the standard model.) **For details, refer to the Web Catalog.**

25A-C□UJB 6 / 8 / 10

∗ The position of the width across flats may not be parallel to the cylinder tube

[mm]

Bore size	L dimension
6	8
8	10
10	11



Mini Free Mount Cylinder

25A-CUJ Series

ø12, ø16, ø20

RoHS



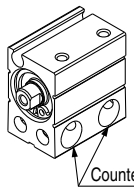
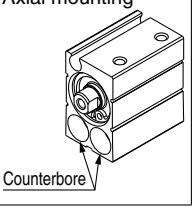
How to Order

	25A-		CUJ	B	12	-	30	D			
With auto switch	25A-	C	DUJ	B	12	-	30	D		- F8N	

Series compatible with secondary batteries

With auto switch (Built-in magnet)

Mounting direction

B	Lateral mounting 
S	Axial mounting 

Bore size

12	12 mm
16	16 mm
20	20 mm

Standard stroke [mm]

Bore size	Standard stroke
12, 16, 20	5, 10, 15, 20, 25 30, 35, 40, 45, 50

Action

D	Double acting

Rod end thread

Nil	Rod end female thread
M	Rod end male thread

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1

* M9□: With 1 pc.

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDUJB12-15DM

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Free Mount Cylinder
Double Acting, Single Rod
25A-CU Series
ø10, ø16, ø20, ø25, ø32

RoHS



How to Order

25A – C D U 16 – 30 D – M9BW

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Bore size

10	10 mm
16	16 mm
20	20 mm
25	25 mm
32	32 mm

Cylinder stroke [mm]

Bore size	Standard stroke	Long stroke
10, 16	5, 10, 15, 20, 25, 30	40, 50, 60
20, 25, 32	5, 10, 15, 20, 25, 30, 40, 50	60, 70, 80, 90, 100

Action

D	Double acting

Auto switch

Nil	Without auto switch

* **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1

Built-in Magnet Cylinder Model

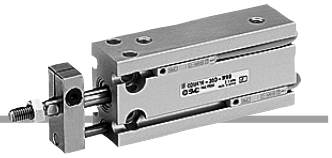
If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDU20-25D

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Free Mount Cylinder: Non-rotating Rod Type
Double Acting, Single Rod
25A-CUK Series
ø10, ø16, ø20, ø25, ø32

RoHS



How to Order

25A – C D UK 16 – 30 D – M9BW

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Non-rotating rod type

Bore size

10	10 mm
16	16 mm
20	20 mm
25	25 mm
32	32 mm

Cylinder stroke [mm]

Bore size	Standard stroke	Long stroke
10, 16	5, 10, 15, 20, 25, 30	40, 50, 60
20, 25, 32	5, 10, 15, 20, 25, 30, 40, 50	60, 70, 80, 90, 100

Action

D	Double acting

Auto switch

Nil	Without auto switch

* **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDUK20-25D

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Compact Cylinder: Standard Type
Double Acting, Single Rod
25A-CQS Series
ø12, ø16, ø20, ø25

RoHS



How to Order

25A- C D QS B 20 - 30 D - M9BW

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Through-hole/Both ends tapped common (Standard)
L	Foot
LC	Compact foot
F	Rod flange
G	Head flange
D	Double clevis

* In the case of long strokes, use either ends tapped mounting or bracket mounting.
* Mounting brackets are shipped together with the product but do not come assembled.
* Cylinder mounting bolts are not included.

Bore size

12	12 mm
16	16 mm
20	20 mm
25	25 mm

Action

D	Double acting

Cylinder stroke [mm]

Bore size	Standard stroke	Long stroke
12, 16	5, 10, 15, 20, 25, 30	35, 40, 45, 50, 75, 100, 125, 150, 175, 200
20	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	75, 100, 125, 150, 175, 200
25		75, 100, 125, 150, 175, 200, 250, 300

Body option

<Standard stroke>

Nil	Standard
C	With rubber bumper
M	Rod end male thread

* Combination of body options is available.

<Long stroke>

C	With rubber bumper Rod end female thread (Standard)
CM	With rubber bumper Rod end male thread

* Rubber bumper is standard equipment for long stroke type.

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDQSL25-30D

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Compact foot*1	Flange	Double clevis
12	25A-CQS-L012	25A-CQS-LC012	25A-CQS-F012	25-CQS-D012
16	25A-CQS-L016	25A-CQS-LC016	25A-CQS-F016	25-CQS-D016
20	25A-CQS-L020	25A-CQS-LC020	25A-CQS-F020	25-CQS-D020
25	25A-CQS-L025	25A-CQS-LC025	25A-CQS-F025	25-CQS-D025

*1 When ordering foot and compact foot brackets, order 2 pieces per cylinder.
* Parts included with each type of bracket are as follows.
Foot, Compact foot, Flange: Body mounting bolts
Double clevis type: Clevis pin, Type C retaining ring for axis, Body mounting bolt

Compact Cylinder: Standard Type Double Acting, Double Rod

RoHS

25A-CQSW Series

ø12, ø16, ø20, ø25



How to Order

25A – C D QSW B 20 – 30 D – M9BWL

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Through-hole/Both ends tapped common (Standard)
L	Foot
LC	Compact foot
F	Flange

* Mounting brackets are shipped together with the product but do not come assembled.
* Cylinder mounting bolts are not included.

Bore size

12	12 mm
16	16 mm
20	20 mm
25	25 mm

Cylinder stroke [mm]

Bore size	Standard stroke
12, 16	5, 10, 15, 20, 25, 30
20	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
25	

Action

D	Double acting

Cushion/Rod end thread

Nil	Standard
C	With rubber bumper
M	Rod end male thread

* Combination of body options is available.

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Compact foot*1	Flange
12	25A-CQS-L012	25A-CQS-LC012	25A-CQS-F012
16	25A-CQS-L016	25A-CQS-LC016	25A-CQS-F016
20	25A-CQS-L020	25A-CQS-LC020	25A-CQS-F020
25	25A-CQS-L025	25A-CQS-LC025	25A-CQS-F025

*1 When ordering foot and compact foot brackets, order 2 pieces per cylinder.
* Body mounting bolts are included for each bracket.

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDQSWL25-30D

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Compact Cylinder: Anti-lateral Load Type

25A-CQS□S Series

ø12, ø16, ø20, ø25

RoHS



How to Order

25A-C D QS B S 20 - 30 D C - M9BW

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Through-hole/Both ends tapped common (Standard)
L	Foot
LC	Compact foot
F	Rod flange
G	Head flange
D	Double clevis

* Mounting brackets are shipped together with the product but do not come assembled.
* Cylinder mounting bolts are not included.

Cushion

S	Anti-lateral load type

Bore size

12	12 mm
16	16 mm
20	20 mm
25	25 mm

Cylinder stroke [mm]

Bore size	Standard stroke
12, 16	5, 10, 15, 20, 25, 30
20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50

Body option

C	With rubber bumper Rod end female thread (Standard)
CM	With rubber bumper Rod end male thread

Action

D	Double acting

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDQSLS12-25DC
* With cushion only.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Compact foot*1	Flange	Double clevis
12	25A-CQS-L012	25A-CQS-LC012	25A-CQS-F012	25-CQS-D012
16	25A-CQS-L016	25A-CQS-LC016	25A-CQS-F016	25-CQS-D016
20	25A-CQS-L020	25A-CQS-LC020	25A-CQS-F020	25-CQS-D020
25	25A-CQS-L025	25A-CQS-LC025	25A-CQS-F025	25-CQS-D025

*1 When ordering foot and compact foot brackets, order 2 pieces per cylinder.
* Parts included with each type of bracket are as follows.
Foot, Compact foot, Flange: Body mounting bolts
Double clevis type: Clevis pin, Type C retaining ring for axis, Body mounting bolt

Compact Cylinder: Standard
Double Acting, Single Rod

RoHS

25A-CQ2 Series

ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100



How to Order

25A – C D Q2 B 20 ☐ – 30 D ☐ Z – M9BW ☐

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Through-hole (Standard)
A	Both ends tapped
L	Foot
LC	Compact foot
F	Rod flange
G	Head flange
D	Double clevis

* Mounting brackets are shipped together with the product but do not come assembled.
* Cylinder mounting bolts are not included.

Bore size

12	12 mm	**40**	40 mm
16	16 mm	**50**	50 mm
20	20 mm	**63**	63 mm
25	25 mm	**80**	80 mm
32	32 mm	**100**	100 mm

Port thread type

Nil	M thread	ø12 to ø25
	Rc	ø32 to ø100
TN	NPT	
TF	G	

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Auto switch mounting groove

Z	ø12 to ø25	2 surfaces
	ø32 to ø100	4 surfaces

* "Z" is not available for ø12 to ø25 without auto switches.

Body option

Nil	Standard (Rod end female thread)
C	With rubber bumper
M	Rod end male thread

* Combination of body options is available.

Action

D	Double acting

Cylinder stroke [mm]

12, 16	5, 10, 15, 20, 25, 30
20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100
50 to 100	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDQ2L32-25DZ

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]		Foot*1	Compact foot*1	Flange	Double clevis
12	Without auto switch	25A-CQ-L012	25A-CQ-LC012	25A-CQ-F012	25-CQ-D012
	With auto switch	25A-CQ-LZ12	25A-CQ-LCZ12		
16	Without auto switch	25A-CQ-L016	25A-CQ-LC016	25A-CQ-F016	25-CQ-D016
	With auto switch	25A-CQ-LZ16	25A-CQ-LCZ16		
20	Without auto switch	25A-CQ-L020	25A-CQ-LC020	25A-CQ-F020	25-CQ-D020
	With auto switch	25A-CQ-LZ20	25A-CQ-LCZ20		
25	Without auto switch	25A-CQ-L025	25A-CQ-LC025	25A-CQ-F025	25-CQ-D025
	With auto switch	25A-CQ-LZ25	25A-CQ-LCZ25		
32		25A-CQ-L032	25A-CQ-LC032	25A-CQ-F032	25-CQ-D032
40		25A-CQ-L040	25A-CQ-LC040	25A-CQ-F040	25-CQ-D040
50		25A-CQ-L050	25A-CQ-LC050	25A-CQ-F050	25-CQ-D050
63		25A-CQ-L063	25A-CQ-LC063	25A-CQ-F063	25-CQ-D063
80		25A-CQ-L080	25A-CQ-LC080	25A-CQ-F080	25-CQ-D080
100		25A-CQ-L100	25A-CQ-LC100	25A-CQ-F100	25-CQ-D100

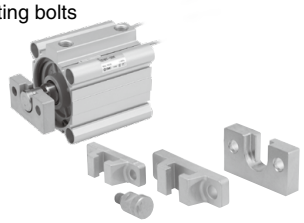
*1 When ordering foot and compact foot brackets, the required quantity will be different depending on the bore size.
ø12 to ø25:
• Without auto switch: Order 2 pieces per cylinder.
• With auto switch: Order 1 piece per cylinder. (Part number for a set of 2 foot brackets)
ø32 to ø100:
• Order 2 pieces per cylinder.

* Parts included with each type of bracket are as follows.
Foot, Compact foot, Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

Simple Joint (Standard)/ Part Nos.

Bore size [mm]	Joint	Type A mounting bracket	Type B mounting bracket
32, 40	YU-03	YA-03	YB-03
50, 63	YU-05	YA-05	YB-05
80	YU-08	YA-08	YB-08
100	YU-10	YA-10	YB-10

<Ordering>
• Joints are not included with type A or B mounting brackets. Order them separately.
(Example)
Bore size ø40 Part no.
• Type A mounting bracket ·····**YA-03**
• Joint·····**YU-03**



Compact Cylinder: Standard
Double Acting, Double Rod

RoHS

25A-CQ2W Series

ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100



How to Order

25A – C D Q2W B 20 [ ] – 30 D [ ] Z – M9BW [ ]

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

* Mounting brackets are shipped together with the product but do not come assembled.
* Cylinder mounting bolts are not included.

B	Through-hole (Standard)
A	Both ends tapped
L	Foot
LC	Compact foot
F	Flange

Bore size

12	12 mm	40	40 mm
16	16 mm	50	50 mm
20	20 mm	63	63 mm
25	25 mm	80	80 mm
32	32 mm	100	100 mm

Port thread type

Nil	M thread	ø12 to ø25
	Rc	ø32 to ø100
TN	NPT	
TF	G	

Cylinder stroke [mm]

12, 16	5, 10, 15, 20, 25, 30
20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100
50 to 100	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100

Action

D	Double acting

Body option

Nil	Standard (Rod end female thread)
C	With rubber bumper
M	Rod end male thread

* Combination of body options is available.

Auto switch mounting groove

Z	ø12 to ø25	2 surfaces
	ø32 to ø100	4 surfaces

* "Z" is not available for ø12 to ø25 without auto switches.

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]		Foot*1	Compact foot*1	Flange
12	Without auto switch	25A-CQ-L012	25A-CQ-LC012	25A-CQ-F012
	With auto switch	25A-CQ-LZ12	25A-CQ-LCZ12	
16	Without auto switch	25A-CQ-L016	25A-CQ-LC016	25A-CQ-F016
	With auto switch	25A-CQ-LZ16	25A-CQ-LCZ16	
20	Without auto switch	25A-CQ-L020	25A-CQ-LC020	25A-CQ-F020
	With auto switch	25A-CQ-LZ20	25A-CQ-LCZ20	
25	Without auto switch	25A-CQ-L025	25A-CQ-LC025	25A-CQ-F025
	With auto switch	25A-CQ-LZ25	25A-CQ-LCZ25	
32		25A-CQ-L032	25A-CQ-LC032	25A-CQ-F032
40		25A-CQ-L040	25A-CQ-LC040	25A-CQ-F040
50		25A-CQ-L050	25A-CQ-LC050	25A-CQ-F050
63		25A-CQ-L063	25A-CQ-LC063	25A-CQ-F063
80		25A-CQ-L080	25A-CQ-LC080	25A-CQ-F080
100		25A-CQ-L100	25A-CQ-LC100	25A-CQ-F100

*1 When ordering foot and compact foot brackets, the required quantity will be different depending on the bore size.
ø12 to ø25:
· Without auto switch: Order 2 pieces per cylinder.
· With auto switch: Order 1 piece per cylinder. (Part number for a set of 2 foot brackets)
ø32 to ø100:
· Order 2 pieces per cylinder.

* Body mounting bolts are included for each bracket.

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDQ2WL32-25DZ

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Simple Joint (Standard)/Part Nos.

Bore size [mm]	Joint	Type A mounting bracket	Type B mounting bracket
32, 40	YU-03	YA-03	YB-03
50, 63	YU-05	YA-05	YB-05
80	YU-08	YA-08	YB-08
100	YU-10	YA-10	YB-10

<Ordering>
Joints are not included with type A or B mounting brackets. Order them separately.
(Example)
Bore size ø40 Part no.
Type A mounting bracket ····· **YA-03**
Joint ····· **YU-03**

Compact Cylinder: Large Bore Size
Double Acting, Single Rod
25A-CQ2 Series
ø125, ø140, ø160, ø180, ø200

RoHS



How to Order

25A- C D Q2B 125 [ ] -30 DC [ ] Z -M9BW [ ]

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Through-hole/ Both ends tapped common (Standard)

* Cylinder mounting bolts are not included.

Bore size

125	125 mm
140	140 mm
160	160 mm
180	180 mm
200	200 mm

Port thread type

Nil	Rc
TN	NPT
TF	G

Cylinder stroke [mm]

Bore size	Standard stroke
125, 140, 160 180, 200	10, 20, 30, 40, 50, 75, 100, 125, 150, 175, 200, 250, 300

Action

D	Double acting

Cushion

C	Rubber bumper

Body option

Nil	Standard (Rod end female thread)
M	Rod end male thread

Auto switch mounting groove

Z	4 surfaces

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDQ2B140-30DCZ

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Compact Cylinder: Long Stroke
Double Acting, Single Rod

RoHS

25A-CQ2 Series
ø32, ø40, ø50, ø63, ø80, ø100



How to Order

25A- C D Q2 A 32 [ ] - 200 DC [ ] Z - M9BW [ ]

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

A	Both ends tapped
L	Foot
LC	Compact foot
F	Rod flange
G	Head flange
D	Double clevis

* Mounting brackets are shipped together with the product but do not come assembled.

Bore size

32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

Port thread type

Nil	Rc
TN	NPT
TF	G

Cylinder stroke [mm]

Bore size	Standard stroke
32, 40, 50 63, 80, 100	125, 150, 175, 200, 250, 300

Action

D	Double acting

Cushion

C	Rubber bumper

Body option

Nil	Standard (Rod end female thread)
M	Rod end male thread

Auto switch mounting groove

Z	4 surfaces

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDQ2L40-200DCZ

Simple Joint (Standard)/Part Nos.

Bore size [mm]	Joint	Type A mounting bracket	Type B mounting bracket
32, 40	YU-03	YA-03	YB-03
50, 63	YU-05	YA-05	YB-05
80	YU-08	YA-08	YB-08
100	YU-10	YA-10	YB-10

<Ordering>
• Joints are not included with type A or B mounting brackets. Order them separately.
(Example)
Bore size ø40 Part no.
• Type A mounting bracket·····**YA-03**
• Joint·····**YU-03**

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Compact foot*1	Flange	Double clevis
32	25A-CQ-L032	25A-CQ-LC032	25A-CQ-F032	25-CQ-D032
40	25A-CQ-L040	25A-CQ-LC040	25A-CQ-F040	25-CQ-D040
50	25A-CQ-L050	25A-CQ-LC050	25A-CQ-F050	25-CQ-D050
63	25A-CQ-L063	25A-CQ-LC063	25A-CQ-F063	25-CQ-D063
80	25A-CQ-L080	25A-CQ-LC080	25A-CQ-F080	25-CQ-D080
100	25A-CQ-L100	25A-CQ-LC100	25A-CQ-F100	25-CQ-D100

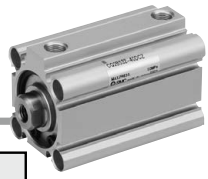
*1 Order 2 pieces per cylinder.
* Parts included with each type of bracket are as follows.
Foot, Compact foot, Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

Compact Cylinder: Anti-lateral Load

25A-CQ2□S Series

ø32, ø40, ø50, ø63, ø80, ø100

RoHS



How to Order

25A- C D Q2 B S 32 □ -30 D C □ Z- M9BW □

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Through-hole (Standard)
A	Both ends tapped
L	Foot
LC	Compact foot
F	Rod flange
G	Head flange
D	Double clevis

* Mounting brackets are shipped together with the product but do not come assembled.
* Cylinder mounting bolts are not included.

Type

S	Anti-lateral load

Bore size

32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

Port thread type

Nil	Rc
TN	NPT
TF	G

Cylinder stroke [mm]

Bore size	Standard stroke
32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100
50, 63, 80, 100	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100

Action

D	Double acting

Cushion

C	Rubber bumper

Body option

Nil	Standard (Rod end female thread)
M	Rod end male thread

Auto switch mounting groove

Z	4 surfaces

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDQ2LS40-30DCZ

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Compact foot*1	Flange	Double clevis
32	25A-CQ-L032	25A-CQ-LC032	25A-CQ-F032	25-CQ-D032
40	25A-CQ-L040	25A-CQ-LC040	25A-CQ-F040	25-CQ-D040
50	25A-CQ-L050	25A-CQ-LC050	25A-CQ-F050	25-CQ-D050
63	25A-CQ-L063	25A-CQ-LC063	25A-CQ-F063	25-CQ-D063
80	25A-CQ-L080	25A-CQ-LC080	25A-CQ-F080	25-CQ-D080
100	25A-CQ-L100	25A-CQ-LC100	25A-CQ-F100	25-CQ-D100

*1 Order 2 pieces per cylinder.
* Parts included with each type of bracket are as follows.
Foot, Compact foot, Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

Compact Cylinder: With End Lock

25A-CBQ2 Series

ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100

RoHS



How to Order

25A – C D BQ2 B 40 ☐ – 30 D C ☐ – H N – M9BW ☐

Series compatible with secondary batteries

With auto switch (Built-in magnet)

Mounting

ø20, ø25		ø32 to ø100	
B	Through-hole/Both ends tapped common (Standard)	**B**	Through-hole (Standard)*1
L	Foot	**A**	Both ends tapped
LC	Compact foot	**L**	Foot
F	Rod flange	**LC**	Compact foot
G	Head flange	**F**	Rod flange
D	Double clevis	**G**	Head flange
		D	Double clevis

*1 At the 75 and 100 mm strokes with ø80, ø100, both ends tapped (A) is the standard. Through-hole (B) is not available.

* Mounting brackets are shipped together with the product but do not come assembled.

Bore size

20	20 mm	**50**	50 mm
25	25 mm	**63**	63 mm
32	32 mm	**80**	80 mm
40	40 mm	**100**	100 mm

Port thread type

Nil	M thread	ø20, ø25
	Rc	ø32 to ø100
TN	NPT	
TF	G	

Cylinder stroke [mm]

Bore size	Standard stroke
20, 25, 32, 40, 50, 63	10, 15, 20, 25, 50, 75, 100
80, 100	25, 50, 75, 100

Action

D	Double acting

Cushion

C	Rubber bumper

Body option

Nil	Rod end female thread
M	Rod end male thread

Lock position

H	Head end lock
R	Rod end lock

Manual release type

N	Non-lock type

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDBQ2L32-30DC-RN

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Compact foot*1	Flange	Double clevis
20	25A-CQS-L020	25A-CQS-LC020	25A-CQS-F020	25-CQS-D020
25	25A-CQS-L025	25A-CQS-LC025	25A-CQS-F025	25-CQS-D025
32	25A-CQ-L032	25A-CQ-LC032	25A-CQ-F032	25-CQ-D032
40	25A-CQ-L040	25A-CQ-LC040	25A-CQ-F040	25-CQ-D040
50	25A-CQ-L050	25A-CQ-LC050	25A-CQ-F050	25-CQ-D050
63	25A-CQ-L063	25A-CQ-LC063	25A-CQ-F063	25-CQ-D063
80	25A-CQ-L080	25A-CQ-LC080	25A-CQ-F080	25-CQ-D080
100	25A-CQ-L100	25A-CQ-LC100	25A-CQ-F100	25-CQ-D100

*1 Order 2 pieces per cylinder.

* Parts included with each type of bracket are as follows: Foot, Compact foot, Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

Plate Cylinder: Double Acting, Single Rod

25A-MU Series

ø25, ø32, ø40, ø50, ø63

RoHS



How to Order

25A-M D UB 25 □ -30 D M Z-M9BW S

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Basic

Size

25	Equiv. ø25 piston area
32	Equiv. ø32 piston area
40	Equiv. ø40 piston area
50	Equiv. ø50 piston area
63	Equiv. ø63 piston area

Port thread type

Nil	M thread	ø25
	Rc	ø32, ø40 ø50, ø63
TN	NPT	
TF	G	

Cylinder stroke [mm]

Size	Standard stroke
25, 32, 40 50, 63	5, 10, 15, 20, 25, 30, 35, 40, 45, 50 75, 100, 125, 150, 175, 200, 250, 300

Action

D	Double acting

Rod end configuration

Nil	Rod end female thread
M	Rod end male thread

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-MDUB32-30DZ

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mechanically Jointed Rodless Cylinder
Basic Type
25A-MY1B Series
ø16, ø20, ø25, ø32, ø40, ø50, ø63

RoHS



How to Order

ø16, ø20, ø50, ø63: **25A-MY1B 20 □ □ -300 □ -M9BW □**

ø25, ø32, ø40: **25A-MY1B 25 □ □ -300 □ Z-M9BW □**

- **Series compatible with secondary batteries**: 25A
- **Basic type**: MY1B
- **Bore size**

16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm

- **Port thread type**

Symbol	Type	Bore size
Nil	M5	ø16, ø20
	Rc	ø25, ø32, ø40 ø50, ø63
TN	NPT	
TF	G	

- **Piping**

Nil	Standard type
G	Centralized piping type

- **Cylinder stroke [mm]**

Bore size	Standard stroke*	Long stroke	Maximum manufacturable stroke
16	100, 200, 300, 400, 500, 600 700, 800, 900, 1000, 1200 1400, 1600, 1800, 2000	Strokes of 2001 to 3000 mm (1 mm increments) exceeding the standard stroke	3000
20, 25, 32 40, 50, 63	* The stroke can be manufactured in 1 mm increments from 1 mm stroke.	Strokes of 2001 to 5000 mm (1 mm increments) exceeding the standard stroke	5000

Ordering example
* Long stroke can be ordered the same as the standard stroke. 25A-MY1B20-3000L-M9BW
* Please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.

- **Number of auto switches**

Nil	2
S	1
n	n

- **Auto switch**

Nil	Without auto switch (Built-in magnet)

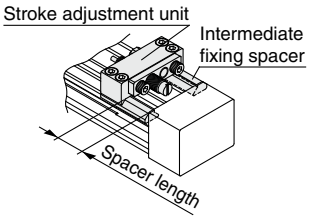
* Applicable auto switches vary depending on the bore size.
* Click here for details on applicable auto switch models.

For ø16 to ø40 — **Stroke adjustment unit symbol**

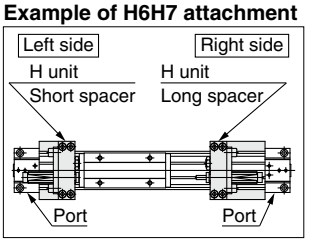
Left side stroke adjustment unit	Right side stroke adjustment unit: Without unit	A: With adjustment bolt	A: With short spacer	A: With long spacer	L: With low load shock absorber + Adjustment bolt	L: With short spacer	L: With long spacer	H: With high load shock absorber + Adjustment bolt	H: With short spacer	H: With long spacer
Without unit	Nil	SA	SA6	SA7	SL	SL6	SL7	SH	SH6	SH7
A: With adjustment bolt	AS	A	AA6	AA7	AL	AL6	AL7	AH	AH6	AH7
A: With adjustment bolt, With short spacer	A6S	A6A	A6	A6A7	A6L	A6L6	A6L7	A6H	A6H6	A6H7
A: With adjustment bolt, With long spacer	A7S	A7A	A7A6	A7	A7L	A7L6	A7L7	A7H	A7H6	A7H7
L: With low load shock absorber + Adjustment bolt	LS	LA	LA6	LA7	L	LL6	LL7	LH	LH6	LH7
L: With low load shock absorber + Adjustment bolt, With short spacer	L6S	L6A	L6A6	L6A7	L6L	L6	L6L7	L6H	L6H6	L6H7
L: With low load shock absorber + Adjustment bolt, With long spacer	L7S	L7A	L7A6	L7A7	L7L	L7L6	L7	L7H	L7H6	L7H7
H: With high load shock absorber + Adjustment bolt	HS	HA	HA6	HA7	HL	HL6	HL7	H	HH6	HH7
H: With high load shock absorber + Adjustment bolt, With short spacer	H6S	H6A	H6A6	H6A7	H6L	H6L6	H6L7	H6H	H6	H6H7
H: With high load shock absorber + Adjustment bolt, With long spacer	H7S	H7A	H7A6	H7A7	H7L	H7L6	H7L7	H7H	H7H6	H7

* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.
* The 25A-MY1B50 and 63 are not available with the stroke adjustment unit.
* The stroke adjustment unit H unit is not available for the 25A-MY1B16.

Stroke adjustment unit mounting diagram



Example of H6H7 attachment



* The 25A- series specifications and dimensions are the same as those of the standard model. **For details, refer to the Web Catalog.**

Mechanically Jointed Rodless Cylinder
Slide Bearing Guide Type
25A-MY1M Series
ø16, ø20, ø25, ø32, ø40, ø50, ø63

RoHS



How to Order

25A – MY1M 20 ☐ G – 300 ☐ – M9BW ☐

Series compatible with secondary batteries

Slide bearing guide type

Bore size

16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm

Port thread type

Symbol	Type	Bore size
Nil	M thread	ø16, ø20
	Rc	ø25, ø32,
TN	NPT	ø40, ø50,
TF	G	ø63

Piping

Nil	Standard type
G	Centralized piping type

Cylinder stroke [mm]

Bore size	Standard stroke*	Long stroke	Maximum manufacturable stroke
16	100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1200, 1400 1600, 1800, 2000 * The stroke can be manufactured in 1 mm increments from 1 mm stroke.	Strokes of 2001 to 3000 mm (1 mm increments) exceeding the standard stroke	3000
20, 25 32, 40 50, 63		Strokes of 2001 to 5000 mm (1 mm increments) exceeding the standard stroke	5000

Ordering example
* Long stroke can be ordered the same as the standard stroke.
  25A-MY1M20-3000L-M9BW
* Please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.

Auto switch

Nil	Without auto switch (Built-in magnet)

* **Click here** for details on applicable auto switch models.

Number of auto switches

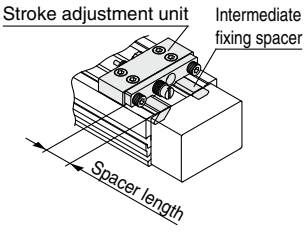
Nil	2
S	1
n	n

Stroke adjustment unit symbol

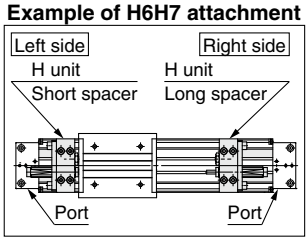
Left side stroke adjustment unit		Right side stroke adjustment unit: Without unit	A: With adjustment bolt			L: With low load shock absorber + Adjustment bolt			H: With high load shock absorber + Adjustment bolt		
				With short spacer	With long spacer		With short spacer	With long spacer		With short spacer	With long spacer
Without unit		**Nil**	**SA**	**SA6**	**SA7**	**SL**	**SL6**	**SL7**	**SH**	**SH6**	**SH7**
A: With adjustment bolt		**AS**	**A**	**AA6**	**AA7**	**AL**	**AL6**	**AL7**	**AH**	**AH6**	**AH7**
	With short spacer	**A6S**	**A6A**	**A6**	**A6A7**	**A6L**	**A6L6**	**A6L7**	**A6H**	**A6H6**	**A6H7**
	With long spacer	**A7S**	**A7A**	**A7A6**	**A7**	**A7L**	**A7L6**	**A7L7**	**A7H**	**A7H6**	**A7H7**
L: With low load shock absorber + Adjustment bolt		**LS**	**LA**	**LA6**	**LA7**	**L**	**LL6**	**LL7**	**LH**	**LH6**	**LH7**
	With short spacer	**L6S**	**L6A**	**L6A6**	**L6A7**	**L6L**	**L6**	**L6L7**	**L6H**	**L6H6**	**L6H7**
	With long spacer	**L7S**	**L7A**	**L7A6**	**L7A7**	**L7L**	**L7L6**	**L7**	**L7H**	**L7H6**	**L7H7**
H: With high load shock absorber + Adjustment bolt		**HS**	**HA**	**HA6**	**HA7**	**HL**	**HL6**	**HL7**	**H**	**HH6**	**HH7**
	With short spacer	**H6S**	**H6A**	**H6A6**	**H6A7**	**H6L**	**H6L6**	**H6L7**	**H6H**	**H6**	**H6H7**
	With long spacer	**H7S**	**H7A**	**H7A6**	**H7A7**	**H7L**	**H7L6**	**H7L7**	**H7H**	**H7H6**	**H7**

* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.
* Stroke adjustment unit H is not available for 25A-MY1M16.

Stroke adjustment unit mounting diagram



Example of H6H7 attachment



* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

SMC

Mechanically Jointed Rodless Cylinder
Cam Follower Guide Type
25A-MY1C Series
ø16, ø20, ø25, ø32, ø40, ø50, ø63

RoHS



How to Order

25A-MY1C 25 □ □ - 300 □ - M9BW □ - □

Series compatible with secondary batteries

Cam follower guide type

Bore size

16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm

Port thread type

Symbol	Type	Bore size
Nil	M thread	ø16, ø20
	Rc	ø25, ø32,
TN	NPT	ø40, ø50,
TF	G	ø63

Piping

Nil	Standard type
G	Centralized piping type

Cylinder stroke [mm]

Bore size	Standard stroke*	Long stroke	Maximum manufacturable stroke
16	100, 200, 300, 400, 500, 600 700, 800, 900, 1000, 1200 1400, 1600, 1800, 2000	Strokes of 2001 to 3000 mm (1 mm increments) exceeding the standard stroke	3000
20, 25, 32 40, 50, 63	* The stroke can be manufactured in 1 mm increments from 1 mm stroke.	Strokes of 2001 to 5000 mm (1 mm increments) exceeding the standard stroke	5000

Ordering example
* Long stroke can be ordered the same as the standard stroke. 25A-MY1C20-3000L-M9BW
* Please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.

Auto switch

Nil	Without auto switch (Built-in magnet)

* **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Made to order

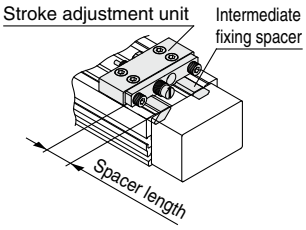
Symbol	Specifications
-XC56	With knock pin hole

Stroke adjustment unit symbol

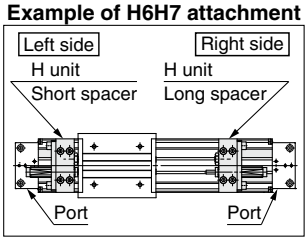
Left side stroke adjustment unit		Right side stroke adjustment unit: Without unit	A: With adjustment bolt	A: With short spacer	A: With long spacer	L: With low load shock absorber + Adjustment bolt	L: With short spacer	L: With long spacer	H: With high load shock absorber + Adjustment bolt	H: With short spacer	H: With long spacer
Without unit		**Nil**	**SA**	**SA6**	**SA7**	**SL**	**SL6**	**SL7**	**SH**	**SH6**	**SH7**
A: With adjustment bolt		**AS**	**A**	**AA6**	**AA7**	**AL**	**AL6**	**AL7**	**AH**	**AH6**	**AH7**
	With short spacer	**A6S**	**A6A**	**A6**	**A6A7**	**A6L**	**A6L6**	**A6L7**	**A6H**	**A6H6**	**A6H7**
	With long spacer	**A7S**	**A7A**	**A7A6**	**A7**	**A7L**	**A7L6**	**A7L7**	**A7H**	**A7H6**	**A7H7**
L: With low load shock absorber + Adjustment bolt		**LS**	**LA**	**LA6**	**LA7**	**L**	**LL6**	**LL7**	**LH**	**LH6**	**LH7**
	With short spacer	**L6S**	**L6A**	**L6A6**	**L6A7**	**L6L**	**L6**	**L6L7**	**L6H**	**L6H6**	**L6H7**
	With long spacer	**L7S**	**L7A**	**L7A6**	**L7A7**	**L7L**	**L7L6**	**L7**	**L7H**	**L7H6**	**L7H7**
H: With high load shock absorber + Adjustment bolt		**HS**	**HA**	**HA6**	**HA7**	**HL**	**HL6**	**HL7**	**H**	**HH6**	**HH7**
	With short spacer	**H6S**	**H6A**	**H6A6**	**H6A7**	**H6L**	**H6L6**	**H6L7**	**H6H**	**H6**	**H6H7**
	With long spacer	**H7S**	**H7A**	**H7A6**	**H7A7**	**H7L**	**H7L6**	**H7L7**	**H7H**	**H7H6**	**H7**

* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.
* Stroke adjustment unit H is not available for 25A-MY1C16.

Stroke adjustment unit mounting diagram



Example of H6H7 attachment



* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mechanically Jointed Rodless Cylinder
Linear Guide Type
25A-MY1H Series
ø16, ø20, ø25, ø32, ø40

RoHS



How to Order

ø16, ø20: **25A-MY1H 20 □ □ - 300 □ - M9BW □**

ø25, ø32, ø40: **25A-MY1H 25 □ □ - 300 □ Z - M9BW □**

- **Series compatible with secondary batteries**: 25A
- **Linear guide type**: MY1H
- **Bore size**

16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm

- **Port thread type**

Symbol	Type	Bore size
Nil	M thread	ø16, ø20
	Rc	ø25, ø32, ø40
TN	NPT	
TF	G	

- **Piping**

Nil	Standard type
G	Centralized piping type

- **Cylinder stroke [mm]**

Bore size	Standard stroke	Intermediate stroke	Long stroke	Maximum manufacturable stroke
16, 20	50, 100, 150 200, 250, 300 350, 400, 450 500, 550, 600	Strokes of 51 to 599 mm (1 mm increments) other than standard strokes	Strokes of 601 to 1000 mm (1 mm increments) exceeding the standard stroke	1000
25, 32, 40			Strokes of 601 to 1500 mm (1 mm increments) exceeding the standard stroke	1500

Ordering example
* Intermediate stroke can be ordered the same as the standard stroke. 25A-MY1H20-60-M9BW
* Long stroke can be ordered the same as the standard stroke. 25A-MY1H20-800L-M9BW

- **Number of auto switches**

Nil	2
S	1
n	n

- **Auto switch**

Nil	Without auto switch (Built-in magnet)

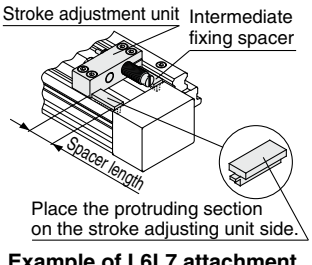
* Click here for details on applicable auto switch models.

- **Stroke adjustment unit symbol**

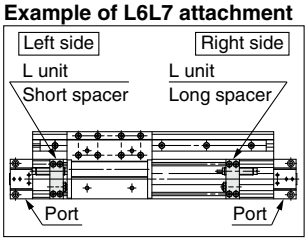
Left side stroke adjustment unit	Right side stroke adjustment unit: Without unit	A: With adjustment bolt	A: With adjustment bolt + With short spacer	A: With adjustment bolt + With long spacer	L: With low load shock absorber + Adjustment bolt	L: With low load shock absorber + Adjustment bolt + With short spacer	L: With low load shock absorber + Adjustment bolt + With long spacer	H: With high load shock absorber + Adjustment bolt	H: With high load shock absorber + Adjustment bolt + With short spacer	H: With high load shock absorber + Adjustment bolt + With long spacer
Without unit	Nil	SA	SA6	SA7	SL	SL6	SL7	SH	SH6	SH7
A: With adjustment bolt	AS	A	AA6	AA7	AL	AL6	AL7	AH	AH6	AH7
A: With adjustment bolt + With short spacer	A6S	A6A	A6	A6A7	A6L	A6L6	A6L7	A6H	A6H6	A6H7
A: With adjustment bolt + With long spacer	A7S	A7A	A7A6	A7	A7L	A7L6	A7L7	A7H	A7H6	A7H7
L: With low load shock absorber + Adjustment bolt	LS	LA	LA6	LA7	L	LL6	LL7	LH	LH6	LH7
L: With low load shock absorber + Adjustment bolt + With short spacer	L6S	L6A	L6A6	L6A7	L6L	L6	L6L7	L6H	L6H6	L6H7
L: With low load shock absorber + Adjustment bolt + With long spacer	L7S	L7A	L7A6	L7A7	L7L	L7L6	L7	L7H	L7H6	L7H7
H: With high load shock absorber + Adjustment bolt	HS	HA	HA6	HA7	HL	HL6	HL7	H	HH6	HH7
H: With high load shock absorber + Adjustment bolt + With short spacer	H6S	H6A	H6A6	H6A7	H6L	H6L6	H6L7	H6H	H6	H6H7
H: With high load shock absorber + Adjustment bolt + With long spacer	H7S	H7A	H7A6	H7A7	H7L	H7L6	H7L7	H7H	H7H6	H7

* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.
* H: With high load shock absorber + Adjustment bolt is not available for 25A-MY1H16.

Stroke adjustment unit mounting diagram



Example of L6L7 attachment



* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

SMC

Mechanically Jointed Rodless Cylinder
Cam Follower Guide Type
25A-MY2C Series
ø16, ø25, ø40

RoHS



How to Order

25A – MY2 C 16 ☐ G – 300 ☐ – M9BW ☐

Series compatible with secondary batteries

Cam follower guide type

Bore size

16	16 mm
25	25 mm
40	40 mm

Port thread type

Symbol	Type	Bore size
Nil	M thread	ø16
	Rc	ø25, ø40
TN	NPT	
TF	G	

Piping

G	Centralized piping type (Standard)

Cylinder stroke [mm]

Bore size [mm]	Standard stroke [mm]*1	Max. manufacturable stroke [mm]
16	100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1200, 1400, 1600, 1800, 2000	3000
25, 40		5000

*1 Strokes are manufacturable in 1 mm increments, up to the maximum stroke. However, please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.

* Long stroke can be ordered the same as the standard stroke.
25A-MY2C25G-3000L-M9BW

Stroke adjustment unit symbol

			Right side stroke adjustment unit						
			Without unit	L: With low load shock absorber			H: With high load shock absorber		
					With short spacer	With long spacer		With short spacer	With long spacer
Left side stroke adjustment unit	Without unit		Nil	SL	SL6	SL7	SH	SH6	SH7
	L: With low load shock absorber		LS	L	LL6	LL7	LH	LH6	LH7
		With short spacer	L6S	L6L	L6	L6L7	L6H	L6H6	L6H7
		With long spacer	L7S	L7L	L7L6	L7	L7H	L7H6	L7H7
	H: With high load shock absorber		HS	HL	HL6	HL7	H	HH6	HH7
		With short spacer	H6S	H6L	H6L6	H6L7	H6H	H6	H6H7
		With long spacer	H7S	H7L	H7L6	H7L7	H7H	H7H6	H7

* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

Number of auto switches

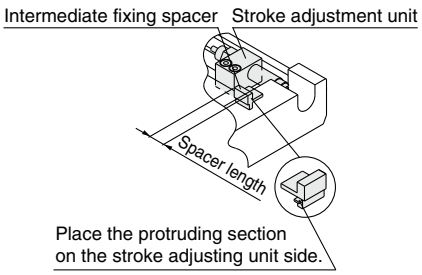
Nil	2
S	1
n	n

Auto switch

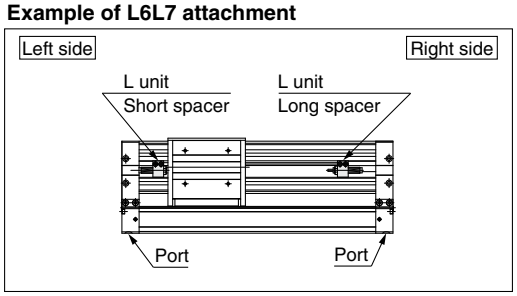
Nil	Without auto switch (Built-in magnet)

* **Click here** for details on applicable auto switch models.

Stroke adjustment unit mounting diagram



Example of L6L7 attachment



* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mechanically Jointed Rodless Cylinder
Linear Guide Type
25A-MY2H/HT Series
ø16, ø25, ø40

RoHS



How to Order

25A – MY2 H 16 ☐ G – 300 ☐ – M9BW ☐

Series compatible with secondary batteries

Guide type

H	Linear guide, Single axis
HT	Linear guide, Double axis

Bore size

16	16 mm
25	25 mm
40	40 mm

Port thread type

Symbol	Type	Bore size
Nil	M thread	ø16
	Rc	ø25, ø40
TN	NPT	
TF	G	

Piping

G	Centralized piping type (Standard)

Cylinder stroke [mm]

Bore size [mm]	Standard stroke [mm]*1	Max. manufacturable stroke [mm]
16	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600	1000
25, 40		1500

*1 Strokes are manufacturable in 1 mm increments, up to the maximum stroke.

* Intermediate stroke can be ordered the same as the standard stroke.
25A-MY2H16G-80-M9BW

* Long stroke can be ordered the same as the standard stroke.
25A-MY2H25G-800L-M9BW

Stroke adjustment unit symbol

Left side stroke adjustment unit		Right side stroke adjustment unit: Without unit	L: With low load shock absorber	L: With short spacer	L: With long spacer	H: With high load shock absorber	H: With short spacer	H: With long spacer
Without unit		**Nil**	**SL**	**SL6**	**SL7**	**SH**	**SH6**	**SH7**
L: With low load shock absorber		**LS**	**L**	**LL6**	**LL7**	**LH**	**LH6**	**LH7**
	With short spacer	**L6S**	**L6L**	**L6**	**L6L7**	**L6H**	**L6H6**	**L6H7**
	With long spacer	**L7S**	**L7L**	**L7L6**	**L7**	**L7H**	**L7H6**	**L7H7**
H: With high load shock absorber		**HS**	**HL**	**HL6**	**HL7**	**H**	**HH6**	**HH7**
	With short spacer	**H6S**	**H6L**	**H6L6**	**H6L7**	**H6H**	**H6**	**H6H7**
	With long spacer	**H7S**	**H7L**	**H7L6**	**H7L7**	**H7H**	**H7H6**	**H7**

* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

Auto switch

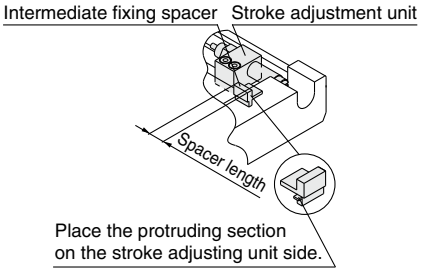
Nil	Without auto switch (Built-in magnet)

* **Click here** for details on applicable auto switch models.

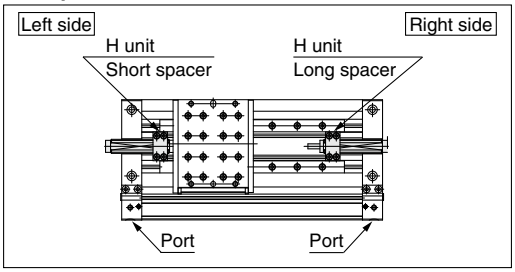
Number of auto switches

Nil	2
S	1
n	n

Stroke adjustment unit mounting diagram



Example of H6H7 attachment



* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

SMC

Mechanically Jointed Rodless Cylinder/Basic Type

25A-MY3A/3B Series

ø16, ø20, ø25, ø32, ø40, ø50, ø63

RoHS

How to Order



MY3A MY3B

25A – MY3 B 16 ☐ – 300 ☐ – M9BW ☐

Series compatible with secondary batteries

Type

A	Short type (Rubber bumper)
B	Standard type (Air cushion)

Cylinder bore size

16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm

Port thread type

Symbol	Type	Bore size
Nil	M5	ø16, ø20
	Rc	ø25, ø32, ø40 ø50, ø63
TN	NPT	
TF	G	

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Cylinder stroke [mm]

Bore size	Standard stroke∗	Long stroke	Maximum manufacturable stroke
16, 20 25, 32 40, 50 63	100, 200, 300, 400, 500, 600 700, 800, 900, 1000, 1200 1400, 1600, 1800, 2000 ∗ The stroke can be manufactured in 1 mm increments from 1 mm stroke.	Strokes of 2001 to 3000 mm (1 mm increments) exceeding the standard stroke	3000

Ordering example

∗ Long stroke can be ordered the same as the standard stroke. 25A-MY3A25-3000L-M9BW

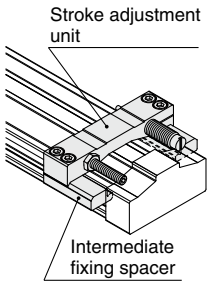
∗ Please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.

Stroke adjustment unit symbol

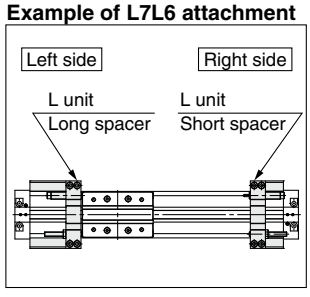
			Right side stroke adjustment unit						
			Without unit	L: With low load shock absorber + Adjustment bolt			H: With high load shock absorber + Adjustment bolt		
					With short spacer	With long spacer		With short spacer	With long spacer
Left side stroke adjustment unit	Without unit		**Nil**	**SL**	**SL6**	**SL7**	**SH**	**SH6**	**SH7**
	L: With low load shock absorber + Adjustment bolt		**LS**	**L**	**LL6**	**LL7**	**LH**	**LH6**	**LH7**
		With short spacer	**L6S**	**L6L**	**L6**	**L6L7**	**L6H**	**L6H6**	**L6H7**
		With long spacer	**L7S**	**L7L**	**L7L6**	**L7**	**L7H**	**L7H6**	**L7H7**
	H: With high load shock absorber + Adjustment bolt		**HS**	**HL**	**HL6**	**HL7**	**H**	**HH6**	**HH7**
		With short spacer	**H6S**	**H6L**	**H6L6**	**H6L7**	**H6H**	**H6**	**H6H7**
		With long spacer	**H7S**	**H7L**	**H7L6**	**H7L7**	**H7H**	**H7H6**	**H7**

∗ Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

Stroke adjustment unit mounting diagram



Example of L7L6 attachment



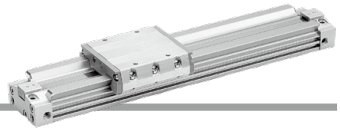
∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mechanically Jointed Rodless Cylinder
Slide Bearing Guide Type

RoHS

25A-MY3M Series
ø16, ø25, ø40, ø63



How to Order

25A – MY3 M 16 ☐ – 300 ☐ – M9BW ☐

Series compatible with secondary batteries

Slide bearing guide type

Cylinder bore size

16	16 mm
25	25 mm
40	40 mm
63	63 mm

Port thread type

Symbol	Type	Bore size
Nil	M5	ø16
	Rc	ø25, ø40, ø63
TN	NPT	
TF	G	

Cylinder stroke [mm]

Bore size	Standard stroke*	Long stroke	Maximum manufacturable stroke
16, 25 40, 63	100, 200, 300, 400, 500, 600 700, 800, 900, 1000, 1200 1400, 1600, 1800, 2000 * The stroke can be manufactured in 1 mm increments from 1 mm stroke.	Strokes of 2001 to 3000 mm (1 mm increments) exceeding the standard stroke	3000

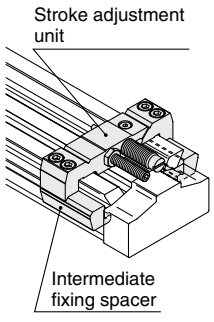
Ordering example
* Long stroke can be ordered the same as the standard stroke. 25A-MY3M25-3000L-M9BW
* Please be advised that with a stroke of 49 mm or less, there are cases where auto switch mounting is not possible, and the performance of the air cushion may decline.

Stroke adjustment unit symbol

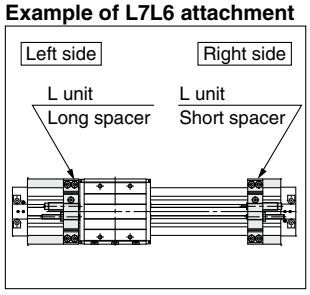
			Right side stroke adjustment unit						
			Without unit	L: With low load shock absorber + Adjustment bolt			H: With high load shock absorber + Adjustment bolt		
					With short spacer	With long spacer		With short spacer	With long spacer
Left side stroke adjustment unit	Without unit		**Nil**	**SL**	**SL6**	**SL7**	**SH**	**SH6**	**SH7**
	L: With low load shock absorber + Adjustment bolt	With short spacer	**LS**	**L**	**LL6**	**LL7**	**LH**	**LH6**	**LH7**
		With long spacer	**L6S**	**L6L**	**L6**	**L6L7**	**L6H**	**L6H6**	**L6H7**
	H: With high load shock absorber + Adjustment bolt	With short spacer	**L7S**	**L7L**	**L7L6**	**L7**	**L7H**	**L7H6**	**L7H7**
		With long spacer	**HS**	**HL**	**HL6**	**HL7**	**H**	**HH6**	**HH7**
			H6S	**H6L**	**H6L6**	**H6L7**	**H6H**	**H6**	**H6H7**
			H7S	**H7L**	**H7L6**	**H7L7**	**H7H**	**H7H6**	**H7**

* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

Stroke adjustment unit mounting diagram



Example of L7L6 attachment



* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

SMC

Magnetically Coupled Rodless Cylinder/Basic Type

25A-CY3B Series

ø6, ø10, ø15, ø20, ø25, ø32, ø40, ø50, ø63

RoHS

How to Order



25A – CY3 B 25 □ – 300 Z

- **Series compatible with secondary batteries**
- **Basic type**
- **Bore size**

6	6 mm
10	10 mm
15	15 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm

- **Port thread type**

Symbol	Type	Bore size
Nil	M thread	6, 10, 15
	Rc	20, 25, 32, 40 50, 63
TN	NPT	
TF	G	

- **Standard stroke [mm]**

Bore size	Standard stroke	Manufacturable stroke
6	50, 100, 150, 200	20 to 300
10	50, 100, 150, 200, 250, 300	20 to 500
15	50, 100, 150, 200, 250, 300, 350 400, 450, 500	20 to 1000
20	100, 150, 200, 250, 300, 350 400, 450, 500, 600, 700, 800	25 to 1500
25		25 to 2000
32, 40		
50, 63	100, 150, 200, 250, 300, 350, 400 450, 500, 600, 700, 800, 900, 1000	40 to 2000

∗ Please contact SMC if the maximum stroke is exceeded.
∗ The longer the stroke, the larger the amount of deflection in a cylinder tube. Pay attention to the mounting bracket and clearance value.
∗ Intermediate stroke is available in 1 mm increments.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Magnetically Coupled Rodless Cylinder/Basic Type

25A-CY3B Series

ø6, ø10, ø15, ø20, ø25, ø32, ø40, ø50, ø63

RoHS

How to Order



25A – CY3 B 25 □ – 300

Series compatible with secondary batteries

Basic type

Bore size

6	6 mm
10	10 mm
15	15 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm

Port thread type

Symbol	Type	Bore size
Nil	M thread	6, 10, 15
	Rc	20, 25, 32, 40 50, 63
TN	NPT	
TF	G	

Standard stroke [mm]

Bore size	Standard stroke	Max. manufacturable stroke
6	50, 100, 150, 200	300
10	50, 100, 150, 200, 250, 300	500
15	50, 100, 150, 200, 250, 300, 350 400, 450, 500	1000
20	100, 150, 200, 250, 300, 350 400, 450, 500, 600, 700, 800	1500
25		2000
32		
40, 50, 63	100, 150, 200, 250, 300, 350, 400 450, 500, 600, 700, 800, 900, 1000	

∗ Please contact SMC if the maximum stroke is exceeded.
∗ The longer the stroke, the larger the amount of deflection in a cylinder tube. Pay attention to the mounting bracket and clearance value.
∗ Intermediate stroke is available in 1 mm increments.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Magnetically Coupled Rodless Cylinder/Direct Mount Type

25A-CY3R Series

ø6, ø10, ø15, ø20, ø25, ø32, ø40, ø50, ø63

RoHS

How to Order



25A – CY3R □ 25 □ – 300 □ – M9BWL □

Series compatible with secondary batteries

Direct mount type

Piping type

Nil	Standard type
G	Centralized piping type

* Type G (centralized piping) is not available for ø6.

Bore size

6	6 mm
10	10 mm
15	15 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm

Port thread type

Symbol	Type	Bore size
Nil	M thread	6, 10, 15
	Rc	20, 25, 32, 40 50, 63
TN	NPT	
TF	G	

Switch rail

Nil	With switch rail
N	Without switch rail

* A type with switch rail has built-in auto switch magnets.
* ø15 has built-in auto switch magnets even without switch rail.
* Centralized piping type (G) is not available without switch rail (N).

Auto switch

Nil	ø6 to ø15 ø25 to ø63	Without auto switch (Built-in magnet)
	ø20	Without auto switch (Built-in magnet for reed switch)
M		Without auto switch (Built-in magnet for solid state switch)

* **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Cylinder stroke [mm]

Bore size	Standard stroke	Max. stroke without switch	Max. stroke with switch
6	50, 100, 150, 200	300	300
10	50, 100, 150, 200, 250, 300	500	500
15	50, 100, 150, 200, 250, 300 350, 400, 450, 500	1000	750
20	100, 150, 200, 250, 300, 350 400, 450, 500, 600, 700, 800	1500	1000
25			1200
32		2000	1500
40, 50, 63	100, 150, 200, 250, 300, 350 400, 450, 500, 600, 700, 800 900, 1000		

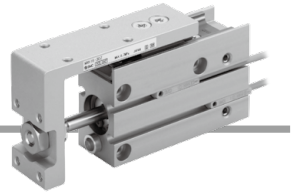
* The longer the stroke, the larger the amount of deflection in a cylinder tube. Pay attention to the mounting bracket and clearance value.
* Intermediate stroke is available in 1 mm increments.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Compact Slide
25A-MXH Series
ø6, ø10, ø16, ø20

RoHS



How to Order

25A – MXH [10] – [60] Z – [M9BW] [ ]

Series compatible with secondary batteries

Compact slide

Bore size

6	6 mm
10	10 mm
16	16 mm
20	20 mm

Cylinder stroke [mm]

6, 10, 16, 20	5, 10, 15, 20, 25, 30, 40 50, 60

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Air Slide Table

25A-MXS Series

ø6, ø8, ø12, ø16, ø20, ø25

RoHS



How to Order

Air slide table **25A – MXS 16 □ □ – 50 AS – M9BW □ – □**

Series compatible with secondary batteries

Port thread type

Nil	M thread	ø6 to ø16
	Rc	ø20, ø25
TN	NPT	
TF	G	

Symmetric type

Nil	Standard type
L	Symmetric type

Bore size (Standard stroke [mm])

6	10, 20, 30, 40, 50
8	10, 20, 30, 40, 50, 75
12	10, 20, 30, 40, 50, 75, 100
16	10, 20, 30, 40, 50, 75, 100, 125
20	10, 20, 30, 40, 50, 75, 100, 125, 150
25	10, 20, 30, 40, 50, 75, 100, 125, 150

Made to Order

Nil	None
-X2578	Adjuster side mounting type*1

*1 The type with a shock absorber is only available for bore sizes ø8, ø12, and ø16.

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch (Built-in magnet)

* Click here for details on applicable auto switch models.

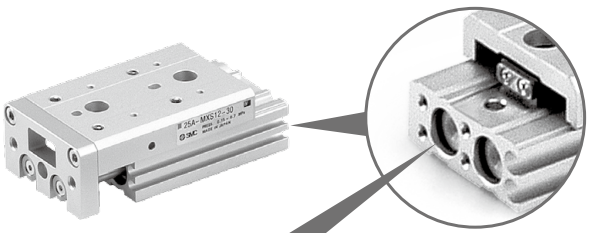
Adjuster option

Nil	Without adjuster
AS	Adjuster on extension end
AT	Adjuster on retraction end
A	Adjuster on both ends
BS	Absorber on extension end
BT	Absorber on retraction end
B	Absorber on both ends
ASBT	Adjuster on extension end + Absorber on retraction end
BSAT	Absorber on extension end + Adjuster on retraction end

* With shock absorber is not available in the 25A-MXS6 series.
* When the adjuster option with shock absorber is used, metal-to-metal collisions occur, and may generate dust particles.

Corrosion Resistant Air Slide Table

(Made to order: 25A-MXS□-X1949)
The material of the head cap part has been changed to a highly corrosion-resistant material.
Please contact your local sales representative for more details.



	After change	Before change
Head cap	Aluminum	Synthetic resin

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Air Slide Table
Double-ported Type

RoHS

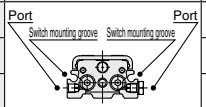
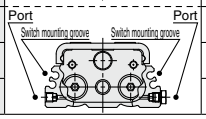
25A-MXQ□A Series
ø6, ø8, ø12, ø16, ø20, ø25



How to Order

25A – MXQ 12 A – 30 ZA □ – M9BW □

- 25A: Series compatible with secondary batteries
- ❶ Bore size
- ❷ Body option: Double-ported type
- ❸ Standard stroke [mm]
- ❹ Adjuster options/Functional option combinations
- ❺ Functional options
- ❻ Auto switch
- ❼ Number of auto switches

❶ Bore size	❷ Body option: Double-ported type A	❸ Standard stroke [mm]
6		10, 20, 30, 40, 50
8		10, 20, 30, 40, 50, 75
12		10, 20, 30, 40, 50, 75, 100
16		10, 20, 30, 40, 50, 75, 100, 125
20		10, 20, 30, 40, 50, 75, 100, 125, 150
25		10, 20, 30, 40, 50, 75, 100, 125, 150

❺ Functional options

Symbol	Functional option
Nil	Without functional option
1	With buffer
2	With end lock
3	Axial piping
4	With buffer, end lock
5	With buffer, axial piping

❼ Number of auto switches

Nil	2
S	1
n	n

❻ Auto switch

Nil	Without auto switch (Built-in magnet)

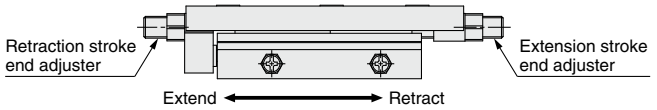
∗ Click here for details on applicable auto switch models.

❹ Adjuster options/Functional option combinations

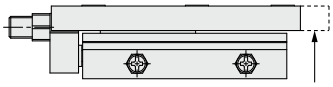
Symbol	Adjuster type∗6			Adjuster mounting position∗1 Extension stroke end	Adjuster mounting position∗1 Retraction stroke end	Functional option combination Nil: Without functional option	1: ∗2∗7 With buffer	2: With end lock	3: ∗5 Axial piping	4: ∗2∗7 With buffer, end lock	5: ∗2∗5∗7 With buffer, axial piping
Z	Without adjuster					○	○	○	○	○	○
ZA	Metal stopper with bumper			●	●	○	×	×	○	×	×
ZB				●		○	×	○	○	×	×
ZC					●	○	×	×	○	×	×
ZD	Rubber stopper			●	●	○	×	×	○	×	×
ZE				●		○	○	○	○	○	○
ZF					●	○	×	×	○	×	×
ZG	Shock absorber/RJ			●	●	○	×	×	○	×	×
ZH				●		○	×	○	○	×	×
ZJ					●	○	×	×	○	×	×
ZK	Metal stopper			●	●	○	×	×	○	×	×
ZL				●		○	○	○	○	○	○
ZM					●	○	×	×	○	×	×
ZN	Shorter total length type∗3	Retraction stroke end adjuster	Without adjuster			○	○∗4	×	○	×	○∗4
ZP			Rubber stopper		●	○	×	×	○	×	×
ZQ			Shock absorber/RJ		●	○	×	×	○	×	×
ZS			Metal stopper with bumper		●	○	×	×	○	×	×
ZT			Metal stopper		●	○	×	×	○	×	×
ZBF	Extension stroke end adjuster	Metal stopper with bumper	Rubber stopper	●	●	○	×	×	○	×	×
ZBJ			Shock absorber/RJ	●	●	○	×	×	○	×	×
ZBM			Metal stopper	●	●	○	×	×	○	×	×
ZEC		Rubber stopper	Metal stopper with bumper	●	●	○	×	×	○	×	×
ZEJ			Shock absorber/RJ	●	●	○	×	×	○	×	×
ZEM			Metal stopper	●	●	○	×	×	○	×	×
ZHC		Shock absorber/RJ	Metal stopper with bumper	●	●	○	×	×	○	×	×
ZHF			Rubber stopper	●	●	○	×	×	○	×	×
ZHM			Metal stopper	●	●	○	×	×	○	×	×
ZLC		Metal stopper	Metal stopper with bumper	●	●	○	×	×	○	×	×
ZLF			Rubber stopper	●	●	○	×	×	○	×	×
ZLJ			Shock absorber/RJ	●	●	○	×	×	○	×	×

∗1 ●: Shipped together with the product, but not assembled
Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
∗2 For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
∗3 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
∗4 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward.
∗5 There is no piping port on the side surface of the product.
∗6 The metal stopper with bumper option is not available for ø6.
∗7 As there is no magnet in the buffer mechanism, auto switches cannot be used on the buffer part.

Adjuster Mounting Position



Shorter total length type



Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.

∗ When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.
∗ When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.
∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

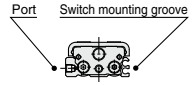
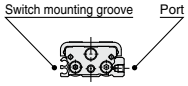
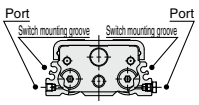
Air Slide Table
Low Thrust with High Rigidity Type RoHS
25A-MXQ□B Series
ø6, ø8, ø12, ø16, ø20



How to Order

25A – MXQ [12] [B] – [30] [ZA] – [M9BW] [ ]

- 25A: Series compatible with secondary batteries
- ❶ Bore size
- ❷ Body option
- ❸ Standard stroke [mm]
- ❹ Adjuster options
- ❺ Auto switch
- ❻ Number of auto switches

❶ Bore size	❷ Body option: Standard type B	❷ Body option: Symmetric type BL	❸ Standard stroke [mm]
6			10, 20, 30, 40, 50, 75
8			10, 20, 30, 40, 50, 75, 100
12			10, 20, 30, 40, 50, 75, 100, 125
16		—*1	10, 20, 30, 40, 50, 75, 100, 125, 150
20			10, 20, 30, 40, 50, 75, 100, 125, 150

*1 Not available, as the standard model has piping ports and auto switch mounting grooves on both sides. Please use the standard type.

❹ Adjuster options

Symbol	Adjuster type*3			Adjuster mounting position*1: Extension stroke end	Adjuster mounting position*1: Retraction stroke end
Z	Without adjuster				
ZA	Metal stopper with bumper			●	●
ZB				●	
ZC					●
ZD	Rubber stopper			●	●
ZE				●	
ZF					●
ZG	Shock absorber/RJ			●	●
ZH				●	
ZJ					●
ZK	Metal stopper			●	●
ZL				●	
ZM					●
ZN	Shorter total length type*2		Without adjuster		
ZP			Rubber stopper		●
ZQ			Shock absorber/RJ		●
ZS			Metal stopper with bumper		●
ZT			Metal stopper		●
ZBF	Extension stroke end adjuster	Metal stopper with bumper	Rubber stopper	●	●
ZBJ			Shock absorber/RJ	●	●
ZBM			Metal stopper	●	●
ZEC		Rubber stopper	Metal stopper with bumper	●	●
ZEJ			Shock absorber/RJ	●	●
ZEM			Metal stopper	●	●
ZHC		Shock absorber/RJ	Metal stopper with bumper	●	●
ZHF			Rubber stopper	●	●
ZHM			Metal stopper	●	●
ZLC		Metal stopper	Metal stopper with bumper	●	●
ZLF			Rubber stopper	●	●
ZLJ			Shock absorber/RJ	●	●

Retraction stroke end adjuster

❺ Auto switch

Nil	Without auto switch (Built-in magnet)

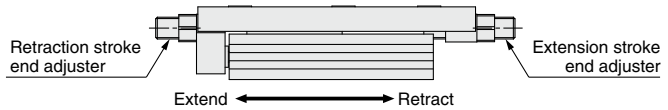
* Click here for details on applicable auto switch models.

❻ Number of auto switches

Nil	2
S	1
n	n

*1 ●: Shipped together with the product, but not assembled
Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
*2 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
*3 The metal stopper with bumper option is not available for ø6.

Adjuster Mounting Position



Shorter total length type



Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.

* When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.
* The 25A- series specifications and dimensions are the same as those of the standard model. **For details, refer to the Web Catalog.**

Air Slide Table
Single Side-ported Type

RoHS

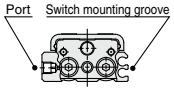
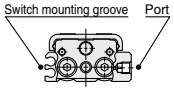
25A-MXQ□C Series
ø8, ø12



How to Order

25A – MXQ [12] [C] – [30] [ZA] [ ] – [M9BW] [ ]

- 25A: Series compatible with secondary batteries
- ❶ Bore size
- ❷ Body option
- ❸ Standard stroke [mm]
- ❹ Adjuster options/Functional option combinations
- ❺ Functional options
- ❻ Auto switch
- ❼ Number of auto switches

❶ Bore size	❷ Body option: Standard type C	❷ Body option: Symmetric type CL	❸ Standard stroke [mm]
8			10, 20, 30, 40, 50, 75
12			10, 20, 30, 40, 50, 75, 100

❺ Functional options

Symbol	Functional option
Nil	Without functional option
1	With buffer
2	With end lock
3	Axial piping
4	With buffer, end lock
5	With buffer, axial piping

❻ Auto switch

Nil	Without auto switch (Built-in magnet)

* Click here for details on applicable auto switch models.

❼ Number of auto switches

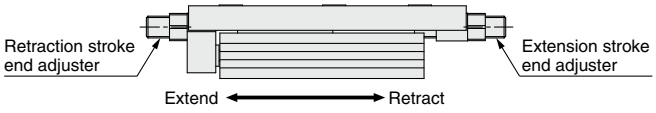
Nil	2
S	1
n	n

❹ Adjuster options/Functional option combinations

Symbol	Adjuster type			Adjuster mounting position*1: Extension stroke end	Adjuster mounting position*1: Retraction stroke end	Functional option combination: Nil Without functional option	1 *2*6 With buffer	2 With end lock	3 *5 Axial piping	4 *2*6 With buffer, end lock	5 *3*5*6 With buffer, axial piping
Z	Without adjuster					○	○	○	○	○	○
ZA	Metal stopper with bumper			●	●	○	×	×	○	×	×
ZB				●		○	×	○	○	×	×
ZC					●	○	×	×	○	×	×
ZD	Rubber stopper			●	●	○	×	×	○	×	×
ZE				●		○	○	○	○	○	○
ZF					●	○	×	×	○	×	×
ZG	Shock absorber/RJ			●	●	○	×	×	○	×	×
ZH				●		○	×	○	○	×	×
ZJ					●	○	×	×	○	×	×
ZK	Metal stopper			●	●	○	×	×	○	×	×
ZL				●		○	○	○	○	○	○
ZM					●	○	×	×	○	×	×
ZN	Shorter overall length type*3	Retraction stroke end adjuster	Without adjuster			○	○*4	×	○	×	○*4
ZP			Rubber stopper		●	○	×	×	○	×	×
ZQ			Shock absorber/RJ		●	○	×	×	○	×	×
ZS			Metal stopper with bumper		●	○	×	×	○	×	×
ZT			Metal stopper		●	○	×	×	○	×	×
ZBF	Extension stroke end adjuster	Metal stopper with bumper	Rubber stopper	●	●	○	×	×	○	×	×
ZBJ			Shock absorber/RJ	●	●	○	×	×	○	×	×
ZBM			Metal stopper	●	●	○	×	×	○	×	×
ZEC		Rubber stopper	Metal stopper with bumper	●	●	○	×	×	○	×	×
ZEJ			Shock absorber/RJ	●	●	○	×	×	○	×	×
ZEM			Metal stopper	●	●	○	×	×	○	×	×
ZHC		Shock absorber/RJ	Metal stopper with bumper	●	●	○	×	×	○	×	×
ZHF			Rubber stopper	●	●	○	×	×	○	×	×
ZHM			Metal stopper	●	●	○	×	×	○	×	×
ZLC		Metal stopper	Metal stopper with bumper	●	●	○	×	×	○	×	×
ZLF			Rubber stopper	●	●	○	×	×	○	×	×
ZLJ			Shock absorber/RJ	●	●	○	×	×	○	×	×

*1 ●: Shipped together with the product, but not assembled Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
*2 For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
*3 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
*4 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward.
*5 There is no piping port on the side surface of the product.
*6 As there is no magnet in the buffer mechanism, auto switches cannot be used on the buffer part.

Adjuster Mounting Position



Shorter total length type



Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.

* When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.
* When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Air Slide Table
Height Interchangeable Type

RoHS

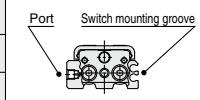
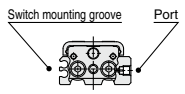
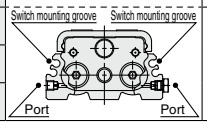
25A-MXQ Series
ø6, ø8, ø12, ø16, ø20, ø25



How to Order

25A – MXQ ❶ **12** ❷ **–** ❸ **30** ❹ **ZA** ❺ **–** ❻ **M9BW** ❼

- **25A**: Series compatible with secondary batteries

❶ Bore size	❷ Body option: Standard type Nil	❷ Body option: Symmetric type L	❸ Standard stroke [mm]
6			10, 20, 30, 40, 50
8			10, 20, 30, 40, 50, 75
12			10, 20, 30, 40, 50, 75, 100
16		—*1	10, 20, 30, 40, 50, 75, 100, 125
20			10, 20, 30, 40, 50, 75, 100, 125, 150
25			10, 20, 30, 40, 50, 75, 100, 125, 150

*1 Not available, as the standard model has piping ports and auto switch mounting grooves on both sides. Please use the standard type.

❺ Functional options

Symbol	Functional option
Nil	Without functional option
1	With buffer
2	With end lock
3	Axial piping
4	With buffer, end lock
5	With buffer, axial piping

❼ Number of auto switches

Nil	2
S	1
n	n

❻ Auto switch

Nil	Without auto switch (Built-in magnet)

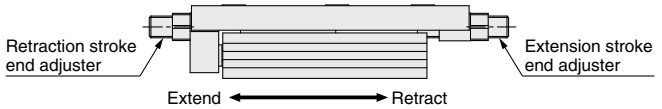
* **Click here** for details on applicable auto switch models.

❹ Adjuster options/Functional option combinations

Symbol	Adjuster type*6			Adjuster mounting position*1: Extension stroke end	Adjuster mounting position*1: Retraction stroke end	Functional option combination: Nil (Without functional option)	1 (*2*7 With buffer)	2 (With end lock)	3 (*5 Axial piping)	4 (*2*7 With buffer, end lock)	5 (*2*5*7 With buffer, axial piping)
Z	Without adjuster					○	○	○	○	○	○
ZA	Metal stopper with bumper			●	●	○	×	×	○	×	×
ZB				●		○	×	○	○	×	×
ZC					●	○	×	×	○	×	×
ZD	Rubber stopper			●	●	○	×	×	○	×	×
ZE				●		○	○	○	○	○	○
ZF					●	○	×	×	○	×	×
ZG	Shock absorber/RJ			●	●	○	×	×	○	×	×
ZH				●		○	×	○	○	×	×
ZJ					●	○	×	×	○	×	×
ZK	Metal stopper			●	●	○	×	×	○	×	×
ZL				●		○	○	○	○	○	○
ZM					●	○	×	×	○	×	×
ZN	Shorter total length type*3	Retraction stroke end adjuster	Without adjuster			○	○*4	×	○	×	○*4
ZP			Rubber stopper		●	○	×	×	○	×	×
ZQ			Shock absorber/RJ		●	○	×	×	○	×	×
ZS			Metal stopper with bumper		●	○	×	×	○	×	×
ZT			Metal stopper		●	○	×	×	○	×	×
ZBF	Extension stroke end adjuster: Metal stopper with bumper		Rubber stopper	●	●	○	×	×	○	×	×
ZBJ			Shock absorber/RJ	●	●	○	×	×	○	×	×
ZBM			Metal stopper	●	●	○	×	×	○	×	×
ZEC	Extension stroke end adjuster: Rubber stopper		Metal stopper with bumper	●	●	○	×	×	○	×	×
ZEJ			Shock absorber/RJ	●	●	○	×	×	○	×	×
ZEM			Metal stopper	●	●	○	×	×	○	×	×
ZHC	Extension stroke end adjuster: Shock absorber/RJ		Metal stopper with bumper	●	●	○	×	×	○	×	×
ZHF			Rubber stopper	●	●	○	×	×	○	×	×
ZHM			Metal stopper	●	●	○	×	×	○	×	×
ZLC	Extension stroke end adjuster: Metal stopper		Metal stopper with bumper	●	●	○	×	×	○	×	×
ZLF			Rubber stopper	●	●	○	×	×	○	×	×
ZLJ			Shock absorber/RJ	●	●	○	×	×	○	×	×

*1 ●: Shipped together with the product, but not assembled Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
*2 For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
*3 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
*4 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward.
*5 There is no piping port on the side surface of the product.
*6 The metal stopper with bumper option is not available for ø6.
*7 As there is no magnet in the buffer mechanism, auto switches cannot be used on the buffer part.

Adjuster Mounting Position



Shorter total length type



Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.

* When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.
* When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

SMC

Air Slide Table

RoHS

25A-MXQ Series

ø6, ø8, ø12, ø16, ø20, ø25



How to Order

25A-MXQ 16 □ □ - 50 AS - M9BW □ - □

Series compatible with secondary batteries

Port thread type

Nil	M thread	ø6 to ø16
	Rc	ø20, ø25
TN	NPT	
TF	G	

Symmetric type

Nil	Standard type
L	Symmetric type

Bore size (Standard stroke [mm])

6	10, 20, 30, 40, 50
8	10, 20, 30, 40, 50, 75
12	10, 20, 30, 40, 50, 75, 100
16	10, 20, 30, 40, 50, 75, 100, 125
20	10, 20, 30, 40, 50, 75, 100, 125, 150
25	10, 20, 30, 40, 50, 75, 100, 125, 150

Made to Order

Nil	None
-X2578	Adjuster side mounting type*1

*1 The type with a shock absorber is only available for bore sizes ø8, ø12, and ø16.

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch (Built-in magnet)

* Click here for details on applicable auto switch models.

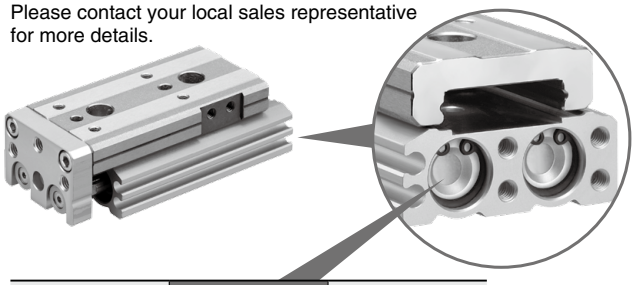
Adjuster option

Nil	Without adjuster
AS	Extension end rubber stopper
AT	Retraction end rubber stopper
A	Both ends rubber stopper
BS	Extension end absorber
BT	Retraction end absorber
B	Double absorber
CS	Extension end metal stopper
CT	Retraction end metal stopper
C	Double metal stopper
ASBT	Extension end adjustor + Retraction end absorber
ASCT	Extension end adjustor + Retraction end metal stopper
BSAT	Extension end absorber + Retraction end adjuster
BSCT	Extension end absorber + Retraction end metal stopper
CSAT	Extension end metal stopper + Retraction end adjuster
CSBT	Extension end metal stopper + Retraction end absorber

* With shock absorber is not available in the 25A-MXQ6 series.
* When the adjuster option with shock absorber or metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.

Corrosion Resistant Air Slide Table

(Made to order: 25A-MXQ□-X771)
The material of the head cap part has been changed to a highly corrosion-resistant material.
Please contact your local sales representative for more details.



	After change	Before change
Head cap	Aluminum	Synthetic resin

* The 25A- series specifications and dimensions are the same as those of the standard model.

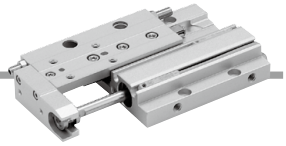
For details, refer to the Web Catalog.

Low Profile Slide Table

25A-MXF Series

ø8, ø12, ø16, ø20

RoHS



How to Order

25A – MXF [12] – [50] – [M9BW] [ ]

Series compatible with secondary batteries

Bore size/ Stroke (mm)

ø8	10, 20, 30
ø12	20, 30, 50
ø16	30, 50, 75
ø20	30, 50, 75, 100

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

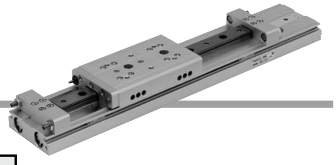
For details, refer to the Web Catalog.

Air Slide Table

RoHS

25A-MXW Series

ø8, ø12, ø16, ø20, ø25



How to Order

25A – MXW 16 [ ] – 100 B – M9BW [ ]

Series compatible with secondary batteries

Port thread type

Nil	M thread	ø8 to ø16
	Rc	ø20, ø25
TN	NPT	
TF	G	

Bore size (Standard stroke [mm])

8	25, 50, 75, 100, 125, 150
12	50, 75, 100, 125, 150
16	75, 100, 125, 150, 175, 200
20	100, 125, 150, 175, 200, 225, 250
25	100, 125, 150, 175, 200, 225, 250, 275, 300

Option

Nil	Standard (With urethane bumper)
B	With shock absorbers 2 pcs.

* When the adjuster option with shock absorber is used, metal-to-metal collisions occur, and may generate dust particles.

Auto switch

Nil	Without auto switch (Built-in magnet)

* **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

* The 25A- series specifications and dimensions are the same as those of the standard model.

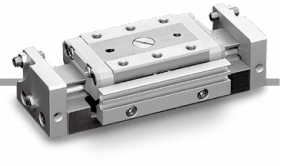
For details, refer to the Web Catalog.

Air Slide Table

25A-MXP Series

ø6, ø8, ø10, ø12, ø16

RoHS



How to Order

25A – MXP 12 – 15 □ □ – M9BW □

Series compatible with secondary batteries

Bore size (Standard stroke [mm])

6	5, 10
8	10, 20
10	10, 20
12	15, 25
16	20, 30

Adjuster option

Nil	Rubber stopper
B	Shock absorber
C	Metal stopper

Magnet/Switch rail

Nil	With magnet and rail
N	Without magnet and rail

∗ Auto switch cannot be mounted on type N (without magnet and rail).

Auto switch

Nil	Without auto switch

∗ **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

∗ In the case of 25A-MXP6-5, with 2 auto switches are available for D-M9□ type and D-M9□V type only. For other switches, no other choice is affordable but with 1 piece attached (symbol: S).

∗ Adjuster for 25A-MXP6 series is available for one side only.
∗ Shock absorber is not available in 25A-MXP6 and 25A-MXP8 series.
∗ When the adjuster option with shock absorber or metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Miniature Guide Rod Cylinder

25A-MGJ Series

ø6, ø10



How to Order

25A – MGJ [6] – [10] – [F8N] [ ]

Series compatible with secondary batteries

Miniature guide rod cylinder

Bore size

6	6 mm
10	10 mm

Cylinder stroke [mm]
Refer to the following table ① and ②.

Auto switch type

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1

Table ① Standard Strokes

Bore size [mm]	Standard stroke [mm]
6	5, 10, 15
10	5, 10, 15, 20

Table ② Intermediate Stroke (by the 1 mm stroke)

Bore size [mm]	Applicable stroke [mm]
6	1 to 15 (Spacer type)
10	1 to 20 (Spacer type)
Example	Model no.: 25A-MGJ6-9 Installing a 1 mm width spacer for 25A-MGJ6-10 External size: same as 25A-MGJ6-10

∗ When mounting an auto switch, the min. stroke is 4 mm.
However, only 1 auto switch can be mounted in this case.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Compact Guide Cylinder

RoHS

25A-MGP Series

ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100



How to Order

25A – MGP M 25 □ – 30 Z – M9BW □

Series compatible with secondary batteries

Compact guide cylinder

Bearing type

M	Slide bearing
L	Ball bushing

Bore size

12	12 mm
16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

Port thread type

Nil	M5 x 0.8
	Rc
TN	NPT
TF	G

∗ For bore sizes ø12 and ø16, only M5 x 0.8 is available.

Cylinder stroke [mm]

12, 16	10, 20, 30, 40, 50, 75, 100, 125, 150, 175, 200, 250
20, 25	20, 30, 40, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400
32 to 100	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Compact Guide Cylinder/With Air Cushion

25A-MGP Series

ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100

RoHS



How to Order

25A – MGP M 32 [ ] – 50 A Z – M9BW [ ]

Series compatible with secondary batteries

Compact guide cylinder

Bearing type

M	Slide bearing
L	Ball bushing

Bore size

16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

Port thread type

Nil	M5 x 0.8
	Rc
TN	NPT
TF	G

∗ For bore size 16, only M5 x 0.8 is available.

With air cushion

Cylinder stroke [mm]

Bore size	Standard stroke
16	25, 50, 75, 100, 125, 150, 175, 200, 250
20 to 63	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400
80, 100	50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

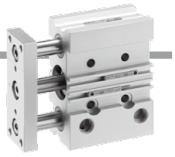
For details, refer to the Web Catalog.

Compact Guide Cylinder

25A-MGPK Series

ø12, ø16, ø20, ø25, ø32, ø40, ø50

RoHS



How to Order

25A – MGPK A M 32 □ – 50 □ – M9BW □

Series compatible with secondary batteries

Compact guide cylinder

Plate material

A	Aluminum alloy
F	Carbon steel

Bearing type

M	Slide bearing

Bore size

12	12 mm	**32**	32 mm
16	16 mm	**40**	40 mm
20	20 mm	**50**	50 mm
25	25 mm		

Port thread type

Nil	M5 x 0.8
	Rc
TN	NPT
TF	G

∗ For bore sizes 12 and 16, only M5 x 0.8 is available.

Cylinder stroke [mm]

Bore size [mm]	Standard stroke [mm]
12, 16	10, 20, 30, 40, 50, 75, 100, 125, 150
20, 25	20, 30, 40, 50, 75, 100, 125, 150, 175, 200
32 to 50	25, 50, 75, 100, 125, 150, 175, 200

Piping port location

Nil	Top/Side ported
P∗1	Top ported

∗1 For bore sizes 12 and 16 only

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

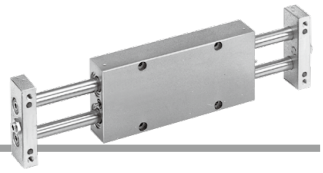
∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Slide Unit: Built-in Shock Absorber
Slide Bearing Type

RoHS

25A-CXWM Series
ø10, ø16, ø20, ø25, ø32



How to Order

Port thread type

Nil	M thread	ø10 to ø20
	Rc 1/8	ø25, ø32
TN	NPT 1/8	
TF	G 1/8	

25A — C DB XWM 16 ☐ — 150 — J79W ☐

Series compatible with secondary batteries

Cylinder with auto switch

Symbol	Specifications/Mounting
Nil	Without magnet for switch*1
DB	With auto switch (Built-in magnet)/ Housing mounting
DP	With auto switch (Built-in magnet)/ Plate mounting

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Bearing type

M	Slide bearing

Bore size/Stroke [mm]

10	(25), 50, 75, 100
16	(25), 50, 75, 100, 125, 150, 175, 200
20	(25), 50, 75, 100, 125, 150, 175, 200
25	(25), 50, 75, 100, 125, 150, 175, 200
32	(25), (50), 75, 100, 125, 150, 175, 200

* For the strokes indicated in the parentheses of the ø10, ø16 and ø25, shock absorbers are to be mounted on both sides of the plate. For the strokes indicated in the parentheses of the ø20 and ø32, a shock absorber is to be mounted on single side of the plate.
* For the strokes other than those indicated above, refer to the **Web Catalog**.
* For ø16, ø20 and ø25, strokes up to 300, and for ø32, strokes up to 250 are available as Made-to-Order.

Auto switch

Nil	Without auto switch

* **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CDPXWM20-100

* The 25A- series specifications and dimensions are the same as those of the standard model.

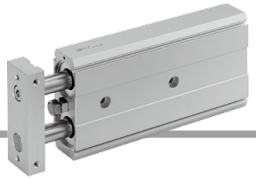
For details, refer to the Web Catalog.

Dual Rod Cylinder/Compact Type

25A-CXSJ Series

ø6, ø10, ø15, ø20, ø25, ø32

RoHS



How to Order

Port thread type

Nil	M thread	ø6 to ø25
	Rc1/8	ø32
TN	NPT1/8	
TF	G1/8	

25A – CXS J M 6 ☐ – 50 – M9BW ☐

Series compatible with secondary batteries

Compact type

Bearing type

M	Slide bearing
L	Ball bushing bearing

Bore size/Stroke [mm]

Bore size	Standard stroke
6	10, 20, 30, 40, 50
10	10, 20, 30, 40, 50, 75
15	10, 20, 30, 40, 50, 75, 100
20	
25	
32	

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Dual Rod Cylinder
Basic Type
25A-CXS Series
ø6, ø10, ø15, ø20, ø25, ø32

RoHS



How to Order

Port thread type

Nil	M thread	ø6 to ø20
	Rc1/8	ø25, ø32
TN	NPT1/8	
TF	G1/8	

Slide bearing type

25A-CXS M 25 □ -100- Y7BW □

Series compatible with secondary batteries

Bearing type

M	Slide bearing

Bore size/Stroke [mm]

Bore size	Standard stroke [mm]
6	10, 20, 30, 40, 50
10	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75
15, 20 25, 32	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75, 80, 90, 100

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Port thread type

Nil	M thread	ø6 to ø20
	Rc1/8	ø25, ø32
TN	NPT1/8	
TF	G1/8	

Ball bushing bearing type

25A-CXS L 20 □ -100- Y7BW □

Series compatible with secondary batteries

Bearing type

L	Ball bushing bearing

Bore size/Stroke [mm]

Bore size	Standard stroke [mm]
6	10, 20, 30, 40, 50
10	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75
15, 20 25, 32	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75, 80, 90, 100

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

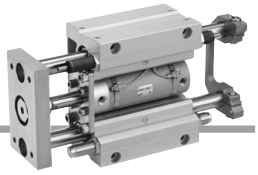
For details, refer to the Web Catalog.

Guide Cylinder

RoHS

25A-MGG Series

ø20, ø25, ø32, ø40, ø50



How to Order

25A – MGG L B 32 □ – 100 – M9BW □

Series compatible with secondary batteries

Guide cylinder

Bearing type

L	Ball bushing

Mounting

B	Basic
F	Front mounting flange

Bore size

20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm

Port thread type

Nil	Rc
TN	NPT
TF	G

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Cylinder stroke [mm]

Bore size [mm]	Standard stroke [mm]	Long stroke [mm]
20	75, 100, 125, 150, 200	250, 300, 350, 400
25	75, 100, 125, 150, 200, 250, 300	350, 400, 450, 500
32		350, 400, 450, 500, 600
40		350, 400, 450, 500, 600, 700, 800
50		350, 400, 450, 500, 600, 700, 800, 900, 1000

∗ Intermediate strokes and short strokes other than those listed above are produced upon receipt of order.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Rotary Clamp Cylinder: Standard

25A-MK Series

RoHS

ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63



How to Order

25A – MKB 20 ☐ – 10 R Z – M9BW ☐

Series compatible with secondary batteries

Bore size

12	12 mm
16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm

Port thread type

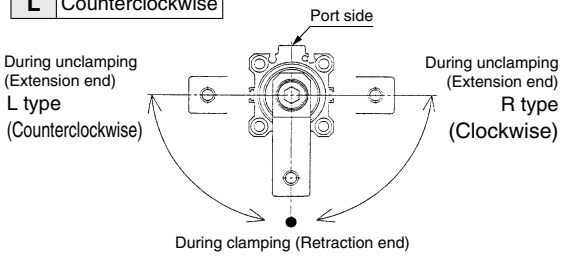
Nil	M thread	ø12 to ø25
	Rc	ø32 to ø63
TN	NPT	
TF	G	

Clamp stroke

Symbol	Clamp stroke	Applicable bore size
10	10 mm	ø12 to ø63
20	20 mm	
30	30 mm	
50	50 mm	ø32 to ø63

Rotary direction (Unclamp → Clamp)

R	Clockwise
L	Counterclockwise



Auto switch multiple side mounting

Auto switch type

Nil	Without auto switch (Built-in magnet)

* **Click here** for details on applicable auto switch models.
* Auto switches are shipped together with the product but do not come assembled.

Number of auto switches

Nil	2
S	1

* The coil scraper is not built-in.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Stopper Cylinder/Fixed Mounting Height

25A-RSQ Series

ø12, ø16, ø20, ø32, ø40, ø50

RoHS



How to Order

Bore size

12	12 mm

Cylinder stroke [mm]

12	10

ø12

25A – RS D Q B 12 – 10 D □ – L – M9BW □

ø16 to ø50

25A – RS D Q B 20 □ – 15 D □ Z – L – M9BW □

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Through-hole
A	Both ends tapped type

* Since ø12 uses a common tube for both A and B, only B is used for part no. denotation.

Bore size

16	16 mm
20	20 mm
32	32 mm
40	40 mm
50	50 mm

Port thread type

Nil	M thread	ø16
	Rc	ø20 to ø50
TN	NPT	
TF*1	G	

*1 TF for ø20 indicates M5.

Cylinder stroke [mm]

16	10, 15
20	10, 15, 20
32	10, 15, 20
40	20, 25, 30
50	20, 25, 30

Action

D	Double acting
B	Double acting with spring loaded
T	Single acting (Spring extend)

Rod end configuration

Nil	Round bar
F*1	Round bar with female rod end
K	Chamfered
G*1	Chamfered with female rod end
R	Roller
L*2	Lever (Fixed absorber type)

*1 F and G are not available for bore size ø12.
*2 L is applicable only to bore sizes ø32, ø40, and ø50.

Mounting bolt

Nil	None
L	Shipped together

* Mounting bolt is shipped together only when the "Mounting" symbol is B.

Auto switch type

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Heavy Duty Stopper Cylinder

RoHS

25A-RSH Series

ø20, ø32



How to Order

25A – RSH 32 □ – 20 D L – M9BW □

Series compatible with secondary batteries

Bore size

20	20 mm
32	32 mm

Port thread type

Nil	M*1
	Rc
TN	NPT
TF	G

*1 The tube I.D. of 20 is only available to port size M screws.

Cylinder stroke

15	15 mm (RSH20)
20	20 mm (RSH32)

Action

D	Double acting type
B	Double acting spring type
T	Single acting/Spring extended

Roller material

L	Resin
M	Carbon steel

Auto switch

Nil	Without auto switch (Built-in magnet)

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

ISO Standard (6432)

ISO Cylinder: Standard
Double Acting, Single Rod
25A-C85 Series
ø8, ø10, ø12, ø16, ø20, ø25

RoHS



How to Order

Double acting, Single rod **25A – C D 85 N 20 – 40 C L – B – M9BW S**

Series compatible with secondary batteries

Built-in magnet

Nil	None
D	Built-in magnet

Head cover type

N	Basic (Integrated clevis)
E	Double end boss-cut
F	Boss-cut/Basic
Y	Head cover axial port

Applicable head cover

Action	Head cover type			
	N	E	F	Y
Rubber bumper	●	●	●	●
Air cushion	●*1	—	—	—

*1 Excluding ø8

Bore size

8	8 mm
10	10 mm
12	12 mm
16	16 mm
20	20 mm
25	25 mm

Cylinder stroke [mm]
Manufacturable stroke range

Bore size [mm]	Manufacturable stroke range [mm]*2, *3, *4
8*1	5 to 200
10	5 to 400
12	
16	
20	5 to 1000
25	

*1 Not available with air cushion.
*2 The minimum stroke with air cushion is 25 mm.
*3 The min. stroke of the type with a magnet varies depending on the switch.
*4 Applicable strokes differ depending on the usage conditions and mounting brackets. For details, refer to the "Stroke Selection" section of the C85 series in the **Web Catalog**.

Cushion

Nil	Rubber bumper (Standard)
C	Air cushion

Mounting bracket*5

Nil	None
L	Single foot
M	Double foot
G	Flange
U	Trunnion
N	Clevis

* Mounting bracket is shipped together with the product.
*5 Refer to Mounting Brackets for details of mounting brackets.

Applicable mounting bracket

Action	Head cover type	Mounting bracket				
		L	M	G	U	N
Rubber bumper	N	●	●	●	●	●
	E	●	●	●	●	—
	F	●	—	●	●	—
	Y	●	—	●	●	—
Air cushion	N*7	●	●	●	●	●

*7 Excluding ø8

Auto switch mounting type*6

B	Band mounting

*6 The symbol is "Nil" for no magnet.

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Mounting Bracket Part Nos. for the 25A- Series

Mounting bracket		Bore size [mm]						Contents
		8	10	12	16	20	25	
Mounting bracket	Rod end nut	C85NT08A-S		C85NT10A-S		C85NT20A-S	C85NT25A-S	1 rod end nut
	Mounting nut	C85NT08B-S		C85NT10B-S		C85NT20B-S		1 mounting nut
	Foot (1 pc.)	25A-C85L10A		25A-C85L16A		25A-C85L25A		1 foot bracket
	Foot (2 pcs. with 1 mounting nut)	25A-C85L10B		25A-C85L16B		25A-C85L25B		2 foot brackets, 1 mounting nut
	Foot (1 pc. with 1 mounting nut)	25A-C85L10C		25A-C85L16C		25A-C85L25C		1 foot bracket, 1 mounting nut
	Flange	25A-C85F10		25A-C85F16		25A-C85F25		1 flange
	Trunnion	C85T10		C85T16		C85T25		1 trunnion
	Clevis	25A-C85C10		25A-C85C16		25A-C85C25		1 clevis pivot bracket, 1 clevis pin, 2 pin retaining rings

Replacement Parts: For Standard Type

Bore size [mm]	Part no.	Note
20	25A-C85A-20PS	Every set includes: 1 rod seal, 1 flat washer, 1 retaining ring
25	25A-C85A-25PS	

* When replacing the seals, use **grease (GR-D-010: ordered separately)** on the sliding parts.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

ISO Standard (15552)

ISO Cylinder: Standard Double Acting, Single Rod

RoHS

25A-CP96 Series

ø32, ø40, ø50, ø63, ø80, ø100, ø125



How to Order

25A-CP96S B 32 - 100 C

With auto switch 25A-CP96SD B 32 - 100 C - M9BW S

Series compatible with secondary batteries

With auto switch (Built-in magnet)

Mounting

B	Basic
L	Axial foot
F	Rod flange
G	Head flange
C	Single clevis
D	Double clevis

* Mounting brackets are shipped together, but not assembled.
* Only the basic type is available for ø125.

Bore size

32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm
125	125 mm

Number of auto switches

Nil	2
S	1
3	3
n	n

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Cylinder stroke [mm]

Bore size [mm]	Standard stroke [mm]	Max. stroke
32	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500	1900
40	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500	1900
50	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600	1900
63	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600	1900
80	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600 700, 800	1900
100	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600 700, 800	1850
125	—	1850

* Aside from the standard strokes, intermediate strokes are also available in 1 mm increments and are produced upon receipt of order.

Cushion

Symbol	Cushion	Bore size [mm]
C	Air cushion on both ends + Bumper cushion	ø32 to ø100
Nil	Air cushion	ø125

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	32	40	50	63	80	100
Foot	25A-L6032	25A-L6040	25A-L6050	25A-L6063	25A-L6080	25A-L6100
Flange	F6032-XC7	F6040-XC7	F6050-XC7	F6063-XC7	F6080-XC7	F6100-XC7
Single clevis	25A-C6032	25A-C6040	25A-C6050	25A-C6063	25A-C6080	25A-C6100
Double clevis	25A-D6032	25A-D6040	25A-D6050	25A-D6063	25A-D6080	25A-D6100

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

ISO Standard (15552)

ISO Cylinder: Standard Double Acting, Single Rod

25A-C96 Series

ø32, ø40, ø50, ø63, ø80, ø100, ø125

RoHS



How to Order

	25A-	C96S		B	32	-	100	C			
With auto switch	25A-	C96SD		B	32	-	100	C	-	M9BW	S

Series compatible with secondary batteries

With auto switch (Built-in magnet)

Mounting

B	Basic
L	Axial foot
F	Rod flange
G	Head flange
C	Single clevis
D	Double clevis
T	Center trunnion

* Mounting brackets are shipped together, but not assembled. (excluding center trunnion type)
* Only the basic type is available for ø125.

Bore size

32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm
125	125 mm

Number of auto switches

Nil	2
S	1
3	3
n	n

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Cushion

Symbol	Cushion	Bore size [mm]
C	Air cushion on both ends + Bumper cushion	ø32 to ø100
Nil	Air cushion	ø125

Cylinder stroke [mm]

Bore size [mm]	Standard stroke [mm]	Max. stroke
32	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500	1000
40	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500	1900
50	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600	1900
63	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600	1900
80	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600 700, 800	1900
100	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600 700, 800	1850
125	—	1850

* Aside from the standard strokes, intermediate strokes are also available in 1 mm increments and are produced upon receipt of order.

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	32	40	50	63	80	100
Foot	25A-L6032	25A-L6040	25A-L6050	25A-L6063	25A-L6080	25A-L6100
Flange	F6032-XC7	F6040-XC7	F6050-XC7	F6063-XC7	F6080-XC7	F6100-XC7
Single clevis	25A-C6032	25A-C6040	25A-C6050	25A-C6063	25A-C6080	25A-C6100
Double clevis	25A-D6032	25A-D6040	25A-D6050	25A-D6063	25A-D6080	25A-D6100

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

ISO/VDMA Cylinder: Large Bore Size Type
Double Acting, Single Rod
25A-C95 Series
ø160, ø200

RoHS

How to Order

Without auto switch 25A-C95S B 200-100

With auto switch 25A-C95S D B 200-100-M9BW

Series compatible with secondary batteries

Built-in magnet

Mounting

B	Basic/without bracket style

Bore size

160	160 mm
200	200 mm

Standard stroke

Bore size (mm)	Max. stroke*1
160	1600
200	1600

*1 Please consult with SMC for longer strokes.
* Intermediate strokes are available.

Auto switch

Nil	Without auto switch

* **Click here** for details on applicable auto switch models.

Number of auto switches

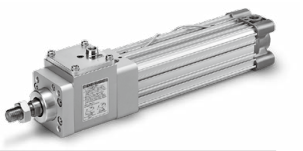
Nil	2
S	1
3	3
n	n

* The 25A- series specifications and dimensions are the same as those of the standard model. **For details, refer to the Web Catalog.**

Cylinder with Lock
Double Acting, Single Rod

RoHS

25A-CP96N Series
ø32, ø40, ø50, ø63, ø80, ø100



How to Order

With auto switch **25A – CP96N D B 32 – 100 C – M9BW S**

Series compatible with secondary

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

Symbol	Description
B	Basic
L	Axial foot
F	Rod flange
G	Head flange
C	Single clevis
D	Double clevis

* Mounting brackets are shipped together with the product but do not come assembled.

Bore size

32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

Air cushion on both ends + Bumper cushion

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
3	3
n	n

Cylinder stroke [mm]

Bore size	Standard stroke	
	Stroke range ①	Stroke range ②
32	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500	Up to 1900
40	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500	Up to 1900
50	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600	Up to 1900
63	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600	Up to 1900
80	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600, 700, 800	Up to 1900
100	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600, 700, 800	Up to 1850

Mounting Brackets/Part Nos.

Bore size [mm]	32	40	50	63	80	100
Foot	25A-L6032	25A-L6040	25A-L6050	25A-L6063	25A-L6080	25A-L6100
Flange	F6032-XC7	F6040-XC7	F6050-XC7	F6063-XC7	F6080-XC7	F6100-XC7
Single clevis	25A-C6032	25A-C6040	25A-C6050	25A-C6063	25A-C6080	25A-C6100
Double clevis	25A-D6032	25A-D6040	25A-D6050	25A-D6063	25A-D6080	25A-D6100

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Cylinder with Lock
Double Acting, Single Rod

RoHS

25A-C96N Series
ø32, ø40, ø50, ø63, ø80, ø100



How to Order

With auto switch **25A – C96N D B 32 – 100 C – M9BW S**

Series compatible with secondary

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

Symbol	Description	Single rod	Double rod
B	Basic	○	○
L	Axial foot	○	○
F	Rod flange	○	○
G	Head flange	○	○
C	Single clevis	○	—
D	Double clevis	○	—
T	Center trunnion	○	○

* Mounting brackets other than center trunnion type are shipped together with the product but do not come assembled.
* The single clevis with ball joint should be ordered separately.

Bore size

32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

Air cushion on both ends + Bumper cushion

Auto switch

Nil	Without auto switch

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
3	3
n	n

Cylinder stroke [mm]

Bore size	Standard stroke	
	Stroke range ①	Stroke range ②
32	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500	Up to 1000
40	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500	Up to 1900
50	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600	Up to 1900
63	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600	Up to 1900
80	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600, 700, 800	Up to 1900
100	25, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500, 600, 700, 800	Up to 1850

Mounting Brackets/Part Nos.

Bore size [mm]	32	40	50	63	80	100
Foot	25A-L6032	25A-L6040	25A-L6050	25A-L6063	25A-L6080	25A-L6100
Flange	F6032-XC7	F6040-XC7	F6050-XC7	F6063-XC7	F6080-XC7	F6100-XC7
Single clevis	25A-C6032	25A-C6040	25A-C6050	25A-C6063	25A-C6080	25A-C6100
Double clevis	25A-D6032	25A-D6040	25A-D6050	25A-D6063	25A-D6080	25A-D6100

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

ISO Standard (21287)

Compact Cylinder: Double Acting, Single Rod

RoHS

25A-C55 Series

ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100



How to Order

25A – C D 55 B 20 – 10 D C □ Z – M9BW □

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Through-hole/Both ends tapped common (Standard)
L	Foot
F	Rod flange
G	Head flange
C	Single clevis

* Mounting brackets are shipped together with the product but do not come assembled.
* For mounting bracket option "B" with through-holes, a mounting bolt is not included.

Bore size

20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

Cylinder stroke [mm]

20 to 63	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 80, 100, 125, 150, 175, 200, 250, 300
80, 100	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 80, 100, 125, 150, 175, 200, 250, 300

Action

D	Double acting

Cushion

C	Rubber bumper

Rod end thread

Nil	Standard (Rod end female thread)
M	Rod end male thread

Auto switch

Nil	Without auto switch (Built-in magnet cylinder)

* Click here for details on applicable auto switch models.
* Auto switches are shipped together, but not assembled.

Number of auto switches

Nil	2
S	1
n	n

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Flange	Single clevis
20	25A-C55-L020	25A-C55-F020	25A-C55-C020
25	25A-C55-L025	25A-C55-F025	25A-C55-C025
32	25A-C55-L032	25A-C55-F032	25A-C55-C032
40	25A-C55-L040	25A-C55-F040	25A-C55-C040
50	25A-C55-L050	25A-C55-F050	25A-C55-C050
63	25A-C55-L063	25A-C55-F063	25A-C55-C063
80	25A-C55-L080	25A-C55-F080	25A-C55-C080
100	25A-C55-L100	25A-C55-F100	25A-C55-C100

*1 Foot bracket part number contains two foot brackets
* Mounting bolts are also included with bracket.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

ISO Standard (21287)

Compact Cylinder: Double Acting, Single Rod

RoHS

25A-C55 Series

ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100



How to Order

25A- C D 55 B 20 - 10 - M9BW

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Through-hole/Both ends tapped common (Standard)
L	Foot
F	Rod flange
G	Head flange
C	Single clevis

* Mounting brackets are shipped together with the product but do not come assembled.
* For mounting bracket option "B" with through-holes, a mounting bolt is not included.

Bore size

20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

Cylinder stroke [mm]

20 to 63	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 80, 100, 125, 150
80, 100	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 80, 100, 125

Rod end thread

Nil	Female rod end
M	Male rod end

* A rubber bumper comes as standard.

Auto switch

Nil	Without auto switch (Built-in magnet cylinder)

* **Click here** for details on applicable auto switch models.
* Auto switches are shipped together, but not assembled.

Number of auto switches

Nil	2
S	1
n	n

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) 25A-CD55L32-25

Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Flange	Single clevis*2
20	25A-C55-L020	25A-C55-F020	25A-C55-C020
25	25A-C55-L025	25A-C55-F025	25A-C55-C025
32	25A-C55-L032	25A-C55-F032	—
40	25A-C55-L040	25A-C55-F040	—
50	25A-C55-L050	25A-C55-F050	—
63	25A-C55-L063	25A-C55-F063	—
80	25A-C55-L080	25A-C55-F080	—
100	25A-C55-L100	25A-C55-F100	—

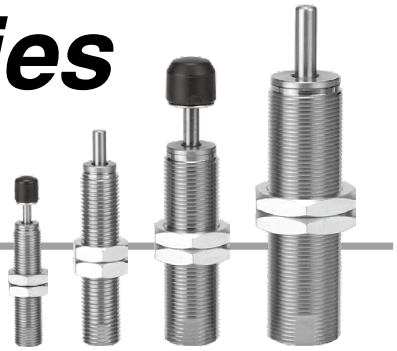
*1 Foot bracket part number contains two foot brackets
*2 The single clevis is only applicable to bore sizes ø20 and ø25.
* Mounting bolts are also included with bracket.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Shock Absorber
Soft Type
25A-RJ Series

RoHS



How to Order

O.D. thread size/Stroke

Symbol	O.D. thread	Stroke
0604	6 mm	4 mm

Option

Symbol	Hexagon nut
Nil	2 pcs.
N	—

25A – RJ 0604 □

25A – RJ 0806 H U □

Series compatible with secondary batteries

Shock absorber/Soft type

O.D. thread size/Stroke

Symbol	O.D. thread	Stroke
0806	8 mm	6 mm
1007	10 mm	7 mm
1412	14 mm	12 mm
2015	20 mm	15 mm
2725	27 mm	25 mm

Collision speed range

H	0.05 to 2 m/s
L	0.05 to 1 m/s

∗ RJ0604: 0.05 to 1.0 m/s
∗ RJ2725H: 0.05 to 1.5 m/s

With cap

Nil	Basic type
U	With urethane cap

Option

Symbol	Hexagon nut	Stopper nut
Nil	2 pcs.	—
J	3 pcs.	—
N	—	—
S	2 pcs.	1 pc.
SJ	3 pcs.	1 pc.
SN	—	1 pc.

Hexagon Nut, Stopper Nut (Option) Part Nos. for the 25A- Series

		Thread size					
		M6	**M8**	**M10**	**M14**	**M20**	**M27**
Hexagon nut		25A-RJ06J	25-RB08J	25-RB10J	25-RB14J	25-RB20J	25-RB27J
Stopper nut	Basic type	—	25-RB08S	25-RB10S	25-RB14S	25-RB20S	25-RB27S
	With cap		25-RBC08S	25-RBC10S	25-RBC14S	25-RBC20S	25-RBC27S

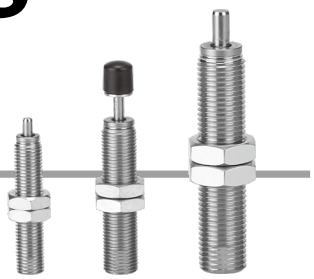
Material: Special steel
Treatment: Electroless nickel plating

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Shock Absorber
Short Stroke Type
25A-RJ Series

RoHS



How to Order

Short stroke type **25A – RJ 0805 U**

Series compatible with secondary batteries

Shock absorber/Soft type

O.D. thread size/Stroke

Symbol	O.D. thread	Stroke
0805	8 mm	5 mm
1006	10 mm	6 mm
1410	14 mm	10 mm

With cap

Nil	Basic type
U	With urethane cap

Option

Symbol	Hexagon nut	Stopper nut
Nil	2 pcs.	—
J	3 pcs.	—
N	—	—
S	2 pcs.	1 pc.
SJ	3 pcs.	1 pc.
SN	—	1 pc.

Hexagon Nut, Stopper Nut (Option) Part Nos. for the 25A- Series

		Thread size		
		M8	**M10**	**M14**
Hexagon nut		25-RB08J	25-RB10J	25-RB14J
Stopper nut	Basic type	25-RB08S	25-RB10S	25-RB14S
	With cap	25-RBC08S	25-RBC10S	25-RBC14S

Material: Special steel
Treatment: Electroless nickel plating

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Shock Absorber

RoHS

25A-RB/RBC Series



How to Order

25A – RB C 14 12 □

Series compatible with secondary batteries

Shock absorber

Type

Nil	Basic type
C	With cap

Option

Symbol	Hexagon nut	Stopper nut
Nil	2 pcs.	—
J	3 pcs.	—
N	—	—
S	2 pcs.	1 pc.
SJ	3 pcs.	1 pc.
SN	—	1 pc.

O.D. thread size/Stroke

Symbol	O.D. thread size	Stroke	Symbol	O.D. thread size	Stroke
0805	8 mm	5 mm	**1411**	14 mm	11 mm
0806	8 mm	6 mm	**1412**	14 mm	12 mm
1006	10 mm	6 mm	**2015**	20 mm	15 mm
1007	10 mm	7 mm	**2725**	27 mm	25 mm

Hexagon Nut, Stopper Nut (Option) Part Nos. for the 25A- Series

		Thread size				
		M8	**M10**	**M14**	**M20**	**M27**
Hexagon nut		25-RB08J	25-RB10J	25-RB14J	25-RB20J	25-RB27J
Stopper nut	Basic type	25-RB08S	25-RB10S	25-RB14S	25-RB20S	25-RB27S
	With cap	25-RBC08S	25-RBC10S	25-RBC14S	25-RBC20S	25-RBC27S

Material: Special steel
Treatment: Electroless nickel plating

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Floating Joint
25A-J□ Series

RoHS



How to Order

Stainless steel type **25A – J S 32 – 10-125 □**

Series compatible with secondary batteries

Stainless steel type

Applicable bore size [mm]

Symbol	Applicable bore size [mm]
10	10
16	10, 16
20	20
32	25, 32
40	40
63	50, 63

Thread nominal size

Nominal thread size	Applicable cylinder nominal thread size
4-070	M4 x 0.7
5-080	M5 x 0.8
8-125	M8 x 1.25
10-125	M10 x 1.25
14-150	M14 x 1.5
18-150	M18 x 1.5

Material of dust cover

Symbol	Material
Nil	Fluororubber (FKM)
S	Silicone rubber (Si)

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.



How to Order

Standard type **25A – JA 80 – 22-150**

Series compatible with secondary batteries

Applicable bore size [mm]

Model	Symbol	Applicable bore size [mm]
Standard	**80**	80
	100	100

∗ For ø63 or less, please consider using the stainless steel type 25A-JS series.

Thread nominal size (Standard)

Nominal thread size	Applicable cylinder nominal thread size
22-150	M22 x 1.5
26-150	M26 x 1.5

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.



How to Order

For compact cylinders **25A – J B 40 – 8-125**

Series compatible with secondary batteries

For compact cylinders/Female thread

Applicable bore size [mm]

Symbol	Applicable bore size [mm]
12	12
16	16
20	20
25	25
40	32, 40
63	50, 63
80	80
100	100

Thread nominal size

Nominal thread size	Applicable cylinder nominal thread size
3-050	M3 x 0.5
4-070	M4 x 0.7
5-080	M5 x 0.8
6-100	M6 x 1
8-125	M8 x 1.25
10-150	M10 x 1.5
16-200	M16 x 2
20-250	M20 x 2.5

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Rotary Table: Vane Type

25A-MSUB Series

Size: 1, 3, 7, 20

RoHS



How to Order

Connection port location

Nil	Side ported
E	Axial ported

Available with side ported only, when equipped with auto switch unit.

Without auto switch 25A– M SUB 20 – 90 S ☐

With auto switch 25A– M D SUB 20 – 90 S – T79 L ☐

Series compatible with secondary batteries

With auto switch (Built-in magnet)

Nominal size (Torque)

1	MSUB 1
3	MSUB 3
7	MSUB 7
20	MSUB20

Rotating angle

Application	Symbol	Rotating angle
Single vane	**90**	90°
	180	180°
Double vane	**90**	90°

Rotation adjustment range
Single vane: Both ends ±5° each
Double vane: Both ends ±2.5° each

Vane type

S	Single vane
D	Double vane

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

Electrical entry/ Lead wire length

Nil	Grommet/Lead wire: 0.5 m
L	Grommet/Lead wire: 3 m

Number of auto switches

S	1∗1
Nil	2∗2

∗1 S (1 auto switch) is shipped with a right-hand auto switch.
∗2 Nil (2 auto switches) is shipped with a right-hand and a left-hand switch.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.
∗ Zinc is used in part of deep groove ball bearing.

For details, refer to the Web Catalog.

Rotary Table/Rack & Pinion Type
25A-MSQ Series
Size: 10, 20, 30, 50



How to Order

25A-MSQ 10 A-M9BW □ □-□

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻

❶ Size

10
20
30
50

❷ Cushion type

A	Cushion pad
D	Bumper
R	Internal shock absorber

❸ Auto switch

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

❹ Number of auto switches

Nil	2
s	1
n	n

❺ Port type

End port type		Size
Nil	M5	10, 20
Nil	Rc1/8	30, 50
-XF	G1/8	
-XN	NPT1/8	
-XT	NPTF1/8	

❻ Made to order

Nil	None
A	With interchangeable table and plate
B	With interchangeable table
C	With interchangeable plate

∗ Some parts have dimensions and shapes that are different from those of the standard model. Refer to page 176 for details. Other specifications are the same as those of the standard model.

∗ Zinc is used in part of deep groove ball bearing and seal washer.

For details, refer to the Web Catalog.

25A-MSQ 10 A-M9BW □ □-□-X251

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻

With vacuum port

❶ Size

10
20
30
50

❷ Cushion type

A	Cushion pad
D	Bumper
R	Internal shock absorber

❸ Auto switch

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

❹ Number of auto switches

Nil	2
s	1
n	n

❺ Port type

End port type		Size
Nil	M5	10, 20
Nil	Rc1/8	30, 50
-XF	G1/8	
-XN	NPT1/8	
-XT	NPTF1/8	

❻ Made to order

Nil	None
B	With interchangeable table

∗ Zinc is used in part of deep groove ball bearing and seal washer.

∗ Some parts have dimensions and shapes that are different from those of the standard model. Refer to page 176 for details. Other specifications are the same as those of the standard model.

For details, refer to the Web Catalog.

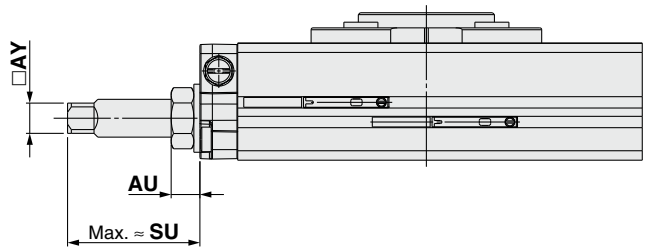
Internal Shock Absorber Part Nos. for the 25A- Series

Size	Part no.
10	25A-RBA0805-X692
20	25A-RBA1006-X692
30	
50	25A-RBA1411-X692

∗ The part number is the same for the 25A-MSQ-X251.

Dimensions

Basic type
25A-MSQ□A



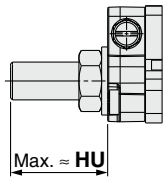
[mm]

Size	AU	AY	FU	HU	SU
10	6.5	6	32	18	24
20	7.5	8	36	26	34
30	7.5	8	34	24	32
50	10	10	54	34	45.5

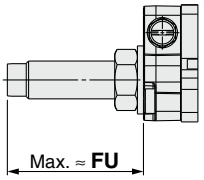
∗ Dimensions other than those shown above are identical to the standard products.

For details, refer to the Web Catalog.

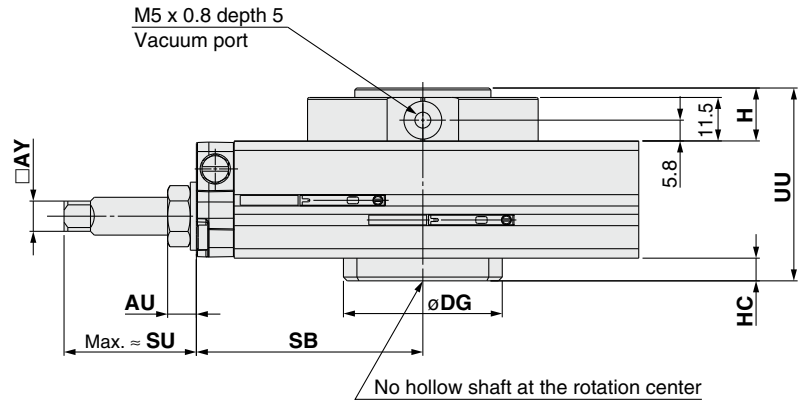
Bumper
25A-MSQ□D



Internal shock absorber
25A-MSQ□R



With vacuum port
25A-MSQ□A-X251



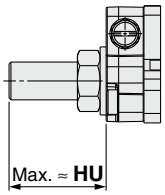
[mm]

Size	AU	AY	DG	FU	H	HC	HU	SB	SU	UU
10	6.5	6	35h9	32	14.2	5	18	47.2	24	48.7
20	7.5	8	42h9	36	14	6	26	59.9	34	51
30	7.5	8	48h9	34	14	6	24	65.3	32	58
50	10	10	54h9	54	14	7	34	77.7	45.5	64

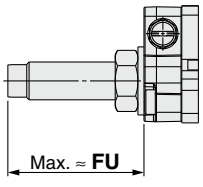
∗ Dimensions other than those shown above are identical to the standard products.
∗ The product with the vacuum port has no hollow shaft at its rotation center.

For details, refer to the Web Catalog.

Bumper
25A-MSQ□D-X251



Internal shock absorber
25A-MSQ□R-X251



MSQ Series
Made to Order

Please contact SMC for detailed dimensions, specifications, and delivery times.

Made to Order

Symbol

1 With Interchangeable Table and Plate — -A, -B, -C

Applicable Rotary Table

Model	Made to order			Note
	With interchangeable table and plate	With interchangeable table	With interchangeable plate	
25A-MSQ	○	○	○	
25A-MSQ□-B-X251	—	○	—	

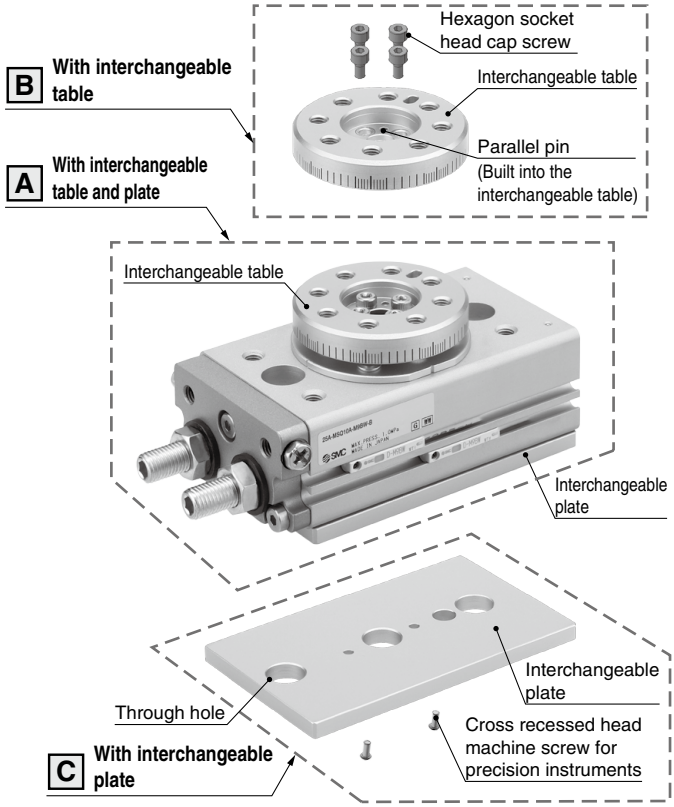
How to Order

Standard model no. – **A**

Made to order

A	With interchangeable table and plate
B	With interchangeable table
C	With interchangeable plate

* The interchangeable table and plate can be ordered separately. For details, refer to the tables below.
* The interchangeable table and plate are assembled before shipment.



Part Nos. of Interchangeable Parts

Interchangeable A Unit (With Interchangeable Table and Plate)

Size	Part no.	Contents
		Description (Qty.)
10	P891010-53	· Interchangeable table (1) · Parallel pin (1) · Hexagon socket head cap screw (4) · Interchangeable plate (1) · Cross recessed head machine screw for precision instruments (2)
20	P891020-53	
30	P891030-53	
50	P891040-53	

Interchangeable B Unit (With Interchangeable Table)

Size	Part no.	Contents
		Description (Qty.)
10	P891010-54	· Interchangeable table (1) · Parallel pin (1) · Hexagon socket head cap screw (4)
20	P891020-54	
30	P891030-54	
50	P891040-54	

Interchangeable C Unit (With Interchangeable Plate)

Size	Part no.	Contents
		Description (Qty.)
10	P891010-55	· Interchangeable plate (1) · Cross recessed head machine screw for precision instruments (2)
20	P891020-55	
30	P891030-55	
50	P891040-55	

* To position the product, use the knock pin holes on the body instead of the through holes that are empty in the interchangeable plate.

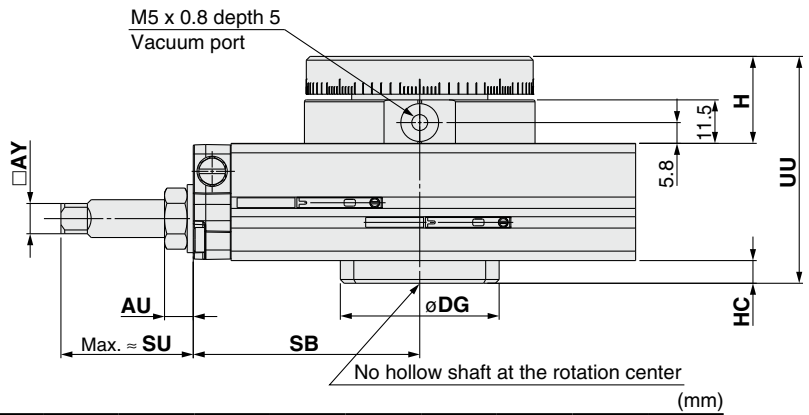
Dimensions: The dimensions of the 25A-MSQ are the same as those of the standard product.
Refer below for the dimensions of the 25A-MSQ□-B-X251 with a vacuum port.

* Refer to the **Web Catalog** for the tightening torque of the interchangeable parts.

Dimensions

* Mounting diagram of the interchangeable table
Dimensions other than those shown below are the same as those of the basic type. Refer to the **Web Catalog** for details.

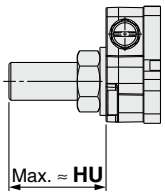
With vacuum port/With interchangeable table
25A-MSQ□A-B-X251



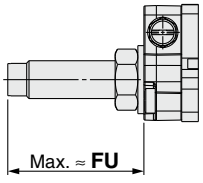
(mm)

Size	AU	AY	DG	FU	H	HC	HU	SB	SU	UU
10	6.5	6	35h9	32	21	5	18	47.2	24	55.7
20	7.5	8	42h9	36	23	6	26	59.9	34	60
30	7.5	8	48h9	34	23	6	24	65.3	32	67
50	10	10	54h9	54	26	7	34	77.7	45.5	75.5

Bumper
25A-MSQ□D-B-X251



Internal shock absorber
25A-MSQ□R-B-X251



* Dimensions other than those shown above are identical to the standard products.
* The product with the vacuum port has no hollow shaft at its rotation center.

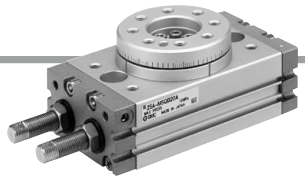
SMC

Rotary Table/Rack & Pinion Type

25A-MSQ Series

Size: 10, 20, 30, 50, 70, 100, 200

RoHS



How to Order

Size

10
20
30
50

High precision type: 25A-MSQ A 10 A-M9BW □ □

Basic type: 25A-MSQ B 10 A-M9BW □ □

Series compatible with secondary batteries

Size

10
20
30
50
70
100
200*1

A	With adjustment bolt

Auto switch

Nil	Without auto switch (Built-in magnet)

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

Port type

End port type		Size
Nil	M5	10, 20
Nil	Rc1/8	30, 50, 70, 100, 200
-XF	G1/8	
-XN	NPT1/8	
-XT	NPTF1/8	

*1 Size 200 is produced upon receipt of order.
* Zinc is used in part of deep groove ball bearing and seal washer.
* Side port cannot be used.

* Some parts have dimensions and shapes that are different from those of the standard model. Refer to page 179 for details. Other specifications are the same as those of the standard model.

For details, refer to the Web Catalog.

With Vacuum Port

Size

10
20
30
50

(Made to order)

High precision type: 25A-MSQ A 10 A X-M9BW □-X251

Basic type: 25A-MSQ B 10 A X-M9BW □-X251

Series compatible with secondary batteries

Size

10
20
30
50
70
100
200*1

A	With adjustment bolt

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch (Built-in magnet)

* Click here for details on applicable auto switch models.

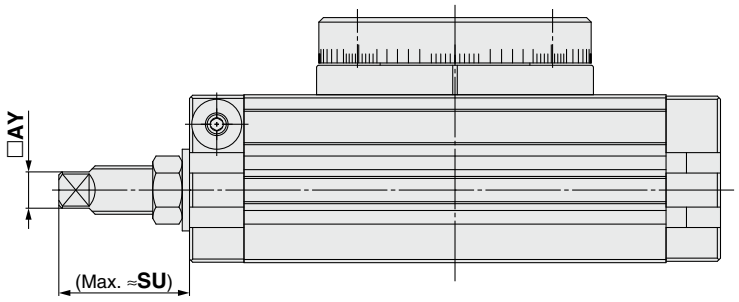
* Some parts have dimensions and shapes that are different from those of the standard model. Refer to page 179 for details. Other specifications are the same as those of the standard model.

For details, refer to the Web Catalog.

*1 Size 200 is produced upon receipt of order.
* Zinc is used in part of deep groove ball bearing and seal washer.
* Side port cannot be used.

Dimensions

25A-MSQB□A



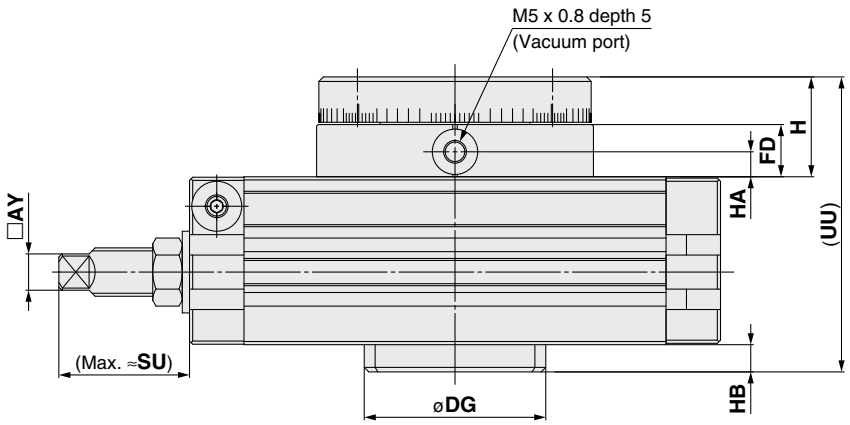
[mm]

Size	AY	SU
10	6	23.7
20	8	33
30	8	33
50	10	42.9
70	16	44.2
100	16	44.3
200	21	52.2

∗ Dimensions other than those shown above are identical to the standard products.

For details, refer to the Web Catalog.

25A-MSQB□AX-X251



[mm]

Size	AY	DG	FD	H	HA	HB	SU	UU
10	6	35h9	11.5	20	5.5	5	23.7	59
20	8	40h9	11.5	22	5.5	6	33	65
30	8	48h9	11.5	22	5.5	6	33	68
50	10	54h9	11.5	24	5.5	7	42.9	77
70	16	50h9	12	25	6	7	44.2	85
100	16	52h9	12	27	6	7	44.3	93
200	21	64h9	15	32	7.5	8	52.2	114

∗ The product with the vacuum port has no hollow shaft at its rotation center.
∗ Dimensions other than those shown above are identical to the standard products.

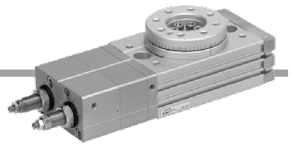
For details, refer to the Web Catalog.

3-Position Rotary Table

25A-MSZ Series

Size: 10, 20, 30, 50

RoHS



How to Order

High precision type 25A-MSZA 10 A-M9BW

Basic type 25A-MSZB 10 A-M9BW

Series compatible with secondary batteries

Size

10
20
30
50

A	With adjustment bolt

* Zinc is used in part of deep groove ball bearing and seal washer.

Auto switch

Nil	Without auto switch (Built-in magnet)

* **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
n	n

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Compact Type Parallel Style Air Gripper

25A-JMHZ2 Series

RoHS

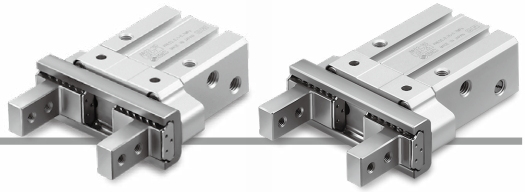
Compact Type Parallel Style Air Gripper/With Positioning Pins on the Lateral Mounting Surface

25A-JMHZ2-X6900(A, B) (Made to Order)

Compact Type Parallel Style Air Gripper/Lateral Auto Switch Mounting

25A-JMHZ2-X7460 (Made to Order)

ø8, ø12, ø16, ø20



How to Order

Bore Size

ø8 to ø20

25A – JMHZ2 – ❶ ❷ ❸ ❹ – ❺ ❻

Series compatible with secondary batteries

❶ Number of fingers

2	2

❷ Bore size

8	8 mm
12	12 mm
16	16 mm
20	20 mm

❸ Action

D	Double acting

❹ Finger option

Nil	Standard
1	Side tapped mounting
2	Through-holes in opening/ closing direction

❺ Auto switch

Nil	Without auto switch (Built-in magnet)

∗ Click here for details on applicable auto switch models.

❻ Number of auto switches

Nil	2
S	1
n	n

∗ The 25A- series specifications and dimensions are the same as those of the standard model. **For details, refer to the Web Catalog.**

Bore Size

ø8 to ø20 Made to Order

25A – JMHZ2 – ❶ ❷ ❸ ❹ – ❺ ❻ – X6900 ❼

Series compatible with secondary batteries

With positioning pins on the lateral mounting surface

❶ Number of fingers

2	2

❷ Bore size

8	8 mm
12	12 mm
16	16 mm
20	20 mm

❸ Action

D	Double acting

❹ Finger option

Nil	Standard
1	Side tapped mounting
2	Through-holes in opening/ closing direction

❺ Auto switch

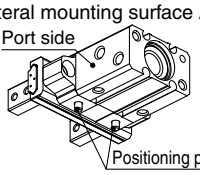
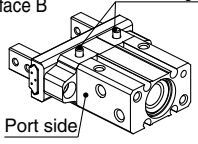
Nil	Without auto switch (Built-in magnet)

∗ Click here for details on applicable auto switch models.

❻ Number of auto switches

Nil	2
S	1
n	n

❼ Direction of pin projection

A	Lateral mounting surface A Port side  Positioning pins
B	Lateral mounting surface B Positioning pins  Port side

∗ The 25A- series have the same specifications and dimensions as those of the JMHZ2-X6900(A, B) (made-to-order individual specifications). **For details, refer to the Web Catalog.**

Bore Size

ø8 to ø20 Made to Order

25A – JMHZ2 – ❶ ❷ ❸ ❹ – ❺ ❻ – X7460

Series compatible with secondary batteries

Lateral auto switch mounting

❶ Number of fingers

2	2

❷ Bore size

8	8 mm
12	12 mm
16	16 mm
20	20 mm

❸ Action

D	Double acting

❹ Finger option

Nil	Standard
1	Side tapped mounting
2	Through-holes in opening/ closing direction

❺ Auto switch

Nil	Without auto switch (Built-in magnet)

∗ Click here for details on applicable auto switch models.

❻ Number of auto switches

Nil	2
S	1

∗ The 25A- series have the same specifications and dimensions as those of the JMHZ2-X7460 (made-to-order individual specifications). **For details, refer to the Web Catalog.**

Parallel Type Air Gripper
Standard Type
25A-MHZ2 Series
ø10, ø16, ø20, ø25, ø32, ø40

RoHS



How to Order

Bore size
ø16 to ø25

25A-MHZ2-16D □-M9BW□

Series compatible with secondary batteries

Number of fingers

2	2 fingers

Bore size

10	10 mm
16	16 mm
20	20 mm
25	25 mm

Action

D	Double acting

Number of auto switches

Nil	2
S	1
n	n

Auto switch

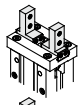
Nil	Without auto switch (Built-in magnet)

* Click here for details on applicable auto switch models.

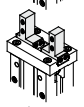
Finger position/option

Standard (MHQG2 compatible type)

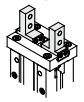
Nil: Basic type



1: Side tapped mounting

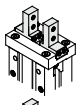


2: Through-holes in opening/ closing direction

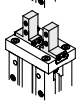


Narrow type (MHQ2 compatible type)

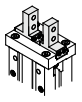
N: Basic type



N1: Side tapped mounting



N2: Through-holes in opening/ closing direction



3: Flat type fingers
The flat type fingers do not have standard and narrow options.



Bore size
ø32, ø40

25A-MHZ2-32D □-M9BW□

Series compatible with secondary batteries

Number of fingers

2	2 fingers

Bore size

32	32 mm
40	40 mm

Action

D	Double acting

Number of auto switches

Nil	2
S	1
n	n

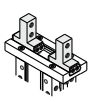
Auto switch

Nil	Without auto switch (Built-in magnet)

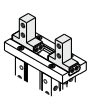
* Click here for details on applicable auto switch models.

Finger option

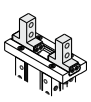
[Standard]
Nil: Basic type



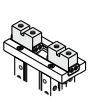
1: Side tapped mounting



2: Through-holes in opening/ closing direction



3: Flat type fingers



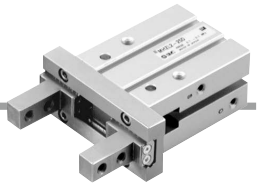
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Parallel Type Air Gripper
Long Stroke Type
25A-MHZL2 Series

RoHS

ø10, ø16, ø20, ø25



How to Order

25A – MHZL2 – 16 D □ – M9BW □

Series compatible with secondary batteries

Number of fingers

2	2 fingers

Bore size

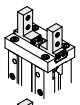
Symbol	Bore size [mm]
10	10 mm
16	16 mm
20	20 mm
25	25 mm

Action

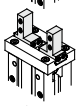
D	Double acting

Finger option

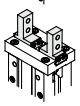
Nil: Basic type



1: Side tapped mounting



2: Through-holes in opening/closing direction



3: Flat type fingers



Auto switch

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Parallel Type Air Gripper with Dust Cover

25A-MHZJ2 Series

RoHS

25A-MHZJ2-X6100 (Made to Order)

Parallel Type Air Gripper with Dust Cover: Long Stroke Type

25A-MHZL2-X5955 (Made to Order)



How to Order

With Dust Cover

Bore size

10	10 mm
16	16 mm
20	20 mm
25	25 mm

ø10 to ø25 25A – MHZJ 2 – 16 D □ – M9BW □

ø32, ø40 Made to Order 25A – MHZJ 2 – 32 D □ – M9BW □ – X6100

Series compatible with secondary batteries

Number of fingers

2	2 fingers

Bore size

32	32 mm
40	40 mm

Action

D	Double acting

Dust cover type

Nil	Chloroprene rubber (CR)
F	Fluororubber (FKM)
S	Silicone rubber (Si)

With dust cover

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

∗ Sizes ø10 to ø25 of the 25A- series have the same specifications and dimensions as those of the standard model.

For details, refer to the Web Catalog.

∗ Sizes ø32 and ø40 of the 25A- series have the same specifications and dimensions as those of the MHZJ2-X6100 (made-to-order individual specifications).

For details, refer to the Web Catalog.

Long Stroke Type/ With Dust Cover (Made to Order)

ø10 to ø20 25A – MHZL 2 – 16 D □ – M9BW □ – X5955

Series compatible with secondary batteries

Number of fingers

2	2 fingers

Bore size/Stroke

Symbol	Bore size [mm]
10	10 mm
16	16 mm
20	20 mm

Action

D	Double acting

Dust cover type

Nil	Chloroprene rubber (CR)
F	Fluororubber (FKM)
S	Silicone rubber (Si)

Long stroke type/ With dust cover

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

∗ The 25A- specifications and dimensions are the same as those of the MHZL2-X6110 (made to order individual specifications).

For details, refer to the Web Catalog.

Low Profile Air Gripper

25A-MHF2 Series

ø8, ø12, ø16, ø20, ø25, ø32

RoHS



How to Order

25A—MHF 2 — 12 □ D □ □ — M9BW □

Number of fingers

2	2 fingers

Series compatible with secondary batteries

Bore size [mm]

8	8
12	12
16	16
20	20
25	25
32	32

Port thread type

Symbol	Type	Bore size
Nil	M thread	ø8 to ø25
	Rc	ø32
TN	NPT	
TF	G	

Action

D	Double acting

Stroke

Nil	Short stroke
1	Medium stroke
2	Long stroke

Number of auto switches

Nil	2
S	1
n	n

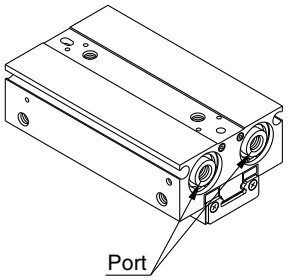
Auto switch

Nil	Without auto switch (Built-in magnet)

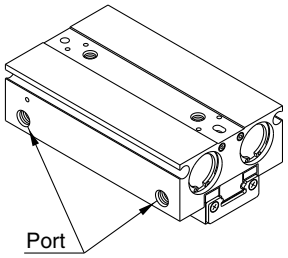
∗ **Click here** for details on applicable auto switch models.

Body option

Nil: Axial piping type



R: Side piping type



∗ The 25A- series specifications and dimensions are the same as those of the standard model.

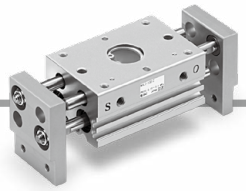
For details, refer to the Web Catalog.

Parallel Type Air Gripper: Wide Type

25A-MHL2 Series

ø10, ø16, ø20, ø25, ø32, ø40

RoHS



How to Order

25A-MHL2-20D□Z-M9BW□

Series compatible with secondary batteries

Wide opening

Number of fingers

2	2 fingers

Bore size

10	10 mm
16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm

Action

D	Double acting

Opening/Closing stroke [mm]

Symbol	ø10	ø16	ø20	ø25	ø32	ø40
Nil	20	30	40	50	70	100
1	40	60	80	100	120	160
2	60	80	100	120	160	200

Auto switch

Nil	Without auto switch (Built-in magnet)

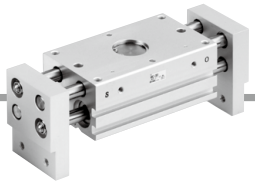
* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.



How to Order

25A-MHL2-20D□-M9BW□

Series compatible with secondary batteries

Wide opening

Number of fingers

2	2 fingers

Bore size

10	10 mm
16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm

Action

D	Double acting

Opening/Closing stroke [mm]

Symbol	ø10	ø16	ø20	ø25	ø32	ø40
Nil	20	30	40	50	70	100
1	40	60	80	100	120	160
2	60	80	100	120	160	200

Auto switch

Nil	Without auto switch (Built-in magnet)

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

* The 25A- series specifications and dimensions are the same as those of the standard model.

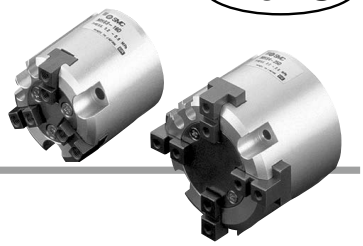
For details, refer to the Web Catalog.

Parallel Type Air Gripper

25A-MHS□ Series

ø16, ø20, ø25, ø32

RoHS



How to Order

25A – MHS [3] – [20] [D] – [M9BW] [ ]

Series compatible with secondary batteries

Number of fingers

3	3 fingers
4	4 fingers

Bore size

16	16 mm
20	20 mm
25	25 mm
32	32 mm

Action

D	Double acting

Auto switch

Nil	Without auto switch (Built-in magnet)

∗ **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Parallel Type Air Gripper
3-Finger Type with Dust Cover
25A-MHSJ3 Series
ø16, ø20, ø25, ø32

RoHS



How to Order

25A – MHSJ 3 – 20 D □ – M9BW □

Series compatible with secondary batteries

With dust cover

Number of fingers

3	3 fingers

Bore size

16	16 mm
20	20 mm
25	25 mm
32	32 mm

Action

D	Double acting

Dust cover type

Nil	Chloroprene rubber (CR)
F	Fluororubber (FKM)
S	Silicon rubber (Si)

Auto switch

Nil	Without auto switch (Built-in magnet)

* **Click here** for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

180° Angular Type Air Gripper Cam Type

25A-MHY2 Series

ø10, ø16, ø20, ø25

RoHS



How to Order

25A – MHY 2 – 16 D 2 – M9BW □

Series compatible with secondary batteries

Number of fingers

2	2 fingers

Bore size

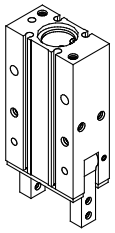
10	10 mm
16	16 mm
20	20 mm
25	25 mm

Action

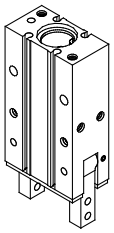
D	Double acting

Finger option

Nil: Standard tapped mounting



2: Through-holes in opening/closing direction



Auto switch

Nil	Without auto switch (Built-in magnet)

* Click here for details on applicable auto switch models.

Number of auto switches

Nil	2
S	1
n	n

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

180° Angular Type Air Gripper
Rack & Pinion Type

RoHS

25A-MHW2 Series
ø20, ø25, ø32, ø40, ø50



How to Order

25A – MHW2 – 20 ☐ D 1 – M9BW ☐

Series compatible with secondary batteries

Number of fingers

2	2 fingers

Bore size

20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm

Port thread type

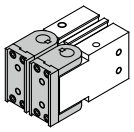
Symbol	Type	Size
Nil	M thread	ø20, ø25
	Rc	ø32
TN	NPT	ø40
TF	G	ø50

Action

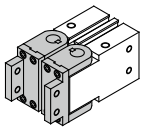
D	Double acting

Finger option

Nil: Flat type fingers (Standard)



1: Right angle type fingers tapped mounting



Number of auto switches

Nil	2
S	1
N	n

Auto switch

Nil	Without auto switch (Built-in magnet)

* **Click here** for details on applicable auto switch models.

* Change of material and surface treatment are not available for the bearing or the parallel key.
* As metal-to-metal collision occurs when the fingers are fully closed, dust particles may be generated.

* The 25A- series specifications and dimensions are the same as those of the standard model.

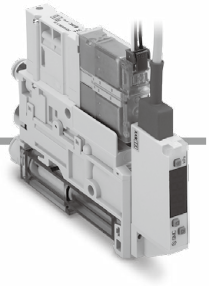
For details, refer to the Web Catalog.

Ejector System **Vacuum Unit**

25A-ZK2□A Series

RoHS

Single Unit Ejector + **With** Valve + **Without** Energy Saving Function



How to Order

25A-ZK2 A 12 K 5 A L A – 08 – □

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

❶ Body/Exhaust type

Symbol	Body	Exhaust type
A	Single unit	Silencer exhaust*1 / Silencer exhaust
B		Port exhaust / Port exhaust
G		High-noise reduction silencer exhaust / High-noise reduction silencer exhaust

*1 With exhaust port when ❷ is 12 or 15

❹ Rated voltage (Supply valve/Release valve)

Symbol	Voltage
5	24 VDC
6	12 VDC

❺ Pressure switch for vacuum/Pressure sensor

Symbol	Type	Pressure range [kPa]	Specifications		
			NPN	PNP	With unit selection function*3
			2 outputs		
A	Pressure switch for vacuum	0 to −101	●	—	●
B			●	—	None (SI unit only)
C			—	●	●
D			—	●	None (SI unit only)
E		−100 to 100	●	—	●
F			●	—	None (SI unit only)
H			—	●	●
J			—	●	None (SI unit only)
P	Pressure sensor	0 to −101	Analog output 1 to 5 V		
T		−100 to 100			
N	Without pressure switch for vacuum/pressure sensor				

*3 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

❼ Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8

❷ Nominal nozzle size

Symbol	Nominal nozzle size
07	ø0.7
10	ø1.0
12	ø1.2
15	ø1.5

* The standard supply pressure of each nozzle diameter is the same as that of the corresponding standard product.
For details, refer to the Web Catalog.

❸ Combination of supply valve and release valve

Symbol	Supply valve		Release valve
	N.C.	Self-holding	N.C.
K	●	—	●
J	●	—	—
R	—	●*2	●

*2 Supply valve maintains vacuum by energization (20 ms or more). Stopping the vacuum turns on the release valve.

❻ Connector (Supply valve/Release valve/Pressure switch for vacuum)

Symbol	For supply valve/ release valve: 300 mm (Connector assembly)*4	For pressure switch for vacuum: 2 m (Lead wire with connector)	Pressure sensor assembly: 3 m (With lead wire)	Note
L	●	●		Cannot be selected when ❺ is N
L1	None	●		
L2	●	None		Cannot be selected when ❺ is P or T
L3	None	None		

*4 For the connector length other than 300 mm, select L1 or L3, and order the connector assembly on page 194 separately.

❽ Option*5 (For details on the Function/Application, refer to page 195.)

Symbol	Type		Note
Nil	Without option		—
B	Mounting bracket for single unit (nuts and bolts are included)	Bracket	—
D	With individual release pressure supply (PD) port (M3)*6	PD port	Cannot be selected when ❸ is J
E	Vacuum break flow adjusting needle	Screwdriver operation type long lock nut	Cannot be selected when ❸ is J Can be selected only for the combination of J and K
J		Round lock nut	
K		Screwdriver operation type	
W	With exhaust interference prevention valve	Exhaust interference prevention valve	When J is selected for ❸, install the release valve or vacuum breaker in the middle of the vacuum piping.

*5 When more than one option is selected, list the option symbols in alphabetical order. (Example -BJ)
*6 Use a One-touch fitting or barb fitting for piping. (O.D.: Within ø6.2)

* The 25A- series specifications and dimensions are the same as those of the standard model.

The manifold type is available as a special order.

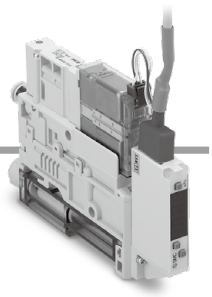
For details, refer to the Web Catalog.

Ejector System **Vacuum Unit**

25A-ZK2□A Series

RoHS

Single Unit Ejector + With Valve + With Energy Saving Function



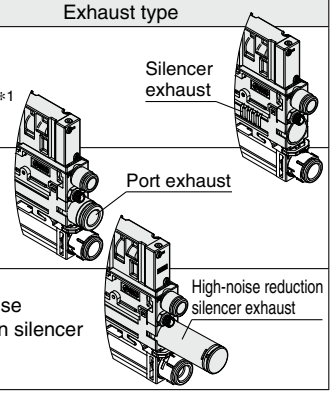
How to Order

25A-ZK2 **A** **12** **K** **5** **K** **W** A – **08** – □

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

❶ Body/Exhaust type

Symbol	Body	Exhaust type
A	Single unit	Silencer exhaust*1
B		Port exhaust
G		High-noise reduction silencer exhaust



*1 With exhaust port when ❷ is 12 or 15

❷ Nominal nozzle size

Symbol	Nominal nozzle size
07	ø0.7
10	ø1.0
12	ø1.2
15	ø1.5

* The standard supply pressure of each nozzle diameter is the same as that of the corresponding standard product.
For details, refer to the Web Catalog.

❸ Combination of supply valve and release valve

Symbol	Supply valve	Release valve
	N.C.	N.C.
K	●	●

❹ Rated voltage (Supply valve/Release valve)

Symbol	Voltage
5	24 VDC
6	12 VDC

❺ Pressure switch for vacuum with energy saving function

Symbol	Pressure range [kPa]	Specifications		
		NPN	PNP	With unit selection function*2
		1 output		
K	−100 to 100	●	—	●
Q		●	—	None (SI unit only)
R		—	●	●
S		—	●	None (SI unit only)

*2 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

❻ Connector

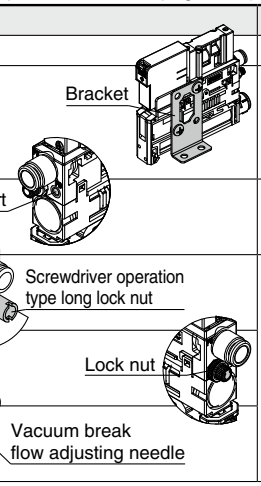
Symbol	For pressure switch for vacuum with energy saving function: 2 m (Lead wire with connector)
W	●
L3	None

❼ Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8

❽ Option*3 (For details on the Function/Application, refer to page 195.)

Symbol	Type	Note
Nil	Without option	—
B	Mounting bracket for single unit (nuts and bolts are included)	—
D	With individual release pressure supply (PD) port (M3)*4	—
E	Vacuum break flow adjusting needle: Screwdriver operation type long lock nut	Can be selected only for the combination of J and K
J	Vacuum break flow adjusting needle: Round lock nut	
K	Vacuum break flow adjusting needle: Screwdriver operation type	



*3 When more than one option is selected, list the option symbols in alphabetical order. (Example -BJ)
*4 Use a One-touch fitting or barb fitting for piping. (O.D.: Within ø6.2)

The manifold type is available as a special order.

* The 25A- series specifications and dimensions are the same as those of the standard model.

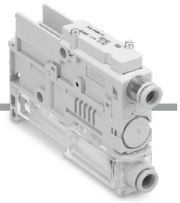
For details, refer to the Web Catalog.

Ejector System **Vacuum Unit**

25A-ZK2□A Series

RoHS

Single Unit **Ejector +** Without **Valve +** Without **Energy Saving Function**



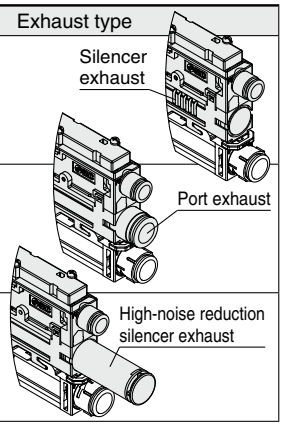
How to Order

25A-ZK2 A 12 N 0 N N A – 08 – □

❶ ❷ ❸ ❹ ❺ ❻

❶ Body/Exhaust type

Symbol	Body	Exhaust type
A	Single unit	Silencer exhaust*1
B		Port exhaust
G		High-noise reduction silencer exhaust



*1 With exhaust port when ❷ is 12 or 15

❷ Nominal nozzle size

Symbol	Nominal nozzle size
07	ø0.7
10	ø1.0
12	ø1.2
15	ø1.5

* The standard supply pressure of each nozzle diameter is the same as that of the corresponding standard product.
For details, refer to the Web Catalog.

❹ Connector

Symbol	For pressure switch for vacuum: 2 m (Lead wire with connector)	Pressure sensor assembly: 3 m (With lead wire)	Note
Y	●		Cannot be selected when ❸ is N
Y1	None		Cannot be selected when ❸ is P, T, or N
N	None		When "N" is selected for ❸

❸ Pressure switch for vacuum/Pressure sensor

Symbol	Type	Pressure range [kPa]	Specifications: NPN (2 outputs)	Specifications: PNP (2 outputs)	Specifications: With unit selection function*2
A	Pressure switch for vacuum	0 to –101	●	—	●
B			●	—	None (SI unit only)
C			—	●	●
D			—	●	None (SI unit only)
E		–100 to 100	●	—	●
F			●	—	None (SI unit only)
H			—	●	●
J			—	●	None (SI unit only)
P	Pressure sensor	0 to –101	Analog output 1 to 5 V		
T		–100 to 100			
N	Without pressure switch for vacuum/pressure sensor				

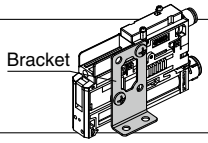
*2 The unit selection function is not available in Japan due to the New Measurement Law. The unit for the type without the unit selection function is fixed as kPa.

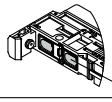
❺ Vacuum (V) port

Symbol	Vacuum (V) port
06	ø6
08	ø8

❻ Option*3 (For details on the Function/Application, refer to page 195.)

Symbol	Type	Note
Nil	Without option	—
B	Mounting bracket for single unit (nuts and bolts are included)	—
W	With exhaust interference prevention valve	Install the release valve or vacuum breaker in the middle of the vacuum piping.





*3 When more than one option is selected, list the option symbols in alphabetical order. (Example -BW)

The manifold type is available as a special order.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Replacement Parts for Single Unit / How to Order

Valve assembly

25A-ZK2 − VA [A] [K] [5] [L] A − A
❶ ❷ ❸ ❹

❶ **Applicable system**

A	Ejector system

❷ **Valve type**

K	Supply valve: N.C., Release valve: N.C.
R	Supply valve: Self-holding release valve linked, Release valve: N.C.
J	Supply valve: N.C., Release valve: None

❸ **Rated voltage**

5	24 VDC
6	12 VDC

❹ **Wiring**

L	Individual wiring: With connector assembly (Lead wire length: 300 mm)
LO	Individual wiring: Without connector assembly

Select the 25A-ZK2VAAK□LOA-A for a switch with energy saving function.

Connector assembly

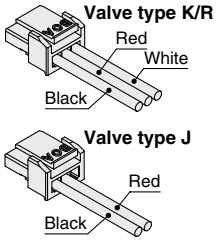
ZK2 − LV [W] [ ] − A

Applicable valve type

W	Valve type K/R
S	Valve type J

Lead wire length

Nil	300 mm
6	600 mm
10	1000 mm
20	2000 mm
30	3000 mm



Sound absorbing material (10 pcs. per set)

ZK2 − SE1 − 1 − A

Sound absorbing material hole diameter

1	300 μm

Vacuum port adapter assembly (Purchasing order is available in units of 1 piece.)

ZK2 − VA1S [8] − A

One-touch fitting size

6	ø6 One-touch fitting	Metric size
8	ø8 One-touch fitting	

Filter element (10 pcs. per set)

ZK2 − FE1 − 3 − A

Nominal filtration rating

3	30 μm

Body gasket*1 (10 pcs. per set)

ZK2 − BG5 − [1] − A

Applicable type

1	One check valve type (All specifications other than vacuum switch with energy saving function and exhaust interference prevention valve)
2	Two check valve type (Vacuum switch with energy saving function and exhaust interference prevention valve)

*1 When ZK2-BG5-2-A is mounted, the workpiece cannot be removed until vacuum is released.

Filter case*1

ZK2 − FC [ ] − A

Port for the pressure switch or sensor

Symbol	Port for the pressure switch or sensor	Filter case color
P	With port (type with pressure switch or sensor)	Smoke
T	Without port (type without pressure switch or sensor)	Clear

*1 Vacuum port adapter assembly is not included.

Pressure switch for vacuum assembly (With 2 mounting screws)

25A-ZK2 − ZS [E] [A] [M] [G] − A
❶ ❷ ❸ ❹

❶ **Rated pressure range and function**

E	0 to −101 kPa	Pressure switch for vacuum	Open collector 2 outputs
F	−100 to 100 kPa		
V	−100 to 100 kPa	Pressure switch for vacuum with energy saving function	Open collector 1 output

❷ **Output**

A	NPN
B	PNP

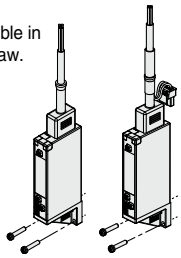
❸ **Unit**

Nil	Unit selection function*1
M	SI unit only*2

*1 The unit selection function is not available in Japan due to the New Measurement Law.
*2 Fixed unit: kPa

❹ **Lead wire with connector**

Nil	None	
G	With lead wire	When ❶ is E or F···For pressure switch for vacuum, Lead wire with connector (Length 2 m)
		When ❶ is V···For pressure switch for vacuum with energy saving function, Lead wire with connector (Length 2 m)



Lead wire with connector

(When individual lead wire is necessary, order with the part number below.)

- **Lead wire with connector for pressure switch for vacuum**
  ZS − 39 − 5G
- **Lead wire with connector for pressure switch for vacuum with energy saving function**
  ZK2 − LW [A] 20 − A

Output

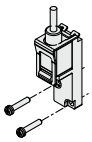
A	NPN open collector
B	PNP open collector

Pressure sensor assembly (With 2 mounting screws)

25A-ZK2 − PS [1] − A

Rated pressure range

1	0 to −101 kPa, Output: 1 to 5 V, Accuracy: ± 2% F.S.
3	−100 to 100 kPa, Output: 1 to 5 V, Accuracy: ± 2% F.S.



High-noise reduction silencer case assembly

ZK2 − SC3 − [4] − A

Applicable nozzle size

4	For nozzle size 07, 10
6	For nozzle size 12, 15

Sound absorbing material for high-noise reduction silencer (5 pcs. per set)

ZK2 − SE4 − 6 − A

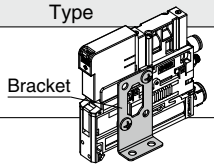
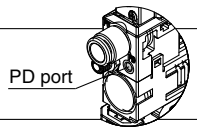
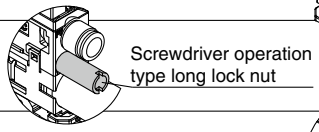
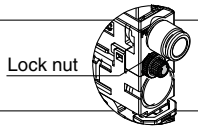
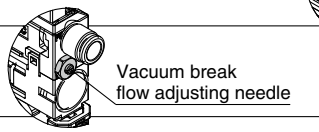
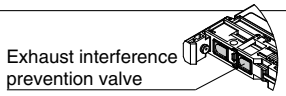
Release lever (10 pcs. per set)

ZK2 − RL1 − A

Lock nut (10 pcs. per set)

25A-ZK2 − LN1 − A

Optional Specifications/Functions/Applications

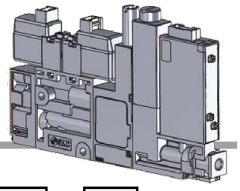
Symbol	Type		Function/Application
B	Mounting bracket for single unit (nuts and bolts are included) 		· Use when a single unit is mounted to the floor in an upright position is requested. If only ordering the bracket, the product number is as follows: 25A-ZK2-BK1-A (includes nuts and bolts).
D	With individual release pressure supply (PD) port (M3) 		· Use when supply pressure for vacuum release is individually requested.
E	Vacuum break flow adjusting needle	Screwdriver operation type long lock nut 	· Used when the needle adjustment operation is difficult
J		Round lock nut 	· Thicker than standard hexagon type. More suitable for hand tightening. · Round lock nut improves operability when the port exhaust type is used.
K		Screwdriver operation type 	· Slotted type improves fine adjustment performance when the port exhaust type is used.
W	With exhaust interference prevention valve 		· When ejectors are operated individually, exhausted air may flow backward from the V port of ejectors that are turned off. Exhaust interference prevention valve prevents backflow.

Ejector System **Compact Vacuum Unit**

With Energy Saving Function

25A-ZQ□A Series

Single Unit Part Number



How to Order

25A-ZQ 05 1U A-K1 5 LO □-VA M W-0 0-□

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫ ⓬

- **25A**: Series compatible with secondary batteries

❶ Nominal nozzle size

05	0.5
07	0.7
10	1.0

❷ Body type

1U	For Single unit
3M	For Manifold

❸ Solenoid valve combination

K1	Supply valve (N.C.), Release valve (N.C.)

❹ Solenoid valve rated voltage

5	24 VDC

❺ Electrical entry

LO	L plug connector (Without connector) With light/surge voltage suppressor

❻ Manual override

Nil	Non-locking push type
B	Locking slotted type

❼ Vacuum pressure switch (With suction filter*1)

Symbol	Pressure range [kPa]	Output
VA	−100 to 100	NPN 1 output + Energy saving function
VB		PNP 1 output + Energy saving function

*1 The filter used in this product is of a simple type, and will become clogged quickly in environments with high quantities of dust or particulates. Please consider using in combination with an air suction filter of the ZFC series, etc.

❽ Unit

Nil*2	With unit switching function
M	SI unit only (kPa)

*2 Under the New Measurement Act, switches with the unit switching function are not permitted for use in Japan (implemented October 1999).

❾ Lead wire

Nil	Without lead wire with connector
W	Lead wire for switch with energy saving function (Length: 2 m) (Included)

❿ Fitting (V port)

Symbol	Applicable tubing O.D.
0	Without fitting (M5 x 0.8)

⓫ Fitting (P port)

Symbol	Applicable tubing O.D.	Specification
Nil	Without port	Manifold
0	Without fitting (M5 x 0.8)	Single unit

⓬ Option

	Bracket for single unit	
	Single unit	Manifold
Nil	With	Without
N	Without	Not available

* The 25A- series specifications and dimensions are the same as those of the standard model.

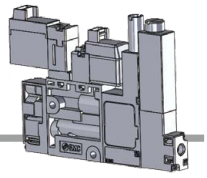
For details, refer to the Web Catalog.

Ejector System **Compact Vacuum Unit**

Without Energy Saving Function

25A-ZQ□A Series

Single Unit Part Number



How to Order

25A-ZQ 05 1U A- K1 5 L □ - EA M G □ - 0 0 - □

(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13)

- **25A: Series compatible with secondary batteries**

❶ Nominal nozzle size

05	0.5
07	0.7
10	1.0

❷ Body type

1U	For Single unit
3M	For Manifold

❸ Solenoid valve combination

K1	Supply valve (N.C.), Release valve (N.C.)
K2	Supply valve (N.O.), Release valve (N.C.)
J1	Supply valve (N.C.)
J2	Supply valve (N.O.)
Q1∗1	Supply valve (Latching), Release valve (N.C.)
Q2∗1	Supply valve (Latching)

∗1 Latching (+ common)

❹ Solenoid valve rated voltage

5	24 VDC

❺ Electrical entry

L	L plug connector (Lead wire length: 0.3 m) With light/surge voltage suppressor
LO	L plug connector (Without connector) With light/surge voltage suppressor

❻ Manual override

Nil	Non-locking push type
	Latching: Push-locking slotted type
B∗2	Locking slotted type

∗2 When "Q1" is selected in ❸, the locking slotted type is only available in the release valve.
This option cannot be chosen when "Q2" is selected in ❸.

❼ Vacuum pressure switch (With suction filter∗3)

Symbol	Pressure range [kPa]	Output
EA	0 to −100	NPN 2 outputs
EB		PNP 2 outputs
EC		NPN 1 output + Analog voltage
EE		PNP 1 output + Analog voltage
FA	−100 to 100	NPN 2 outputs
FB		PNP 2 outputs
FC		NPN 1 output + Analog voltage
FE		PNP 1 output + Analog voltage
F∗4	Suction filter only	

∗3 The filter used in this product is of a simple type, and will become clogged quickly in environments with high quantities of dust or particulates. Please consider using in combination with an air suction filter of the ZFC series, etc.
∗4 It is not necessary to select the items for ❽ and ❾.

❽ Unit

Nil∗5	With unit switching function
M	SI unit only (kPa)
P∗5	With unit switching function (Initial value: psi)

∗5 Under the New Measurement Act, switches with the unit switching function are not permitted for use in Japan (implemented October 1999).

❾ Lead wire

Nil	Without lead wire with connector
G	Lead wire with connector (Length: 2 m) (Included)

❿ Check valve∗6

Nil	None
K∗7	With check valve

∗6 The check valve has a function to prevent the exhaust air from the exhaust unit overflowing to the vacuum port side when a manifold is used, but it cannot prevent overflow of the exhaust air completely. During usage, please inspect thoroughly with actual machine.
Also, in order to completely prevent the overflow of exhaust air, leave plenty of space between the check valve unit and adjacent ejector to avoid interference from the ejector's exhaust unit.
∗7 Cannot be selected when ❷ is "1U"
In addition, for the type with a check valve, the air in the adsorption part is not released to the atmosphere when vacuum is stopped. If "J1," "J2," or "Q2" is selected for ❸, be sure to also install a circuit for vacuum release.

⓫ Fitting (V port)

Symbol	Applicable tubing O.D.
0	Without fitting (M5 x 0.8)

⓬ Fitting (P port)

Symbol	Applicable tubing O.D.	Specification
Nil	Without port	Manifold
0	Without fitting (M5 x 0.8)	Single unit

⚠ Warning

- **Cannot be used for vacuum retention**
- **Use a release valve. Without a release valve, a workpiece may not be released.**

⓭ Option

For Single Unit (❷: 1U)

Symbol	Bracket assembly	Converter assembly for solenoid valve∗8
Nil	○	—
N	—	—
C	—	○
D	○	○

For Manifold (❷: 3M)

Symbol	Low release pressure specification∗9	Converter assembly for solenoid valve∗8
Nil	—	—
S	○	—
C	—	○
E	○	○

∗8 A converter assembly for attaching the VQ100 lead wire assembly with a connector to the ZQ-A is included. Refer to the "Converter assembly for solenoid valve" in the **Web Catalog**.
"Q2" cannot be selected in ❸. Select "LO" in ❺.
∗9 Select "C" for ❹ for the manifold part number on page 180-3. "J1", "J2", or "Q2" cannot be selected in ❸. For a release pressure supply pressure of 0.3 MPa or lower, select "S" or "E."

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

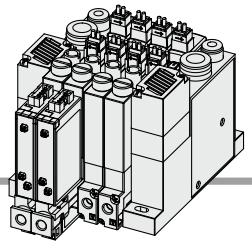
For details, refer to the Web Catalog.

Ejector System **Compact Vacuum Unit**

25A-ZQ□A Series

CE UK CA RoHS

Manifold Part Number



How to Order

25A-ZZQ1 08 A-B S C-A

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺

❶ Stations*1

01	1 station
02	2 stations
⋮	⋮
08	8 stations

*1 Number of stations varies according to nominal nozzle size during simultaneous operation. (Table 1)

Table 1. Max. Number of Stations that Can Operate Simultaneously*2

Nominal nozzle size	Max. number of stations that can operate simultaneously
0.5	8 stations
0.7	6 stations
1.0	4 stations

*2 For any of the nominal nozzle sizes, the max. number of stations that can be mounted is 8. However, please ensure that the max. number of stations that are operated simultaneously comply with the values above.

❷ Air pressure supply (P) port location

B	Both sides

❸ Exhaust

S	Silencer exhaust (Both sides)
P	Port exhaust (Both sides)

❹ Release pressure supply (PD) port

B	None (Release pressure: Commonly supplied from the P port)
C*3	Provided (Release pressure: Supplied from the PD port)

*3 For a release pressure supply pressure of 0.3 MPa or lower (for an individual unit without the energy-saving function), select "S" or "E" for ⓭ for the single unit part number on page 198.

❺ Shipping configuration

Nil	Assembled as a vacuum unit
A*4	Manifold unit only

*4 A set of end blocks and the clamp rod assembly is included in this manifold unit. (Used for the maintenance of the end block)

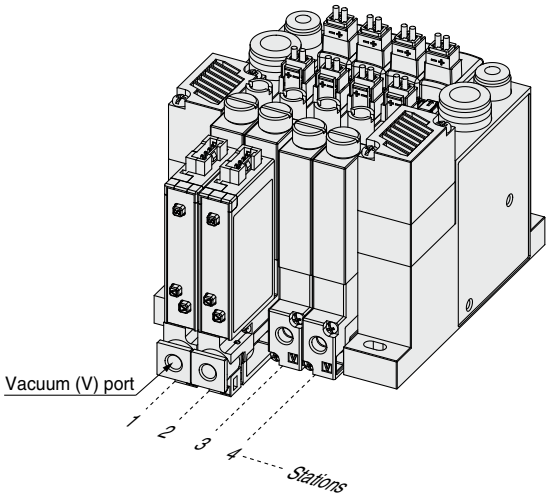
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Manifold Order Example

25A-ZZQ104A-BSB····· 1 pc.
*** 25A-ZQ053MA-K15L-EAG-0··· 2 pcs. → Stations 1 and 2**
*** 25A-ZQ103MA-K15L-F-0 ····· 2 pcs. → Stations 3 and 4**

* When the manifold is viewed from the vacuum (V) port, the first station starts from the left.
25A-ZQ053MA-K15L-EAG-0 (2 pcs.) and 25A-ZQ103MA-K15L-F-0 (2 pcs.) are arranged from the first station.



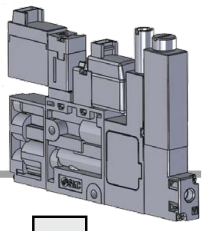
⚠ Caution when ordering manifold

- The asterisk (*) denotes the symbol for the assembly.
- Prefix it to the single unit part number.
- If "*" is not entered, the manifold and single unit will be shipped without being assembled.
- When the manifold and the units are not assembled, please assemble them by referring to "How to increase/decrease manifold stations" in the **Web Catalog**.
- There is nothing else to arrange additionally.

Vacuum Pump System **Compact Vacuum Unit**

25A-ZQ□A Series

Single Unit Part Number



How to Order

25A-ZQ000 U A- K1 5 L □ - EA M G - 0 0 - □

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫

- **25A**: Series compatible with secondary batteries

❶ Body type

U	For Single unit
M	For Manifold

❷ Solenoid valve combination

K1	Supply valve (N.C.), Release valve (N.C.)
K2	Supply valve (N.O.), Release valve (N.C.)
J1∗1	Supply valve (N.C.)
J2∗1	Supply valve (N.O.)
Q1∗2	Supply valve (Latching), Release valve (N.C.)
Q2∗1 ∗2	Supply valve (Latching)

∗1 The air in the adsorption section of this product is not released to the atmosphere at the vacuum suspension state. Devise the circuit for the vacuum release additionally.
∗2 Latching (+ common)

❸ Solenoid valve rated voltage

5	24 VDC

❹ Electrical entry

L	L plug connector (Lead wire length: 0.3 m) With light/surge voltage suppressor
LO	L plug connector (Without connector) With light/surge voltage suppressor

❺ Manual override

Nil	Non-locking push type
	Latching: Push-locking slotted type
B∗3	Locking slotted type

∗3 When "Q1" is selected in ❷, the locking slotted type is only available in the release valve.
This option cannot be chosen when "Q2" is selected in ❷.

❻ Vacuum pressure switch (With suction filter∗4)

Symbol	Pressure range [kPa]	Output
EA	0 to −100	NPN 2 outputs
EB		PNP 2 outputs
EC		NPN 1 output + Analog voltage
EE		PNP 1 output + Analog voltage
FA	−100 to 100	NPN 2 outputs
FB		PNP 2 outputs
FC		NPN 1 output + Analog voltage
FE		PNP 1 output + Analog voltage
F∗5	Suction filter only	

∗4 The filter used in this product is of a simple type, and will become clogged quickly in environments with high quantities of dust or particulates. Please consider using in combination with an air suction filter of the ZFC series, etc.
∗5 It is not necessary to select the items for ❼ and ❽.

❼ Unit

Nil∗6	With unit switching function
M	SI unit only (kPa)
P∗6	With unit switching function (Initial value: psi)

∗6 Under the New Measurement Act, switches with the unit switching function are not permitted for use in Japan (implemented October 1999).

❽ Lead wire

Nil	Without lead wire with connector
G	Lead wire with connector (Length: 2 m) (Included)

❾ Fitting (V port)

Symbol	Applicable tubing O.D.
0	Without fitting (M5 x 0.8)

❿ Fitting (PS/PV port)

Symbol	Applicable tubing O.D.	Specification
Nil	Without port	Manifold
0	Without fitting (M5 x 0.8)	Single unit

⓫ Option

For Single Unit (❶: U)

Symbol	Bracket assembly	Converter assembly for solenoid valve∗7
Nil	○	—
N	—	—
C	—	○
D	○	○

For Manifold (❶: M)

Symbol	Low release pressure specification∗8	Converter assembly for solenoid valve∗7
Nil	—	—
S	○	—
C	—	○
E	○	○

∗7 A converter assembly for attaching the VQ100 lead wire assembly with a connector to the ZQ-A is included. Refer to the "Converter Assembly for Solenoid Valve" in the **Web Catalog**.
"Q2" cannot be selected in ❷. Select "LO" in ❹.
∗8 Select "C" for ❸ for the manifold part number on page 201. "J1", "J2", or "Q2" cannot be selected in ❷. For a release pressure supply pressure of 0.3 MPa or lower, select "S" or "E."

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

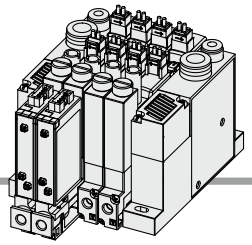
For details, refer to the Web Catalog.

Vacuum Pump System **Compact Vacuum Unit**

25A-ZQ□A Series

RoHS

Manifold Part Number



How to Order

25A-ZZQ1 08 A- L O C- A

Series compatible with secondary batteries

❶ Stations

01	1 station
02	2 stations
⋮	⋮
08	8 stations

❷ Vacuum pressure supply (PV) port location∗1

L	Left side
R	Right side

∗1 The position of the vacuum pressure supply (PV) port when the vacuum (V) port is facing front. The pilot pressure supply (PS) port is on the opposite side.
Refer to the "Table 1" for details.

❸ Release pressure supply (PD) port

B	None (Release pressure: Commonly supplied from the PS port)
C∗2	Provided (Release pressure: Supplied from the PD port)

∗2 For a release pressure supply pressure of 0.3 MPa or lower, select "S" or "E" for ⓫ for the single unit part number on page 200.

❹ Shipping configuration

Nil	Assembled as a vacuum unit
A∗3	Manifold unit only

∗3 A set of end blocks and the clamp rod assembly is included in this manifold unit. (Used for the maintenance of the end block)

Table 1. Location of Each Port

❷ PV port location	❸ PD port	Left side with the V port facing the front			Right side with the V port facing the front		
		PS port	PV port	PD port	PS port	PV port	PD port
L	**B**	—	●	—	●	—	—
	C	—	●	●	●	—	●
R	**B**	●	—	—	—	●	—
	C	●	—	●	—	●	●

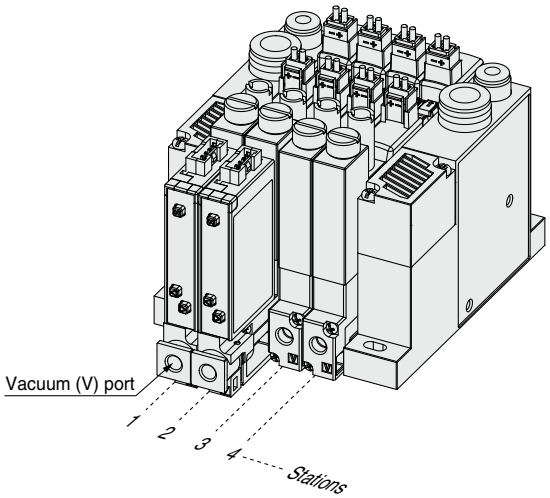
∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Manifold Order Example

25A-ZZQ104A-ROB ····· 1 pc.
∗ **25A-ZQ000MA-K15L-EAG-0··· 2 pcs. → Stations 1 and 2**
∗ **25A-ZQ000MA-K15L-F-0 ····· 2 pcs. → Stations 3 and 4**

∗ When the manifold is viewed from the vacuum (V) port, the first station starts from the left.
25A-ZQ000MA-K15L-EAG-0 (2 pcs.) and 25A-ZQ000MA-K15L-F-0 (2 pcs.) are arranged from the first station.

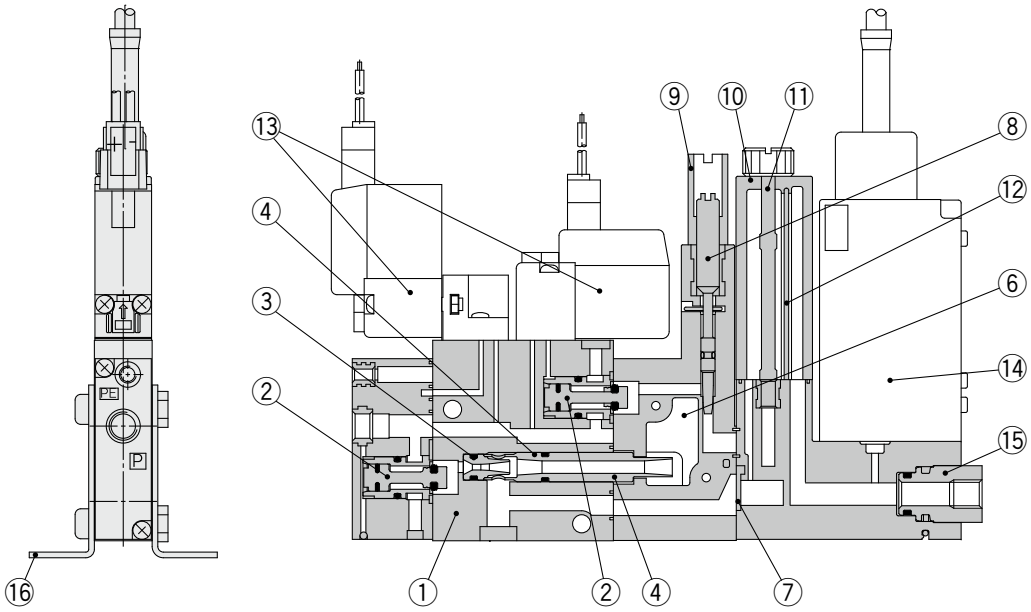


⚠ Caution when ordering manifold

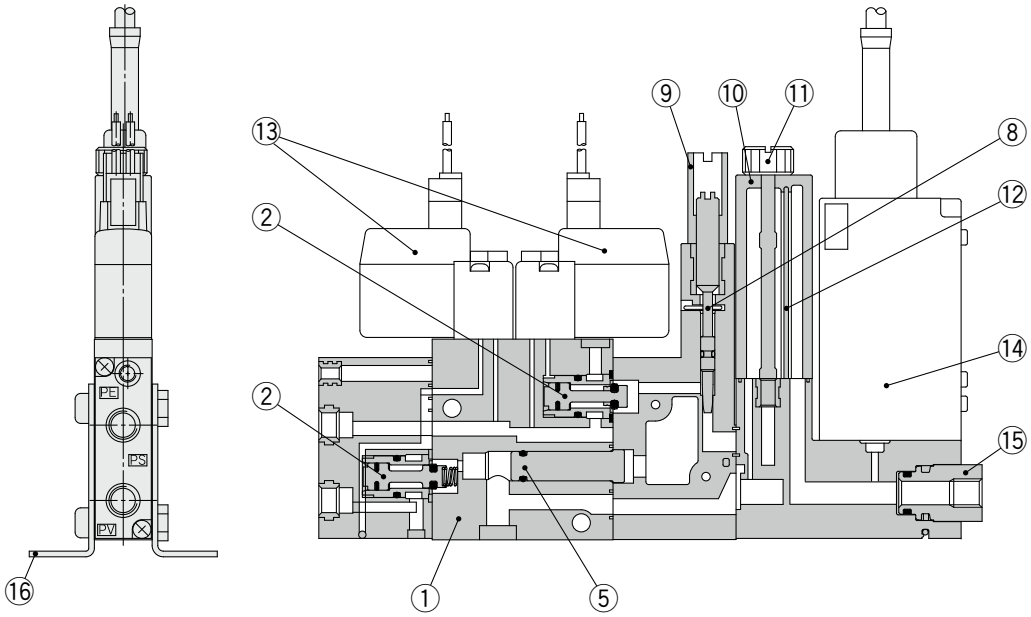
- The asterisk (∗) denotes the symbol for the assembly.
- Prefix it to the single unit part number.
- If "∗" is not entered, the manifold and single unit will be shipped without being assembled.
- When the manifold and the units are not assembled, please assemble them by referring to "How to increase/decrease manifold stations" in the **Web Catalog**.
- There is nothing else to arrange additionally.

Construction

Vacuum ejector (N.O. specification)



Vacuum pump system (N.C. specification)



Component Parts

No.	Description	Material	Note
1	**Body**	PBT	Aluminum alloy is also used.
2	**Supply valve / Release valve assembly**	POM/Aluminum alloy/Stainless steel	
3	**Nozzle**	PBT	
4	**Diffuser**	PBT	
5	**Bushing**	Aluminum alloy	
6	**Sound absorbing material**	Non-woven fabric (PET)	Refer to 3 on page 204 for how to order. (When replacing the sound absorbing material, order a silencer plate assembly.)
7	**Check valve**	HNBR	Refer to 6 on page 204 for how to order.
8	**Vacuum release flow adjusting needle**	Stainless steel	
9	**Lock nut**	Aluminum alloy (Anodized)	
10	**Filter case**	PC (Refer to the precautions in the **Web Catalog**.)	Refer to 4 on page 204 for how to order.
11	**Tension bolt**	Stainless steel	
12	**Filter element**	PVA sponge	Refer to 5 on page 204 for how to order.
13	**Pilot supply valve / Pilot valve (for release)**	—	Refer to 1 on page 203 for how to order.
14	**Vacuum pressure switch**	—	Refer to 2 on page 203 for how to order.
15	**Vacuum (V) port M5 bushing**	Aluminum alloy (Anodized)	
16	**Bracket assembly**	Steel (Electroless nickel plating), Stainless steel	Refer to 7 on page 204 for how to order.
—	**Seal material (O-ring, etc.)**	NBR/HNBR	
—	**Screws for assembly**	Steel (Electroless nickel plating), Stainless steel	

How to Order Replacement Parts for Single Unit

1 Solenoid Valve

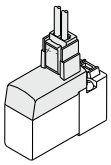
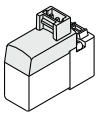
(Recommended torque for replacement: 0.054 to 0.08 N·m)

N.C. Pilot Supply Valves, Pilot Valves (for Release)

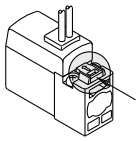
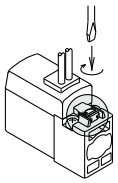
25A − ZQ1 − V114 − 5 [L] U [ ] − A

❶ ❷

❶ Electrical entry

L	LO
With lead wire (300 mm)	Without connector
	

❷ Manual override

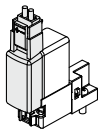
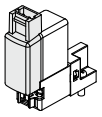
Nil	B
Non-locking push type	Locking slotted type
	

N.O. Pilot Supply Valves

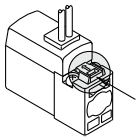
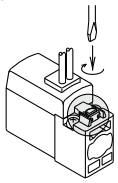
25A − ZQ1 − V124 − 5 [M] U [ ] − A

❶ ❷

❶ Electrical entry

M	MO
With lead wire (300 mm)	Without connector
	

❷ Manual override

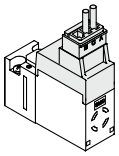
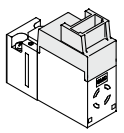
Nil	B
Non-locking push type	Locking slotted type
	

Latching Pilot Supply Valves

25A − ZQ1 − VQ110L − 5 [L] − A

❶

❶ Electrical entry

L	LO
With lead wire (300 mm)	Without connector
	

Lead Wire with Connector Assembly for Solenoid Valve

For N.C./N.O. Pilot Valves, Pilot Valves (for Release)

SY100 − 30 − 4 A − [6]

For Latching Pilot Valves

AXT661 − 13A − [6]

❶

❶ Lead wire length

Nil	300 mm
6	600 mm
10	1000 mm
15	1500 mm
20	2000 mm
30	3000 mm
50	5000 mm

Connector and Socket for Solenoid Valve

For N.C/N.O. Pilot Valves, Pilot Valves (for Release)

SY100 − 30 − A

(Number of sockets: 2)

For Latching Pilot Valves

AXT661 − 12A

(Number of sockets: 3)

∗ With connector and sockets only

2 Vacuum Pressure Switch (With Suction Filter)

(Recommended torque for replacement: 0.11 to 0.13 N·m)

25A − ZQ − ZS [EA] [M] [G] [ ] − [0] − A

❶ ❷ ❸ ❹ ❺

❶ Vacuum pressure switch

Symbol	Pressure range [kPa]	Output
EA	0 to −100	NPN 2 outputs
EB		PNP 2 outputs
EC		NPN 1 output + Analog voltage
EE		PNP 1 output + Analog voltage
FA	−100 to 100	NPN 2 outputs
FB		PNP 2 outputs
FC		NPN 1 output + Analog voltage
FE		PNP 1 output + Analog voltage
VA∗1		NPN 1 output + Energy saving control
VB∗1		PNP 1 output + Energy saving control

∗1 It is not possible to replace the vacuum pressure switch from the specification without energy saving function to the specification with energy saving function.

❷ Unit

Nil∗2	With unit switching function
M	SI unit only (kPa)
P∗2, ∗3	With unit switching function (Initial value: psi)

∗2 Under the New Measurement Act, switches with the unit switching function are not permitted for use in Japan (implemented October 1999).

∗3 Cannot be selected when ❶ is "VA" or "VB"

❸ Lead wire

Nil	Without lead wire with connector
G	Lead wire with connector (Length: 2 m) (Included)
W	Lead wire for switch with energy saving function (Length: 2 m) (Included)

❹ Check valve∗4

Nil	None
K∗5	With check valve

∗4 The check valve has a function to prevent the exhaust air from the exhaust unit overflowing to the vacuum port side when a manifold is used, but it cannot prevent overflow of the exhaust air completely. During usage, please inspect thoroughly with actual machine.
Also, in order to completely prevent the overflow of exhaust air, leave plenty of space between the check valve unit and adjacent ejector to avoid interference from the ejector's exhaust unit.

∗5 When "VA" or "VB" is specified for ❶, the check valve is already built in.

⚠ Warning

1. Cannot be used for vacuum retention

2. Use a release valve. Without a release valve, a workpiece may not be released.

❺ Fitting (V port)

Symbol	Applicable tubing O.D.
0	Without fitting (M5 x 0.8)

Lead Wire with Connector Assembly for Vacuum Pressure Switch

(When an individual lead wire is necessary, order with the part numbers below.)

· Lead wire with connector for vacuum pressure switch

ZS − 39 − 5G

· Lead wire with connector for pressure switch with energy saving function

ZQ1 − LW6 − [N] − A

❶

❶ Output

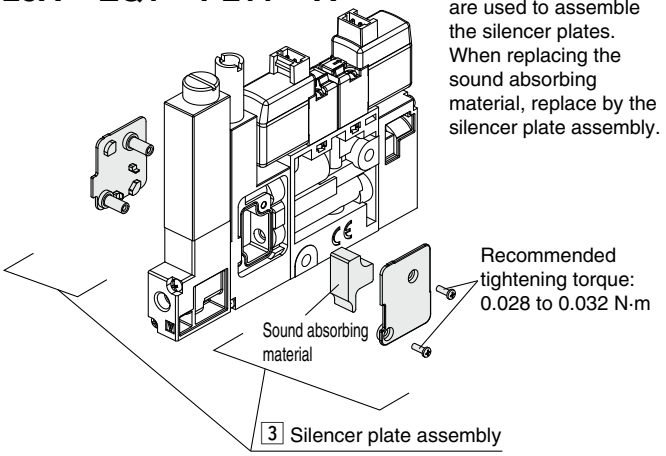
N	NPN open collector
P	PNP open collector

How to Order Replacement Parts for Single Unit

3 Silencer Plate Assembly

25A − ZQ1 − PL11 − A

Resin tapping screws are used to assemble the silencer plates. When replacing the sound absorbing material, replace by the silencer plate assembly.



4 Filter Case Assembly * One filter element is included.

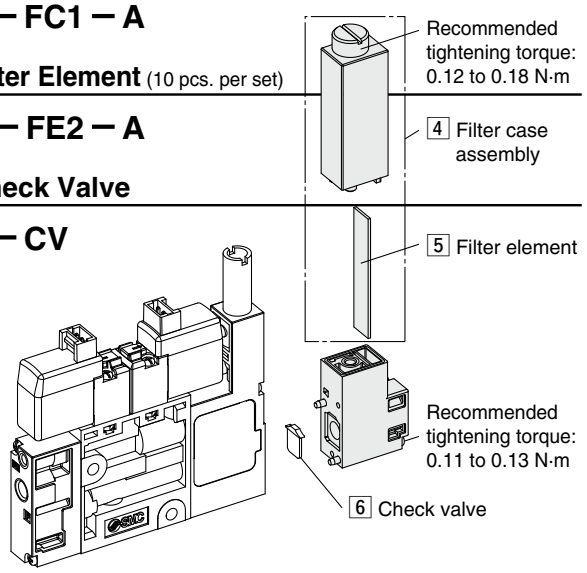
ZQ1 − FC1 − A

5 Filter Element (10 pcs. per set)

ZQ1 − FE2 − A

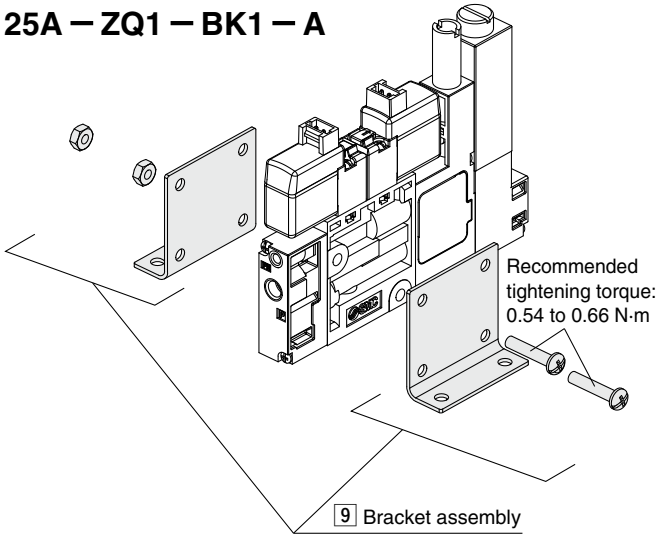
6 Check Valve

ZQ1 − CV

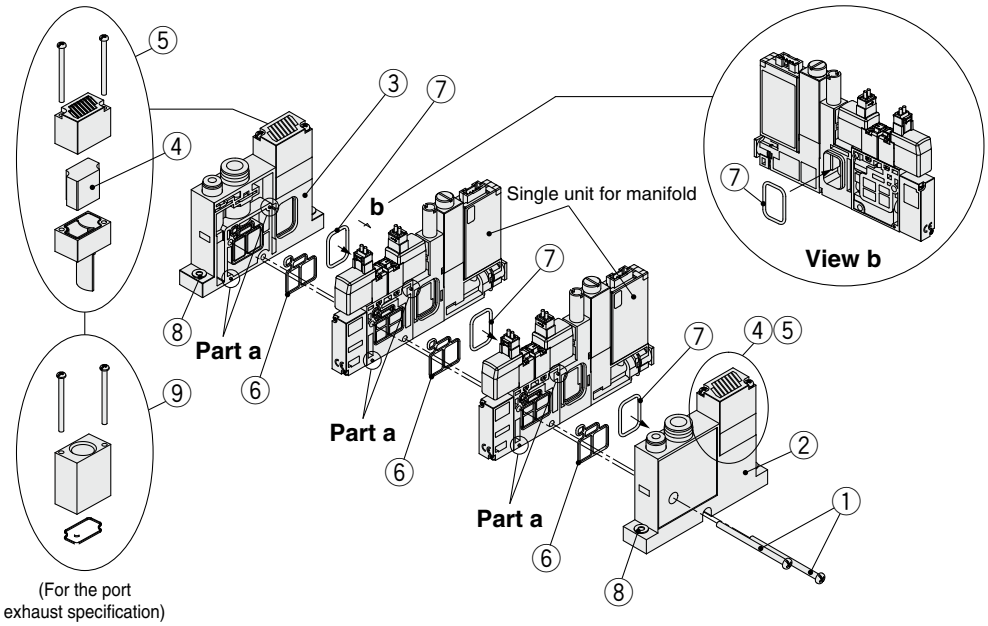


7 Bracket Assembly

25A − ZQ1 − BK1 − A



Manifold Exploded View



How to increase/decrease manifold stations

Disassembly

1. Remove 2 clamp rods ①.
2. Remove end block L ②. (Be careful not to drop the gasket.)

Assembly

1. Confirm that the body gasket for manifold ⑥ is attached to the gasket groove on each single unit and that the exhaust block gasket ⑦ is also attached to the outer side of the raised part. (See View b.)
2. Confirm that the body gasket for manifold ⑥ is attached to the gasket groove on end block R ③.
3. Confirm that the exhaust block gasket ⑦ is attached to the outer side of the raised part on end block L ②.
4. Put together the single units for manifold, end block R ③, and end block L ② using the positioning pins (at two "a" locations), and assemble them using the clamp rods ①. Tightening torque: 0.54 to 0.66 N·m

Component Parts

No.	Description	Material	Note
1	**Clamp rod assembly**	Steel (Electroless nickel plating)	Refer to 1 below for how to order.
2	**End block L**	PBT, POM, PET, Steel, Aluminum alloy, Stainless steel	Left side with the vacuum (V) port facing the front
3	**End block R**	PBT, POM, PET, Steel, Aluminum alloy, Stainless steel	Right side with the vacuum (V) port facing the front
4	**Sound absorbing material (For Manifold)**	Non-woven fabric (PET)	Refer to 2 below for how to order.
5	**Silencer block assembly**	PBT	Refer to 3 below for how to order.
6	**Body gasket for manifold**	NBR	Refer to 4 below for how to order.
7	**Exhaust block gasket**	NBR	Refer to 5 below for how to order.
8	**Washer assembly**	Stainless steel	Refer to 6 below for how to order.
9	**Port block assembly**	Aluminum alloy, Steel (Electroless nickel plating), NBR	Refer to 7 below for how to order.

How to Order Replacement Parts for Manifold

1 Clamp Rod Assembly (2 pcs. per set)

25A – ZQ1 – SR1 – 04 – A

❶

❶ **Stations**

01	For 1 station
02	For 2 stations
⋮	⋮
08	For 8 stations

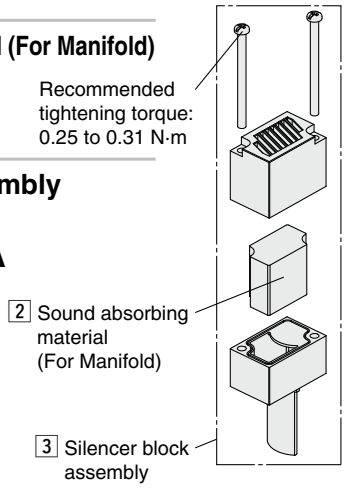
2 Sound Absorbing Material (For Manifold) (2 pcs. per set)

ZQ1 – SE2 – A

Recommended tightening torque: 0.25 to 0.31 N·m

3 Silencer Block Assembly (2 pcs. per set)

25A – ZQ1 – SC1 – A



4 Body Gasket for Manifold (10 pcs. per set)

ZQ – 3 – 005 – 10AS

5 Exhaust Block Gasket (10 pcs. per set)

ZQ – 3 – 009 – 10AS

6 Washer Assembly (4 pcs. per set)

25A – ZQ1 – WS 3 – A

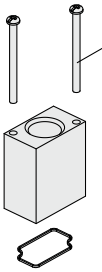
❶

❶ **Size**

3	For M3 (Without release pressure supply port)
4	For M4 (With release pressure supply port)

7 Port Block Assembly (2 pcs. per set)

25A – ZQ1 – EP2 – A



This product **(only the One-touch fitting port type)** is a secondary battery compatible product.
For details, refer to the **Web Catalog**.

Vacuum Ejector Body Ported Type/Box Type (Built-in Silencer)

ZH Series

RoHS

Compact and lightweight

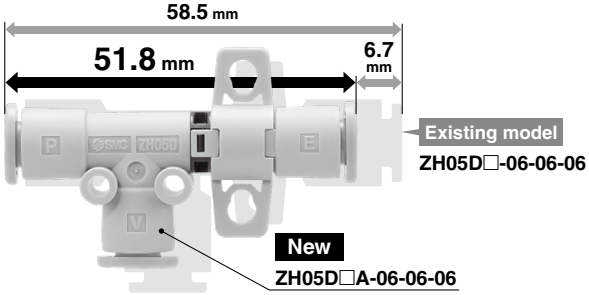
Body ported type

Port size: G threads have been added.



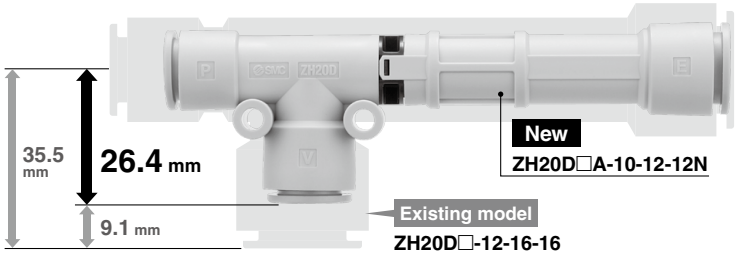
Overall length Max. **12%** reduction

(6.7 mm shorter)



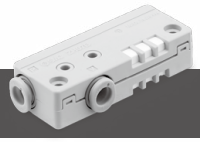
Port height Max. **26%** reduction

(9.1 mm shorter)



Weight Max. **74%** reduction Existing model **88.4 g** ▶ New **23.3 g**

(65.1 g lighter)

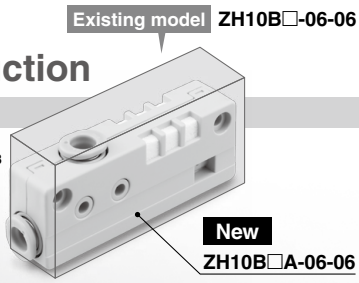


Box type (Built-in silencer)

Volume Max. **39%** reduction

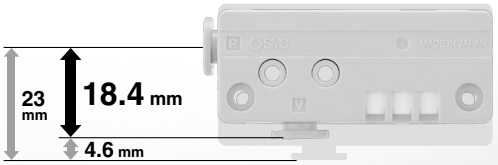
(14.1 cm³ reduction)

Existing model **36.3 cm³** ▶ New **22.2 cm³**



Port height Max. **20%** reduction

(4.6 mm shorter)

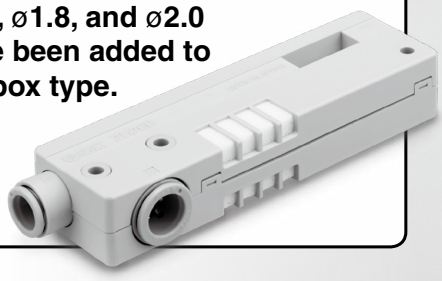


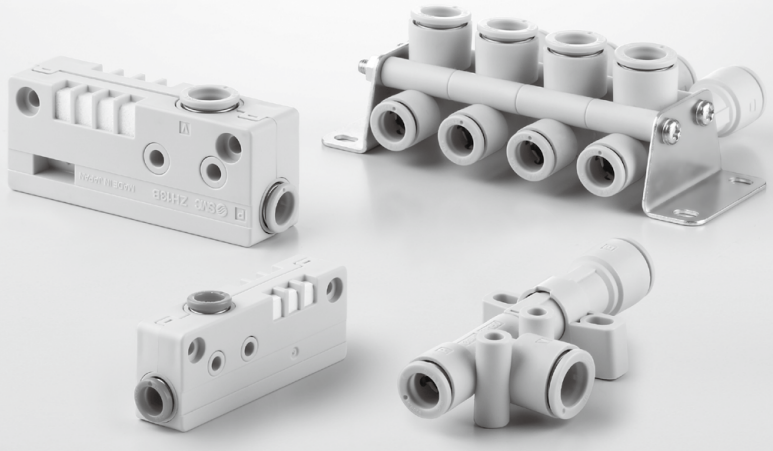
Weight Max. **59%** reduction

(19.4 g lighter)

Existing model **33 g** ▶ New **13.6 g**

Nozzle sizes ø1.5, ø1.8, and ø2.0 have been added to the box type.





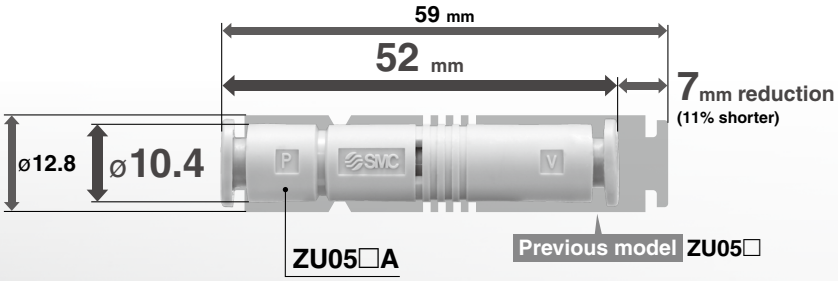
This product **(only the One-touch fitting port type)** is a secondary battery compatible product.
For details, refer to the **Web Catalog**.

In-line Type Vacuum Ejector

ZU□A Series

RoHS

Compact and Lightweight





O.D. ø10.4 (Previous model ø12.8)

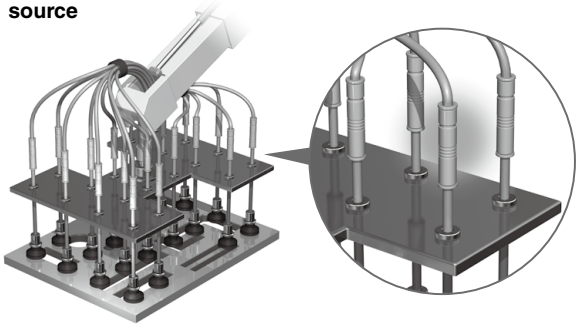
Weight 3.9 g (Previous model 6.5 g)

Overall length 52 mm (Previous model 59 mm)



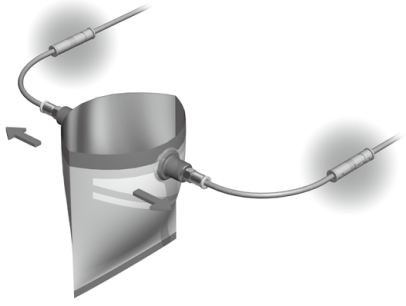
Application Examples

For preventing pad adsorption failures from the vacuum source

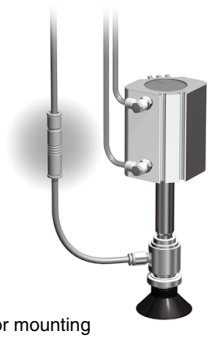


Numerous pads can be used to adsorb workpieces with holes.

For improving responsiveness by installing on flexible parts



Can be used to open and close plastic bags



For mounting
on the end of a Z-axis air cylinder

Variations

Model	Nozzle size [mm]	Standard supply pressure [MPa]	Ultimate vacuum pressure [kPa]		Maximum suction flow rate [L/min (ANR)]		Air consumption [L/min (ANR)]	Port size
			Type S	Type L	Type S	Type L		
ZU03□A	0.3	0.35	–85	–40	1.8	3.4	4.2	ø4 One-touch fitting
ZU04□A	0.4		–87		3.2	5.8	7.7	ø5/32"
ZU05□A	0.5	0.45	–90	–48	7	13	14	ø6 One-touch fitting
ZU07□A	0.7				11	16	28	Rc1/8



Basic Pad
Flat Type
ZP Series

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



How to Order

Pad unit[*1]

Without lock ring[*2] — ZP 02 U N

*2 Pad diameter: ø2 to ø8

Without lock ring[*3] — ZP 10 U N –X19

*3 Applicable pad diameter: ø10 to ø50

With lock ring[*4] — ZP S 10 U N

*4 Applicable pad diameter: ø10 to ø50

*1 Pad unit's sales unit: 10 pcs. (Pad diameter: ø20 or less)

With adapter — ZP S T 10 U N – ☐ – A5

❶ ❷ ❸ ❹ ❺ ❻

● Flat type

❶ Adapter (Lock ring) material

S	Stainless steel (Stainless steel 304)

❷ Vacuum inlet direction

T	Vertical

❸ Pad diameter

02	ø2	**16**	ø16
04	ø4	**20**	ø20
06	ø6	**25**	ø25
08	ø8	**32**	ø32
10	ø10	**40**	ø40
13	ø13	**50**	ø50

❹ Material

N	NBR
S	Silicone rubber*1 *2
U	Urethane rubber
F	FKM
GN	Conductive NBR
GS	Conductive silicone rubber

*1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

*2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

Lock ring unit

Part no.	Pad diameter [mm]
ZPSL1	ø10 to ø16
ZPSL2	ø20 to ø32
ZPSL3	ø40, ø50

With adapter

❺ Vacuum inlet

Type	Symbol	Size	Pad diameter [mm]			
			ø2 to ø8	ø10 to ø16	ø20 to ø32	ø40, ø50
Male thread	**A5**	M5 x 0.8	○*1	—	—	—
	AS5		—	○*1	○*1	—
	A6	M6 x 1	○*1	—	—	—
	AS6		—	○*1	○*1	○*1
	AG01	G1/8	—	○*1	○*1	—
	AG02	G1/4	—	—	—	○*1
Female thread	**Nil**	M3 x 0.5	—	○ (❻Connection thread: A5/A6)	○ (❻Connection thread: A6)	○ (❻Connection thread: A6)
		M5 x 0.8	—	—	○ (❻Connection thread: A8)	○ (❻Connection thread: A8)
	B4	M4 x 0.7	○*1	—	—	—
	B5	M5 x 0.8	○*1	○*1	○*1	—
	B6	M6 x 1	—	○*1	○*1	○*1
	B8	M8 x 1.25	—	—	○*1	○*1
	B01	Rc1/8	—	○*1	○*1	○*1
	BG01	G1/8	—	○*1	○*1	—
	BG02	G1/4	—	—	—	○*1

*1 Use the connection thread.

❻ Connection thread

Type	Symbol	Size	Pad diameter [mm]			
			ø2 to ø8	ø10 to ø16	ø20 to ø32	ø40, ø50
Male thread	**A5**	M5 x 0.8	—	○*2	—	—
	A6	M6 x 1	—	○*2	○*2	○*2
	A8	M8 x 1	—	—	○*2	○*2

*2 With a (female) vacuum inlet



Basic Pad
Flat Type with Ribs
ZP Series

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



How to Order

Pad unit∗1

Without lock ring ZP 10 C N –X19

With lock ring ZP S 10 C N

∗1 Pad unit's sales unit: 10 pcs. (Pad diameter: ø20 or less)

With adapter ZP S T 10 C N – ❺ – A5

❶ ❷ ❸ ❹ ❺ ❻

❹ Flat type with ribs

❶ Adapter (Lock ring) material

S	Stainless steel (Stainless steel 304)

❷ Vacuum inlet direction

T	Vertical

❸ Pad diameter

10	ø10
13	ø13
16	ø16
20	ø20
25	ø25
32	ø32
40	ø40
50	ø50

❹ Material

N	NBR
S	Silicone rubber∗1 ∗2
U	Urethane rubber
F	FKM
GN	Conductive NBR
GS	Conductive silicone rubber

∗1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

∗2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

Lock ring unit

Part no.	Pad diameter [mm]
ZPSL1	ø10 to ø16
ZPSL2	ø20 to ø32
ZPSL3	ø40, ø50

With adapter

❺ Vacuum inlet

Type	Symbol	Size	Pad diameter [mm]		
			ø10 to ø16	ø20 to ø32	ø40, ø50
Male thread	**AS5**	M5 x 0.8	○∗2	○∗2	—
	AS6	M6 x 1	○∗2	○∗2	○∗2
	AG01	G1/8	○∗2	○∗2	—
	AG02	G1/4	—	—	○∗2
Female thread	**Nil**	M3 x 0.5	○ (❻ Connection thread: A5/A6)	○ (❻ Connection thread: A6)	○ (❻ Connection thread: A6)
		M5 x 0.8	—	○ (❻ Connection thread: A8)	○ (❻ Connection thread: A8)
	B5	M5 x 0.8	○∗2	○∗2	—
	B6	M6 x 1	○∗2	○∗2	○∗2
	B8	M8 x 1.25	—	○∗2	○∗2
	B01	Rc1/8	○∗2	○∗2	○∗2
	BG01	G1/8	○∗2	○∗2	—
	BG02	G1/4	—	—	○∗2

∗1 Use the connection thread.

❻ Connection thread

Type	Symbol	Size	Pad diameter [mm]		
			ø10 to ø16	ø20 to ø32	ø40, ø50
Male thread	**A5**	M5 x 0.8	○∗2	—	—
	A6	M6 x 1	○∗2	○∗2	○∗2
	A8	M8 x 1	—	○∗2	○∗2

∗2 With a (female) vacuum inlet



Basic Pad
Bellows Type
ZP Series

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



How to Order

Pad unit

Without lock ring*1 — ZP 06 B N

*1 Pad diameter: ø6, ø8

Without lock ring*2 — ZP 10 B N –X19

*2 Applicable pad diameter: ø10 to ø50

With lock ring*3 — ZP S 10 B N

*3 Applicable pad diameter: ø10 to ø50

With adapter — ZP S T 10 B N – ❺ – A5

❶ ❷ ❸ ❹ ❺ ❻

● Bellows type

❶ Adapter (Lock ring) material

S	Stainless steel (Stainless steel 304)

❷ Vacuum inlet direction

T	Vertical

❸ Pad diameter

06	ø6	**20**	ø20
08	ø8	**25**	ø25
10	ø10	**32**	ø32
13	ø13	**40**	ø40
16	ø16	**50**	ø50

❹ Material

N	NBR
S	Silicone rubber*1 *2
U	Urethane rubber
F	FKM
GN	Conductive NBR
GS	Conductive silicone rubber

*1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

*2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

Lock ring unit

Part no.	Pad diameter [mm]
ZPSL1	ø10 to ø16
ZPSL2	ø20 to ø32
ZPSL3	ø40, ø50

With adapter

❺ Vacuum inlet

Type	Symbol	Size	Pad diameter [mm]			
			ø6, ø8	ø10 to ø16	ø20 to ø32	ø40, ø50
Male thread	**A5**	M5 x 0.8	○*1	—	—	—
	AS5		—	○*1	○*1	—
	A6	M6 x 1	○*1	—	—	—
	AS6		—	○*1	○*1	○*1
	AG01	G1/8	—	○*1	○*1	—
	AG02	G1/4	—	—	—	○*1
Female thread	**Nil**	M3 x 0.5	—	○ (❻Connection thread: A5/A6)	○ (❻Connection thread: A6)	○ (❻Connection thread: A6)
		M5 x 0.8	—	—	○ (❻Connection thread: A8)	○ (❻Connection thread: A8)
	B4	M4 x 0.7	○*1	—	—	—
	B5	M5 x 0.8	○*1	○*1	○*1	—
	B6	M6 x 1	—	○*1	○*1	○*1
	B8	M8 x 1.25	—	—	○*1	○*1
	B01	Rc1/8	—	○*1	○*1	○*1
	BG01	G1/8	—	○*1	○*1	—
	BG02	G1/4	—	—	—	○*1

*1 Use the connection thread.

❻ Connection thread

Type	Symbol	Size	Pad diameter [mm]			
			ø6, ø8	ø10 to ø16	ø20 to ø32	ø40, ø50
Male thread	**A5**	M5 x 0.8	—	○*2	—	—
	A6	M6 x 1	—	○*2	○*2	○*2
	A8	M8 x 1	—	—	○*2	○*2

*2 With a (female) vacuum inlet



Basic Pad
Thin Flat Type
ZP Series

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



How to Order

Pad unit ZP 10 UT N

∗ Pad unit's sales unit: 10 pcs.

With adapter ZP S T 10 UT N – A5

❶ ❷ ❸ ❹ ❺

❹ Thin flat type

❶ Adapter material

S	Stainless steel (Stainless steel 304)

❷ Vacuum inlet direction

T	Vertical

❸ Pad diameter

10	ø10
13	ø13
16	ø16

❹ Material

N	NBR
S	Silicone rubber ∗1 ∗2
U	Urethane rubber
F	FKM
GN	Conductive NBR
GS	Conductive silicone rubber

∗1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

∗2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

With adapter

❺ Vacuum inlet

Type	Symbol	Size	Pad diameter
			All sizes
Female thread	**A5**	M5 x 0.8	○
	A6	M6 x 1	○
One-touch fitting	**B4**	M4 x 0.7	○
	B5	M5 x 0.8	○





Basic Pad

Thin Flat Type with Ribs

ZP Series

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



How to Order

Pad unit ZP 10 CT N

∗ Pad unit's sales unit: 10 pcs.

With adapter ZP S T 10 CT N – A5

❶ ❷ ❸ ❹ ❺

❹ Thin flat type with ribs

❶ Adapter material

S	Stainless steel (Stainless steel 304)

❷ Vacuum inlet direction

T	Vertical

❸ Pad diameter

10	ø10
13	ø13
16	ø16

❹ Material

N	NBR
S	Silicone rubber∗1 ∗2
U	Urethane rubber
F	FKM
GN	Conductive NBR
GS	Conductive silicone rubber

∗1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

∗2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

With adapter

❺ Vacuum inlet

Type	Symbol	Size	Pad diameter
			All sizes
Male thread	**A5**	M5 x 0.8	○
	A6	M6 x 1	○
Female thread	**B4**	M4 x 0.7	○
	B5	M5 x 0.8	○



Basic Pad
Deep Type
ZP Series

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



How to Order

Pad unit

- Without lock ring: **ZP 10 D N –X19**
- With lock ring: **ZP S 10 D N**
- With adapter: **ZP S T 10 D N – [ ] – A5**

❶ ❷ ❸ ❹ ❺ ❻

❹ Deep type

❶ Adapter (Lock ring) material

S	Stainless steel (Stainless steel 304)

❷ Vacuum inlet direction

T	Vertical

❸ Pad diameter

10	ø10
16	ø16
25	ø25
40	ø40

❹ Material

N	NBR
S	Silicone rubber*1 *2
U	Urethane rubber
F	FKM
GN	Conductive NBR
GS	Conductive silicone rubber

*1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

*2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

Lock ring unit

Part no.	Pad diameter [mm]
ZPSL1	ø10, ø16
ZPSL2	ø25
ZPSL3	ø40

With adapter

❺ Vacuum inlet

Type	Symbol	Size	Pad diameter [mm]		
			ø10, ø16	ø25	ø40
Male thread	**AS5**	M5 x 0.8	○*1	○*1	—
	AS6	M6 x 1	○*1	○*1	○*1
	AG01	G1/8	○*1	○*1	—
	AG02	G1/4	—	—	○*1
Female thread	**Nil**	M3 x 0.5	○ (❻ Connection thread: A5/A6)	○ (❻ Connection thread: A6)	○ (❻ Connection thread: A6)
		M5 x 0.8	—	○ (❻ Connection thread: A8)	○ (❻ Connection thread: A8)
	B5	M5 x 0.8	○*1	○*1	—
	B6	M6 x 1	○*1	○*1	○*1
	B8	M8 x 1.25	—	○*1	○*1
	B01	Rc1/8	○*1	○*1	○*1
	BG01	G1/8	○*1	○*1	—
	BG02	G1/4	—	—	○*1

*1 Use the connection thread.

❻ Connection thread

Type	Symbol	Size	Pad diameter [mm]		
			ø10, ø16	ø25	ø40
Male thread	**A5**	M5 x 0.8	○*2	—	—
	A6	M6 x 1	○*2	○*2	○*2
	A8	M8 x 1	—	○*2	○*2

*2 With a (female) vacuum inlet

Compact Type
Flat Type
ZP3 Series
Pad diameter: ø1.5, ø2, ø3.5

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



How to Order

Pad unit ZP3 – 015 U N

∗ Pad unit's sales unit: 10 pcs.

With adapter ZP3 S – T 015 U N – B3 – ☐

❶ ❷ ❸ ❹ ❺ ❻

Flat type

❶ Adapter material

S	Stainless steel (Stainless steel 304)

❷ Vacuum inlet direction

Nil	Pad unit
T	Vertical
Y	Lateral

❸ Pad diameter

015	ø1.5
02	ø2
035	ø3.5

❹ Material

N	NBR
S	Silicone rubber∗1 ∗2
U	Urethane rubber
F	FKM
GN	Conductive NBR
GS	Conductive silicone rubber

∗1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

∗2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

With adapter

❺ Connection thread/ ❻ Vacuum inlet

○: ZP3S-T/Vertical ●: ZP3S-Y/Lateral

❺ Connection thread			❻ Vacuum inlet			Pad diameter
Type	Symbol	Size	Type	Symbol	Size	All sizes
Male thread	A3	M3 x 0.5	—	Nil	—∗1	○
	A6	M6 x 0.75	Female thread	B3	M3 x 0.5	○
Female thread	B3	M3 x 0.5	—	Nil	—∗1	○
			Female thread	B3	M3 x 0.5	●

∗1 Use the connection thread.



Compact Type
Flat Type with Groove
ZP3 Series
Pad diameter: ø4, ø6, ø8, ø10, ø13, ø16

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



How to Order

Pad unit ZP3 – 04 UM N

∗ Pad unit's sales unit: 10 pcs. (Except material HS)

With adapter ZP3 S – T 04 UM N – B5 – ☐

❶ ❷ ❸ ❹ ❺ ❻

❹ Flat type with groove

❶ Adapter material

S	Stainless steel (Stainless steel 304)

❷ Vacuum inlet direction

Nil	Pad unit
T	Vertical
Y	Lateral

❸ Pad diameter

04	ø4
06	ø6
08	ø8
10	ø10
13	ø13
16	ø16

❹ Material

N	NBR
S	Silicone rubber∗1∗2
U	Urethane rubber
F	FKM
GN	Conductive NBR
GS	Conductive silicone rubber
HS	Semiconductive silicone rubber

∗1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

∗2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959).

With adapter

❺ Connection thread/ ❻ Vacuum inlet ○: ZP3S-T/Vertical ●: ZP3S-Y/Lateral

❺ Connection thread			❻ Vacuum inlet			Pad diameter [mm]	
Type	Symbol	Size	Type	Symbol	Size	ø4 to ø8	ø10 to ø16
Male thread	A5	M5 x 0.8	—	Nil	Use the connection thread.	○	○
	A10	M10 x 1	Female thread	B5	M5 x 0.8	○	—
	A12	M12 x 1	Female thread	B5	M5 x 0.8	—	○
Female thread	B5	M5 x 0.8	—	Nil	Use the connection thread.	○	○
			Female thread	B5	M5 x 0.8	●	●



Compact Type
Bellows Type
ZP3 Series
Pad diameter: ø4, ø6, ø8

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



How to Order

Pad unit ZP3 – 04 B N

∗ Pad unit's sales unit: 10 pcs.

With adapter ZP3 S – T 04 B N – B5 – ☐

❶ ❷ ❸ ❹ ❺ ❻

❸ Bellows type

❶ Adapter material

S	Stainless steel (Stainless steel 304)

❷ Vacuum inlet direction

Nil	Pad unit
T	Vertical
Y	Lateral

❸ Pad diameter

04	ø4
06	ø6
08	ø8

❹ Material

N	NBR
S	Silicone rubber∗1 ∗2
U	Urethane rubber
F	FKM
GN	Conductive NBR
GS	Conductive silicone rubber

∗1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

∗2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

With adapter

❺ Connection thread/ ❻ Vacuum inlet

○: ZP3S-T/Vertical ●: ZP3S-Y/Lateral

❺ Connection thread			❻ Vacuum inlet			Pad diameter
Type	Symbol	Size	Type	Symbol	Size	All sizes
Male thread	A5	M5 x 0.8	—	Nil	Use the connection thread.	○
	A10	M10 x 1	Female thread	B5	M5 x 0.8	○
Female thread	B5	M5 x 0.8	—	Nil	Use the connection thread.	○
			Female thread	B5	M5 x 0.8	●



Compact Type
Bellows Type with Ribs
ZP3 Series
Pad diameter: ø10, ø13, ø16

For pad units and pads with an adapter (stainless steel type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



How to Order

Pad unit ZP3 – 10 B N

∗ Pad unit's sales unit: 5 pcs.

With adapter ZP3 S – T 10 B N – B5 – ❻

❶ ❷ ❸ ❹ ❺

● Bellows type with ribs

❶ Adapter material

S	Stainless steel (Stainless steel 304)

❷ Vacuum inlet direction

Nil	Pad unit
T	Vertical
Y	Lateral

❸ Pad diameter

10	ø10
13	ø13
16	ø16

❹ Material

N	NBR
S	Silicone rubber∗1 ∗2
U	Urethane rubber
F	FKM
GN	Conductive NBR
GS	Conductive silicone rubber

∗1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

∗2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959)

With adapter

❺ Connection thread/❻ Vacuum inlet

○: ZP3S-T/Vertical ●: ZP3S-Y/Lateral

❺ Connection thread			❻ Vacuum inlet			Pad diameter
Type	Symbol	Size	Type	Symbol	Size	All sizes
Male thread	A5	M5 x 0.8	—	Nil	Use the connection thread.	○
	A12	M12 x 1	Female thread	B5	M5 x 0.8	○
Female thread	B5	M5 x 0.8	—	Nil	Use the connection thread.	○
			Female thread	B5	M5 x 0.8	●

Vacuum Pad
ZP3P-PT Series
Pad diameter: ø20, ø25, ø35, ø50

For pad units and pads with an adapter (Excludes the M12 x 1.75 type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



How to Order

Pad unit ZP3P – 20 PT SF

Vertical vacuum inlet With adapter ZP3P □ – T 20 PT SF – A5

❶ ❷ ❸ ❹

❶ Adapter material

Nil	Aluminum
S	Stainless steel (Stainless steel 304)

❷ Pad diameter

20	ø20
25	ø25
35	ø35
50	ø50

❸ Pad material

SF	Silicone rubber*1, *2

*1 Compliant with the FDA (USA Food and Drug Administration) regulation 21CFR§177.2600 for "Rubber articles intended for repeated use"

*2 Compliant with the standards for "Rubber apparatus (excluding baby drinking apparatus) and containers/packaging" (D3) (Partial revision: Ministry of Health, Labour, and Welfare Notification No. 595, 2012) in Section 3 "Apparatus and Containers/Packaging" of the Food Sanitation Act, Article 18 "Specifications and Standards for Food and Food Additives, etc." (Ministry of Health and Welfare Notification No. 370, 1959).

With adapter

❹ Mounting thread size

Type	Symbol	Size	ø20	ø25	ø35	ø50
Male thread	**A5**	M5 x 0.8	●	●	—	—
	AG1	G1/8	●	●	—	—
	AG2	G1/4	—	—	●	●
	AG3	G3/8	—	—	●	●
Female thread	**B5**	M5 x 0.8	●	●	—	—
	B8	M8 x 1.25	—	—	●	●

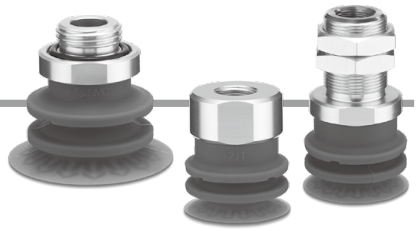


Vacuum Pad

2.5-Stage Bellows Type

ZP3P-JT Series

For pad units and pads with an adapter (Vacuum inlet: Excludes the built-in One-touch fitting type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



How to Order

Pad unit ZP3P – 20 JT 2 SF – W

With adapter ZP3P □ – T 20 JT 2 SF – W – AG01 – □

❶ ❷ ❸ ❹ ❺

Bellows type

2.5-stage

Silicone rubber

❶ Adapter material

Nil	Aluminum
S	Stainless steel (Stainless steel 304)

❷ Pad diameter

20	ø20
25	ø25
32	ø32
40	ø40
50	ø50

❸ Attachment

W	With attachment
WM	With mesh attachment
WF	With flat attachment

With adapter

❹ Connection thread/❺ Vacuum inlet

❹ Connection thread				❺ Vacuum inlet			Pad diameter [mm]	
Type	Thread	Symbol	Size	Thread	Symbol	Size	ø20, ø25	ø32, ø40, ø50
Direct mounting	Male thread	**AG01**	G1/8	—	**Nil**	—*1	●	●
		AG02	G1/4				●	●
		AG03	G3/8				●	●
		AG04	G1/2				—	●
	Female thread	**BG01**	G1/8	—	**Nil**	—*1	●	—
		BG02	G1/4				—	●
Plate mounting	Male thread	**A16**	M16 x 1	Female thread	**B01**	Rc1/8	●	—
					BN01	NPT1/8		
		A20	M20 x 1	Female thread	**B02**	Rc1/4	—	●
					BN02	NPT1/4		

*1 Use the connection thread.

Pad, adapter assembly, and mounting nuts are included but do not come assembled.



Vacuum Pad

5.5-Stage Bellows Type

ZP3P-JT Series

For pad units and pads with an adapter (Vacuum inlet: Excludes the built-in One-touch fitting type): The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



How to Order

Pad unit ZP3P – 20 JT 5 SF – WG

With adapter ZP3P □ – T 20 JT 5 SF – AG01 – □

∗ With guide attachment

❶ ❷ ❸ ❹

- Bellows type
- 5.5-stage
- Silicone rubber
- With guide attachment

❶ Adapter material

Nil	Aluminum
S	Stainless steel (Stainless steel 304)

❷ Pad diameter

20	ø20
25	ø25
32	ø32
40	ø40
50	ø50

With adapter

❸ Connection thread/❹ Vacuum inlet

❸ Connection thread				❹ Vacuum inlet			Pad diameter [mm]	
Type	Thread	Symbol	Size	Thread	Symbol	Size	ø20, ø25	ø32 to ø50
Direct mounting	Male thread	**AG01**	G1/8	—	**Nil**	—∗1	●	●
		AG02	G1/4				—	●
	Female thread	**BG01**	G1/8	—	**Nil**	—∗1	●	—
		BG02	G1/4				—	●
Plate mounting	Male thread	**A16**	M16 x 1	Female thread	**B01**	Rc1/8	●	—
					BN01	NPT1/8		
		A20	M20 x 1	Female thread	**B02**	Rc1/4	—	●
					BN02	NPT1/4		

∗1 Use the connection thread.

Pad, adapter assembly, and mounting nuts are included but do not come assembled.

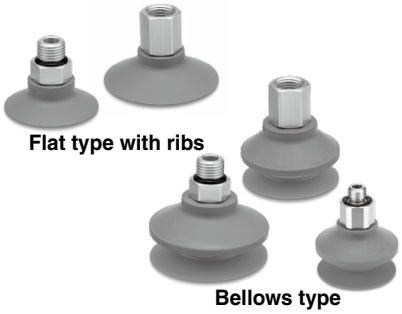


Vacuum Pad

Flat Type with Ribs Bellows Type

ZP3C Series

For pad units and pads with an adapter: The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



Flat type with ribs

Bellows type

How to Order

Pad unit ZP3C – 20 C FS

With adapter ZP3C – T 20 C FS – MF – A8

❶ ❷ ❸ ❹ ❺

● Pad material: FS61

❶ Vacuum inlet direction

Nil	Pad unit
T	Vertical

❷ Pad diameter

20	ø20
25	ø25
32	ø32
40	ø40
50	ø50

❸ Pad form

C	Flat type with ribs
B	Bellows type

❹ Mesh filter

Nil	Without mesh filter
MF	With mesh filter

❺ Connection thread

Type	Thread	Symbol	Size	Pad diameter [mm]	
				ø20 to ø32	**ø40, ø50**
Direct mounting	Male thread	**A8**	M8 x 1	●	—
		A10	M10 x 1	—	●
		AG01	G1/8	●	—
		AG02	G1/4	—	●
	Female thread	**BG01**	G1/8	●	—
		BG02	G1/4	—	●

∗ Use the connection thread for the vacuum inlet.

Specifications

Pad/Mesh filter specifications

Pad	**Material**	FS61 (Fluoro-based rubber)
	Color	Green
	Hardness (Shore A: ±5°)	60
Mesh filter		Opening: 250 μm

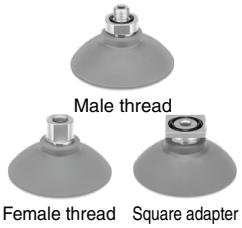
Adapter specifications

Connection	Male thread		Female thread	
Pad diameter	**ø20 to ø32**	**ø40, ø50**	**ø20 to ø32**	**ø40, ø50**
Connection thread	M8 x 1 G1/8	M10 x 1 G1/4	G1/8	G1/4
Vacuum inlet	Use the connection thread.			

Vacuum Pad/Bowl Shape with Non-slip Feature

ZP3M Series

For pads with an adapter: The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



How to Order

With adapter **ZP3M − T 63 R FS − A16 − MF**

❶ ❷ Bowl shape ❸ ❹ ❺

❶ Vacuum inlet direction

T	Vertical

❷ Pad diameter

32	ø32
40	ø40
50	ø50
63	ø63
80	ø80
100	ø100

❸ Material

Symbol	Material	Color
FS	FS61 (Fluoro-based rubber)	Green

❹ Connection thread and type

Mounting	Type	Symbol	Size	Pad diameter	
				ø32 to ø50	**ø63 to ø100**
Direct mounting	Male thread	**A10**	M10 x 1.0	●	—
		A16	M16 x 1.5	—	●
		AG02	G1/4	●	●
	Female thread	**B14**	M14 x 1.0	●	●
		BG02	G1/4	●	●
		BG03	G3/8	●	●
	Square adapter	**S32**	□31.8	●	●

∗ The adapter and pad are adhered to each other and cannot be disassembled.

❺ Mesh filter

Nil	None
MF	With mesh filter

Mesh filter unit

Part no.	Pad diameter	
	ø32 to ø50	**ø63 to ø100**
ZPMF-60-D13	●	—
ZPMF-60-D18	—	●

Specifications

Pad Material

Material	FS61 (Fluoro-based rubber)
Color of rubber	Green
Rubber hardness (Shore A: ±5°)	60
Operating temperature range∗1	0°C to 200°C
Ambient temperature	0°C to 150°C

∗1 Surface temperature of the workpiece to be adsorbed

Adapter Specifications

Connection	Male thread		Female thread		Square adapter
Pad diameter	ø32 to ø50	ø63 to ø100	ø32 to ø50	ø63 to ø100	ø32 to ø100
Size	M10 x 1.0 G1/4	M16 x 1.5 G1/4	M14 x 1.0 G1/4 G3/8		□31.8
Vacuum inlet	Use the connection thread and type.				

Pad Specifications

Part no.	Horizontal holding force [N]∗1		Minimum curvature radius for adsorption [mm]∗2
	Without oil	With oil	
ZP3M-T32RFS	47	21	14
ZP3M-T40RFS	81	53	15
ZP3M-T50RFS	111	74	20
ZP3M-T63RFS	170	108	27.5
ZP3M-T80RFS	231	178	36
ZP3M-T100RFS	387	224	46

∗1 These are actual measurement values when flat workpieces were adsorbed and are not guaranteed values. (According to the SMC test) The values vary depending on the conditions (shape, surface roughness, oil type, oil amount, and other conditions) of the workpiece.

∗2 These are actual measurement values when cylindrical workpieces were adsorbed and are not guaranteed values. (According to the SMC test)

Mesh Filter Specifications

Mesh filter	60
Opening	250 μm

For grippers without a sensor: The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.

Bernoulli Gripper
ZNC Series

How to Order

Size 20 ZNC 20 □ □ – □

Sizes 30 to 80 ZNC 40 □ □ – □

❶ ❷ ❸ ❹

❶ Body size

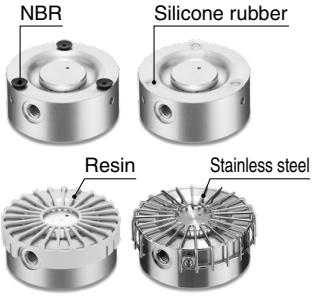
20	ø20 mm
30	ø30 mm
40	ø40 mm
60	ø60 mm
80	ø80 mm

❷ Body material

Nil	Aluminum	
P	Resin	
S	Stainless steel	

❹ Attachment

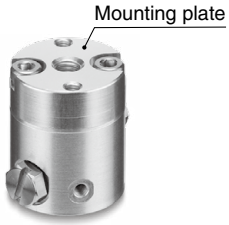
Nil	Basic type (Without attachment)	
PN	With stoppers	NBR (Black)
PS		Silicone rubber (White)
VP	With vibration suppression cover*1	Resin
VS		Stainless steel



*1 Refer to the Table 1. With Vibration Suppression Cover for the size and material.
* Stoppers cannot be retrofitted.
* Vibration suppression cover can be retrofitted to the basic type.
* The vibration suppression cover cannot be used with the type with stoppers.

❸ Mounting plate (Size 20)

Nil	Without mounting plate	
T	With mounting plate	Aluminum
TS		Stainless steel

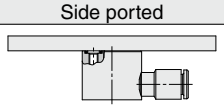
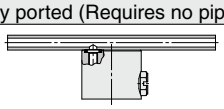
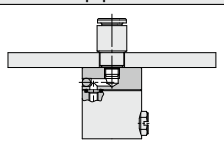
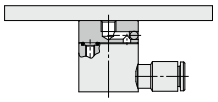


* The mounting plate is shipped together with the product but does not come assembled. Single unit part nos. ⇒ **Web Catalog**
* The piping methods for types with and without a mounting plate are shown in Table 2 below.

Table 1. With Vibration Suppression Cover

Symbol	Material	Body size symbol	Body material		
			Aluminum	Resin	Stainless steel
VP	Resin	20	—	—	—
		30	—	—	—
		40	●	●	—
		60	—	—	—
		80	—	—	—
VS	Stainless steel	20	●	●	●
		30	●	●	●
		40	●	—	●
		60	●	●	●
		80	●	●	●

Table 2. Size 20 Piping (Refer to the **Web Catalog** for details on how to mount the product.)

	Side ported	Body ported (Requires no piping)
Without mounting plate	 Can be used by blocking the supply port on the top surface of the product with the mounting surface and connecting from the side port	 Can be used by connecting the piping inside the mounting surface with the supply port on the top surface of the product
	Top ported	**Side ported**
With mounting plate	 Can be used by mounting a fitting on the supply port on the top surface of the product and connecting	 Can be used by blocking the supply port on the top surface of the product with the mounting plate and connecting from the side port

* An O-ring (5.7 x 3.7 x 1) and a plug are shipped together with the product as accessories.

Attachments/Part Nos.

Stopper ZNCM – PS 2

Material

PN	NBR (Black)
PS	Silicone rubber (White)

Stopper size

Symbol	Body size
1	20, 30
2	40, 60, 80

* Stopper size 1: With 3 stoppers
  Stopper size 2: With 3 stoppers and 3 spring pins
  For replacement instructions ⇒ Refer to the **Web Catalog**.

Vibration suppression cover ZNCM – 40 VP

Body size

20	ø20 mm	**60**	ø60 mm
30	ø30 mm	**80**	ø80 mm
40	ø40 mm		

Material

VP	Resin
VS	Stainless steel

* Material: Resin is only selectable for body size 40.

* For stainless steel:
  Body sizes ø20mm and ø30 mm: With 2 mounting screws
  Body sizes ø40 mm, ø60 mm, and ø80 mm: With 3 mounting screws

Bernoulli Gripper With Coanda Grip

ZNC-C Series

For grippers without a sensor: The standard product is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.



How to Order

Size 20 ZNC 20 □ □ – C □

Sizes 30 to 80 ZNC 40 □ □ – C □

❶ ❷ ❸ ❹

❶ Body size

20	ø20 mm
30	ø30 mm
40	ø40 mm
60	ø60 mm
80	ø80 mm

❷ Body material

Nil	Aluminum
S	Stainless steel

❸ Mounting plate

Nil	None
T	Aluminum
TS	Stainless steel

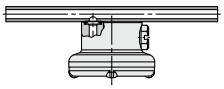
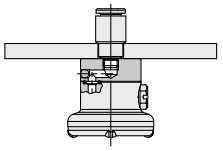
* The mounting plate is shipped together with the product but does not come assembled.
* The piping methods for types with and without a mounting plate are shown in Table 1 below.

❹ Attachment

Nil	Without vibration suppression cover
V	With vibration suppression cover

* It is not possible to additionally install or remove the vibration suppression cover.

Table 1. Piping

Without mounting plate	Body ported (Requires no piping)  Can be used by connecting the piping inside the mounting surface with the supply port on the top surface of the product
With mounting plate	Top ported  Can be used by mounting a fitting on the supply port on the top surface of the product and connecting

Coanda Grip Only / Part No.

ZNCM – 40 C

Body size

20	ø20 mm	**60**	ø60 mm
30	ø30 mm	**80**	ø80 mm
40	ø40 mm		

Vacuum Regulator

RoHS

25A-IRV10/20 Series



How to Order

Standard connections **25A – IRV 20 – □ C08 □ □**

Series compatible with secondary batteries

Body size

10	Max. flow 140 L/min (ANR)
20	Max. flow 240 L/min (ANR)

Fittings

Nil	Straight
L	Elbow

Connection tubing O.D.

Symbol	Tubing O.D.		IRV10	IRV20
C06	Metric	ø6	●	●
C08		ø8	●	●
C10		ø10	—	●

Accessory ① [Supplied with product]

Nil	None
B	With bracket

Accessory ② [Supplied with product]

Nil	None*1
GN	Gauge nut assembly*2

*1 Two plug nuts are mounted on the gauge port. When the Rc1/8 port is required, please order the optional gauge nut assembly P601010-130 separately.

*2 One plug nut, one gauge nut (Rc1/8), and two clips are included. The pressure gauge and digital pressure switch are not included.

Single sided connections **25A – IRV 20 A – □ C08 □ □**

Series compatible with secondary batteries

Body size

10	Max. flow 140 L/min (ANR)
20	Max. flow 240 L/min (ANR)

Single sided connections

A	Single sided connections

Fittings

Nil	Straight
L	Elbow

Connection tubing O.D.

Symbol	Tubing O.D.		IRV10A	IRV20A
C06	Metric	ø6	●	●
C08		ø8	●	●
C10		ø10	—	●

Accessory ① [Supplied with product]

Nil	None
B	With bracket

Accessory ② [Supplied with product]

Nil	None*1
GN	Gauge nut assembly*2

*1 Two plug nuts are mounted on the gauge port. When the Rc1/8 port is required, please order the optional gauge nut assembly P601010-130 separately.

*2 One gauge nut (Rc1/8) and one clip are included. The pressure gauge and digital pressure switch are not included.

* This product cannot be used in environments containing chemical agents such as hydrofluoric acid, etc.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Membrane Air Dryer

25A-IDG Series

Single Unit/Standard Dew Point –40°C/–60°C Specifications

RoHS



How to Order

25A – IDG [50] [L] A – [03] [ ] – [P] [ ]

Series compatible with secondary batteries

Size

30
50
60
75
100

Standard dew point temperature

Symbol	Standard dew point [°C]
L	–40
S	–60

Symbol	30	50	60	75	100
L	●	●	●	●	●
S	—	—	●	●	●

Piping materials

Piping to the outlet side with piping made of water-absorbent or hydrophilic material (nylon, etc.) may result in a rising dew point on the outlet side. Therefore, be sure to use either stainless steel or fluoropolymer piping and fittings.

Port size

Symbol	Bore	Size				
		30	50	60	75	100
02	Rc1/4	●	●	—	—	—
03	Rc3/8	●	●	●	●	●
04	Rc1/2	—	—	●	●	●

Accessory

Symbol	Description
Nil	None
B	With bracket

∗ When symbol B is indicated, a bracket assembly with a part number shown in the table left below is shipped together as an accessory but does not come assembled.

Semi-standard

Symbol	Contents
Nil	None
R	Flow direction (Right → Left)

Fitting for purge air discharge

Symbol	Contents
P	With fitting for purge air discharge

Bracket Assembly (Accessory) Part Nos.

Part no.	Applicable model
25A-BM64	25A-IDG30LA, 50LA
25A-BM65	25A-IDG60LA, 75LA, 100LA

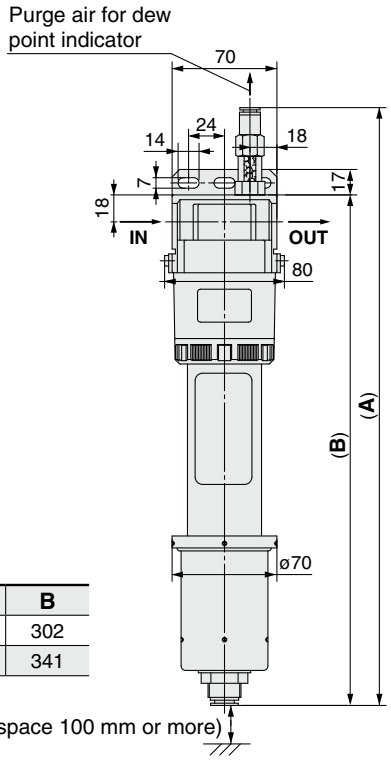
∗ The assembly consists of a bracket and 2 mounting screws.

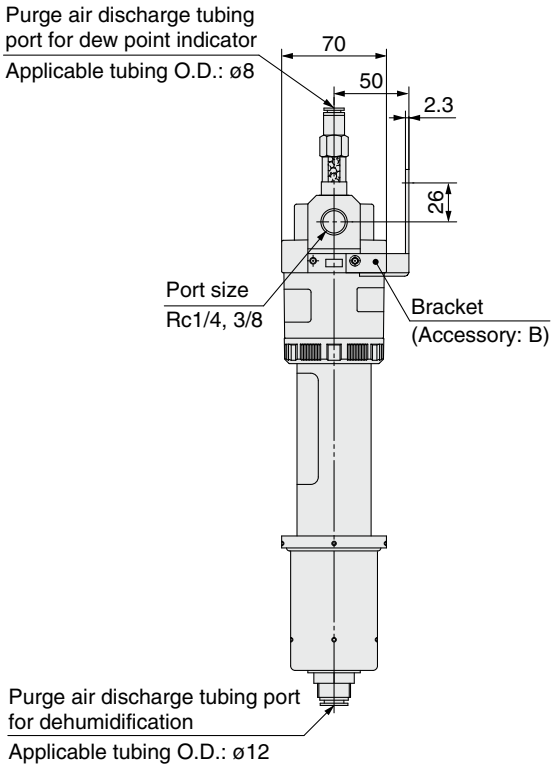
∗ Some parts have dimensions that are different from those of the standard model. Refer to page 228 for details. Other specifications are the same as those of the standard model.

For details, refer to the Web Catalog.

Dimensions

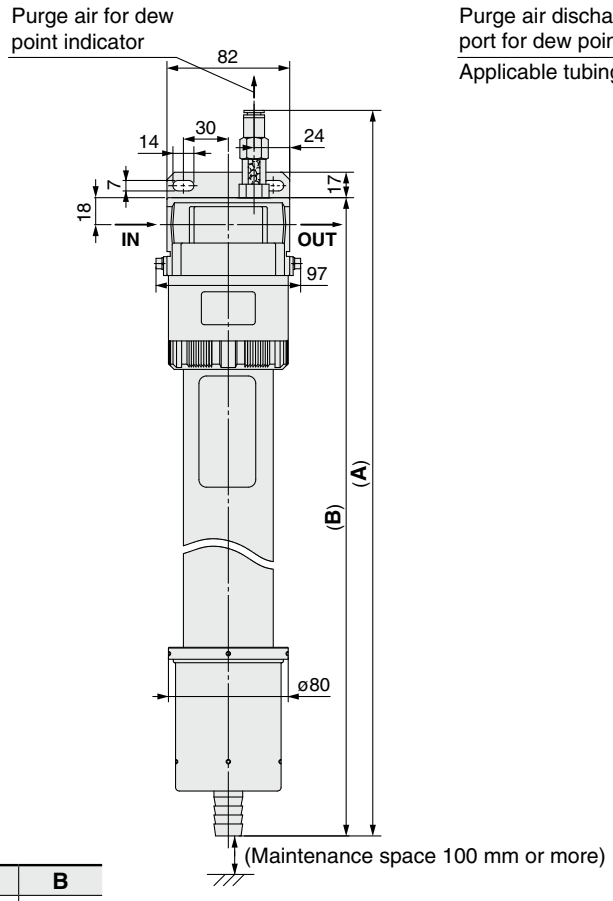
25A-IDG30LA
25A-IDG50LA

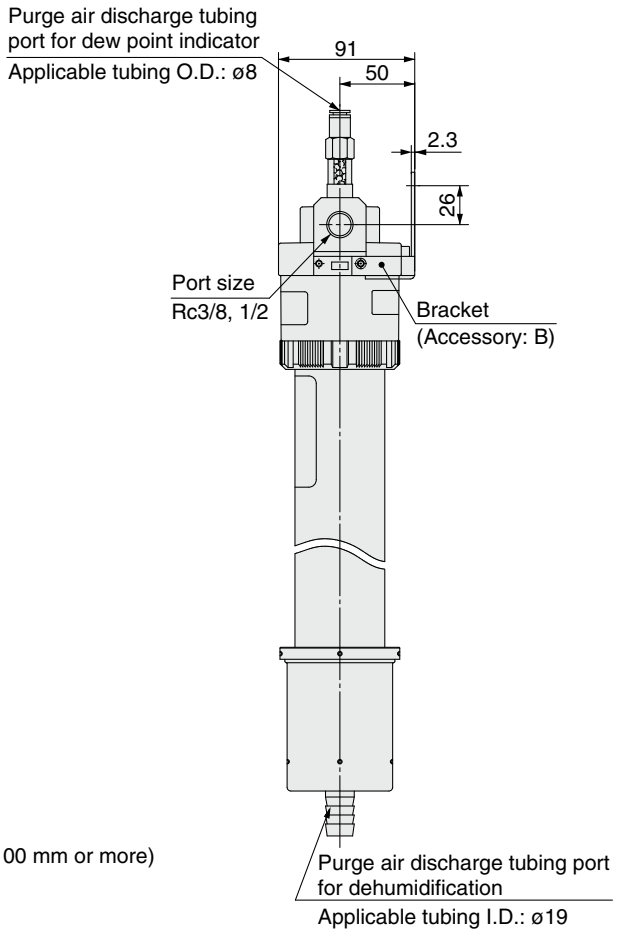




Model	A	B
25A-IDG30LA	361	302
25A-IDG50LA	400	341

25A-IDG60LA
25A-IDG75LA
25A-IDG100LA





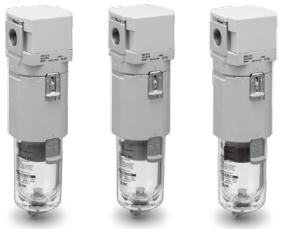
Model	A	B
25A-IDG60LA	426	367
25A-IDG75LA	495	436
25A-IDG100LA	560	501

Compressed Air Preparation Filter

Line Filter/Mist Separator/Micro Mist Separator

25A-AFF/AM/AMD-D Series

RoHS



AFF AM AMD

How to Order

25A – AFF 30 – 03 B – – D

❶ ❷ ❸ ❹ ❺ ❻

• Series compatible with secondary batteries

· Option/Semi-standard: Select one each for **a** to **c**.
· Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
Example) 25A-AM30-N03B-RZ-D

			Symbol	Description	❷ Body size 20	30	40	50	60
❶	Filter type		AFF	Nominal filtration rating: 1 μm Water droplet removal ratio: 99%	●	●	●	●	●
			AM	Nominal filtration rating: 0.1 μm Oil mist concentration on the outlet side: 1 mg/m³	●	●	●	●	●
			AMD	Nominal filtration rating: 0.01 μm Oil mist concentration on the outlet side: 0.1 mg/m³	●	●	●	●	●
			+						
❸	Thread type		Nil	Rc	●	●	●	●	●
			N	NPT	●	●	●	●	●
			F	G	●	●	●	●	●
			+						
❹	Port size		01	1/8	●	—	—	—	—
			02	1/4	●	●	●	—	—
			03	3/8	—	●	●	—	—
			04	1/2	—	—	●	—	—
			06	3/4	—	—	—	●	—
			10	1	—	—	—	●	●
			+						
❺	Option	a Mounting	Nil	Without mounting option	●	●	●	●	●
			B*1	With bracket	●	●	●	●	●
			+						
❻	Semi-standard	b Flow direction	Nil	Flow direction: Left to right	●	●	●	●	●
			R	Flow direction: Right to left	●	●	●	●	●
			+						
		c Unit	Nil	Name plate and caution plate for bowl in SI units: MPa, °C	●	●	●	●	●
			Z*2	Name plate and caution plate for bowl in imperial units: psi, °F	○*3	○*3	○*3	○*3	○*3

*1 Option B is included in the package with the product but does not come assembled. The assembly consists of 2 types of the bracket and 2 mounting screws.
*2 For pipe thread type: NPT
This product is for overseas use only according to the new Measurement Act. (The SI unit type is provided for use in Japan.)
*3 ○: For pipe thread type: NPT only

25A-Bracket, Bowl Assembly/Part Nos.

Description	Size 20	Size 30	Size 40	Size 50	Size 60
Bracket assembly*1	25A-AF24P-070AS	25A-AF34P-070AS	25A-AF44P-070AS	25A-AF54P-070AS	
Bowl assembly	25A-C2SF-D	25A-C3SF-D	25A-C4SF-D	25A-AM54P-120AS	25A-AM64P-120AS

*1 The assembly consists of a bracket A/B and 2 mounting screws.

* The 25A- series specifications and dimensions are the same as those of the standard model.

Compressed Air Preparation Filter
Activated Carbon Filter
25A-AMK-D Series

RoHS



How to Order

25A – AMK [30] – [F] [03] [B] – [ ] – D

❶ ❷ ❸ ❹ ❺ ❻

Series compatible with secondary batteries

· Option/Semi-standard: Select one each for **a** to **c**.
· Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
Example) 25A-AMK30-N03B-RZ-D

			Symbol	Description	❷ Body size 20	30	40	50	60
❶	Filter type		**AMK**	Activated carbon filter	●	●	●	●	●
			+						
❸	Thread type		**Nil**	Rc	●	●	●	●	●
			N	NPT	●	●	●	●	●
			F	G	●	●	●	●	●
			+						
❹	Port size		**01**	1/8	●	—	—	—	—
			02	1/4	●	●	●	—	—
			03	3/8	—	●	●	—	—
			04	1/2	—	—	●	—	—
			06	3/4	—	—	—	●	—
			10	1	—	—	—	●	●
			+						
❺	Option	**a** Mounting	**Nil**	Without mounting option	●	●	●	●	●
			B∗1	With bracket	●	●	●	●	●
			+						
❻	Semi-standard	**b** Flow direction	**Nil**	Flow direction: Left to right	●	●	●	●	●
			R	Flow direction: Right to left	●	●	●	●	●
			+						
		c Pressure unit	**Nil**	Name plate and caution plate in SI units: MPa/°C	●	●	●	●	●
			Z∗2	Name plate and caution plate in imperial units: psi/°F	○∗3	○∗3	○∗3	○∗3	○∗3

∗1 Option B is included in the package with the product but does not come assembled. The assembly consists of 2 types of the bracket and 2 mounting screws.
∗2 For pipe thread type: NPT
This product is for overseas use only according to the new Measurement Act. (The SI unit type is provided for use in Japan.)
∗3 ○: For pipe thread type: NPT only

25A-Bracket, Bowl Assembly/Part Nos.

Description	Size 20	Size 30	Size 40	Size 50	Size 60
Bracket assembly∗1	25A-AF24P-070AS	25A-AF34P-070AS	25A-AF44P-070AS	25A-AF54P-070AS	
Bowl assembly	25A-C2SF-D-X401	25A-C3SK-D	25A-C4SK-D	Equivalent to the standard product	Equivalent to the standard product

∗1 The assembly consists of a bracket A/B and 2 mounting screws.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

Main Line Filter
25A-AFF Series

CE UK CA
* 25A-AFF75B only

RoHS



How to Order

25A-AFF2C to 25A-AFF22C

25A – AFF 22C – □ 10 □ □ – □

Series compatible with secondary batteries

Body size

2C
4C
8C
11C
22C

Thread type

Symbol	Type
Nil	Rc
F	G
N	NPT

Port size

Symbol	Size	Applicable body size				
		2C	**4C**	**8C**	**11C**	**22C**
01	1/8	●	—	—	—	—
02	1/4	●	●	—	—	—
03	3/8	—	●	●	—	—
04	1/2	—	—	●	●	—
06	3/4	—	—	—	●	●
10	1	—	—	—	—	●

Auto drain∗4

Symbol	Description
Nil	Drain cock (Without auto drain)
C	N.C. auto drain
D	N.O. auto drain

∗4 Only one drain exhaust method can be selected. The drain cock, N.C. auto drain, N.O. auto drain and drain guide cannot be selected together.

Option

Symbol	Description
Nil	—
J∗4,∗5	Drain guide 1/4 female threaded
R	IN-OUT reversal direction
T	With element service indicator

∗5 Drain piping and piping for a stop valve such as ball valve are required.

Accessory

Symbol	Description
Nil	—
B	Bracket ∗2

∗2 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

Bracket Assembly Part Nos.∗3

Applicable model	Part no.
25A-AFF2C	**25A-AM-BM101**
25A-AFF4C	**25A-AM-BM102**
25A-AFF8C	**25A-AM-BM103**
25A-AFF11C	**25A-AM-BM104**
25A-AFF22C	**25A-AM-BM105**

∗3 The assembly consists of a bracket and 2 mounting screws.

25A-AFF37B/75B

25A – AFF 37B – □ 10 □ □ – □

Series compatible with secondary batteries

Size

37B
75B

Thread type

Symbol	Type
Nil	Rc
F	G
N	NPT

Port size

Symbol	Size	Applicable body size	
		37B	**75B**
10	1	●	—
14	1 1/2	●	●
20	2	—	●

Accessory

Symbol	Description
Nil	—
B	Bracket ∗1

∗1 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

Auto drain∗4

Symbol	Description
Nil	Drain cock (Without auto drain) ∗2
D	N.O. auto drain (37B only)

∗2 Body size 75B is equipped with a ball valve (Rc 3/8 female threaded).
∗4 Body size 37B: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected together.

Option

Symbol	Description
Nil	—
J∗4,∗5	Drain guide 1/4 female threaded (37B only)
R	IN-OUT reversal direction
T	With element service indicator

∗5 Drain piping and piping for a stop valve such as ball valve are required.

Bracket Assembly Part Nos.∗3

Applicable model	Part no.
25A-AFF37B	**25A-BM56**
25A-AFF75B	**25A-BM57**

∗3 The assembly consists of a bracket and 2 mounting screws.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mist Separator
25A-AM Series

CE UK CA
* 25A-AM850 only

RoHS



How to Order

25A-AM150C to 25A-AM550C

25A – AM 550C – □ 10 □ □ – □

Series compatible with secondary batteries

Body size

150C
250C
350C
450C
550C

Thread type

Symbol	Type
Nil	Rc
F	G
N	NPT

Port size

Symbol	Size	Applicable body size				
		150C	**250C**	**350C**	**450C**	**550C**
01	1/8	●	—	—	—	—
02	1/4	●	●	—	—	—
03	3/8	—	●	●	—	—
04	1/2	—	—	●	●	—
06	3/4	—	—	—	●	●
10	1	—	—	—	—	●

Auto drain∗4

Symbol	Description
Nil	Drain cock (Without auto drain)
C	N.C. auto drain
D	N.O. auto drain

∗4 Only one drain exhaust method can be selected. The drain cock, N.C. auto drain, N.O. auto drain and drain guide cannot be selected together.

Accessory

Symbol	Description
Nil	—
B	Bracket ∗2

∗2 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

Option

Symbol	Description
Nil	—
J∗4,∗5	Drain guide 1/4 female threaded
R	IN-OUT reversal direction
T	With element service indicator

∗5 Drain piping and piping for a stop valve such as ball valve are required.

Bracket Assembly Part Nos.∗3

Applicable model	Part no.
25A-AM150C	**25A-AM-BM101**
25A-AM250C	**25A-AM-BM102**
25A-AM350C	**25A-AM-BM103**
25A-AM450C	**25A-AM-BM104**
25A-AM550C	**25A-AM-BM105**

∗3 The assembly consists of a bracket and 2 mounting screws.

25A-AM650/850

25A – AM 650 – □ 10 □ □ – □

Series compatible with secondary batteries

Body size

650
850

Thread type

Symbol	Type
Nil	Rc
F	G
N	NPT

Port size

Symbol	Size	Applicable body size	
		650	**850**
10	1	●	—
14	1 1/2	●	●
20	2	—	●

Accessory

Symbol	Description
Nil	—
B	Bracket ∗1

∗1 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

Auto drain∗4

Symbol	Description
Nil	Drain cock (Without auto drain) ∗2
D	N.O. auto drain (650 only)

∗2 Body size 850 is equipped with a ball valve (Rc 3/8 female threaded).
∗4 Body size 650: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected together.

Option

Symbol	Description
Nil	—
J∗4,∗5	Drain guide 1/4 female threaded (650 only)
R	IN-OUT reversal direction
T	With element service indicator

∗5 Drain piping and piping for a stop valve such as ball valve are required.

Bracket Assembly Part Nos.∗3

Applicable model	Part no.
25A-AM650	**25A-BM56**
25A-AM850	**25A-BM57**

∗3 The assembly consists of a bracket and 2 mounting screws.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Micro Mist Separator
25A-AMD Series

CE UK CA
* 25A-AMD850 only
RoHS



How to Order

25A-AMD150C to 25A-AMD550C

25A – AMD 550C – □ 10 □ □ – □

Series compatible with secondary batteries

Body size

150C
250C
350C
450C
550C

Thread type

Symbol	Type
Nil	Rc
F	G
N	NPT

Port size

Symbol	Size	Applicable body size				
		150C	250C	350C	450C	550C
01	1/8	●	—	—	—	—
02	1/4	●	●	—	—	—
03	3/8	—	●	●	—	—
04	1/2	—	—	●	●	—
06	3/4	—	—	—	●	●
10	1	—	—	—	—	●

Option

Symbol	Description
Nil	—
J∗4,∗5	Drain guide 1/4 female threaded
R	IN-OUT reversal direction
T	With element service indicator

∗5 Drain piping and piping for a stop valve such as ball valve are required.

Auto drain∗4

Symbol	Description
Nil	Drain cock (Without auto drain)
C	N.C. auto drain
D	N.O. auto drain

∗4 Only one drain exhaust method can be selected. The drain cock, N.C. auto drain, N.O. auto drain and drain guide cannot be selected together.

Accessory

Symbol	Description
Nil	—
B	Bracket ∗2

∗2 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

Bracket Assembly Part Nos.∗3

Applicable model	Part no.
25A-AMD150C	**25A-AM-BM101**
25A-AMD250C	**25A-AM-BM102**
25A-AMD350C	**25A-AM-BM103**
25A-AMD450C	**25A-AM-BM104**
25A-AMD550C	**25A-AM-BM105**

∗3 The assembly consists of a bracket and 2 mounting screws.

25A-AMD650/850

25A – AMD 650 – □ 10 □ □ – □

Series compatible with secondary batteries

Body size

650
850

Thread type

Symbol	Type
Nil	Rc
F	G
N	NPT

Port size

Symbol	Size	Applicable body size	
		650	850
10	1	●	—
14	1 1/2	●	●
20	2	—	●

Accessory

Symbol	Description
Nil	—
B	Bracket ∗1

∗1 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

Auto drain∗4

Symbol	Description
Nil	Drain cock (Without auto drain) ∗2
D	N.O. auto drain (650 only)

∗2 Body size 850 is equipped with a ball valve (Rc 3/8 female threaded).
∗4 Body size 650: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected together.

Option

Symbol	Description
Nil	—
J∗4,∗5	Drain guide 1/4 female threaded (650 only)
R	IN-OUT reversal direction
T	With element service indicator

∗5 Drain piping and piping for a stop valve such as ball valve are required.

Bracket Assembly Part Nos.∗3

Applicable model	Part no.
25A-AMD650	**25A-BM56**
25A-AMD850	**25A-BM57**

∗3 The assembly consists of a bracket and 2 mounting screws.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Micro Mist Separator with Pre-filter

25A-AMH Series

CE UK CA

* 25A-AMH850 only

RoHS



How to Order

25A-AMH150C to 25A-AMH550C

25A – AMH 550C – □ 10 □ □ – □

Series compatible with secondary batteries

Body size

150C
250C
350C
450C
550C

Thread type

Symbol	Type
Nil	Rc
F	G
N	NPT

Port size

Symbol	Size	Applicable body size				
		150C	**250C**	**350C**	**450C**	**550C**
01	1/8	●	—	—	—	—
02	1/4	●	●	—	—	—
03	3/8	—	●	●	—	—
04	1/2	—	—	●	●	—
06	3/4	—	—	—	●	●
10	1	—	—	—	—	●

Option

Symbol	Description
Nil	—
J∗4,∗5	Drain guide 1/4 female threaded
R	IN-OUT reversal direction
T	With element service indicator

∗5 Drain piping and piping for a stop valve such as ball valve are required.

Auto drain∗4

Symbol	Description
Nil	Drain cock (Without auto drain)
C	N.C. auto drain
D	N.O. auto drain

∗4 Only one drain exhaust method can be selected. The drain cock, N.C. auto drain, N.O. auto drain and drain guide cannot be selected together.

Accessory

Symbol	Description
Nil	—
B	Bracket ∗2

∗2 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

Bracket Assembly Part Nos.∗3

Applicable model	Part no.
25A-AMH150C	**25A-AMBM101**
25A-AMH250C	**25A-AMBM102**
25A-AMH350C	**25A-AMBM103**
25A-AMH450C	**25A-AMBM104**
25A-AMH550C	**25A-AMBM105**

∗3 The assembly consists of a bracket and 2 mounting screws.

25A-AMH650/850

25A – AMH 650 – □ 10 □ □ – □

Series compatible with secondary batteries

Body size

650
850

Thread type

Symbol	Type
Nil	Rc
F	G
N	NPT

Port size

Symbol	Size	Applicable body size	
		650	**850**
10	1	●	—
14	1 1/2	●	●
20	2	—	●

Accessory

Symbol	Description
Nil	—
B	Bracket ∗1

∗1 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

Auto drain∗4

Symbol	Description
Nil	Drain cock (Without auto drain) ∗2
D	N.O. auto drain (650 only)

∗2 Body size 850 is equipped with a ball valve (Rc 3/8 female threaded).

∗4 Body size 650: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected together.

Option

Symbol	Description
Nil	—
J∗4,∗5	Drain guide 1/4 female threaded (650 only)
R	IN-OUT reversal direction
T	With element service indicator

∗5 Drain piping and piping for a stop valve such as ball valve are required.

Bracket Assembly Part Nos.∗3

Applicable model	Part no.
25A-AMH650	**25A-BM56**
25A-AMH850	**25A-BM57**

∗3 The assembly consists of a bracket and 2 mounting screws.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

This product (standard product) is a secondary battery compatible product. For details, refer to the **Web Catalog**.

Clean Air Filter

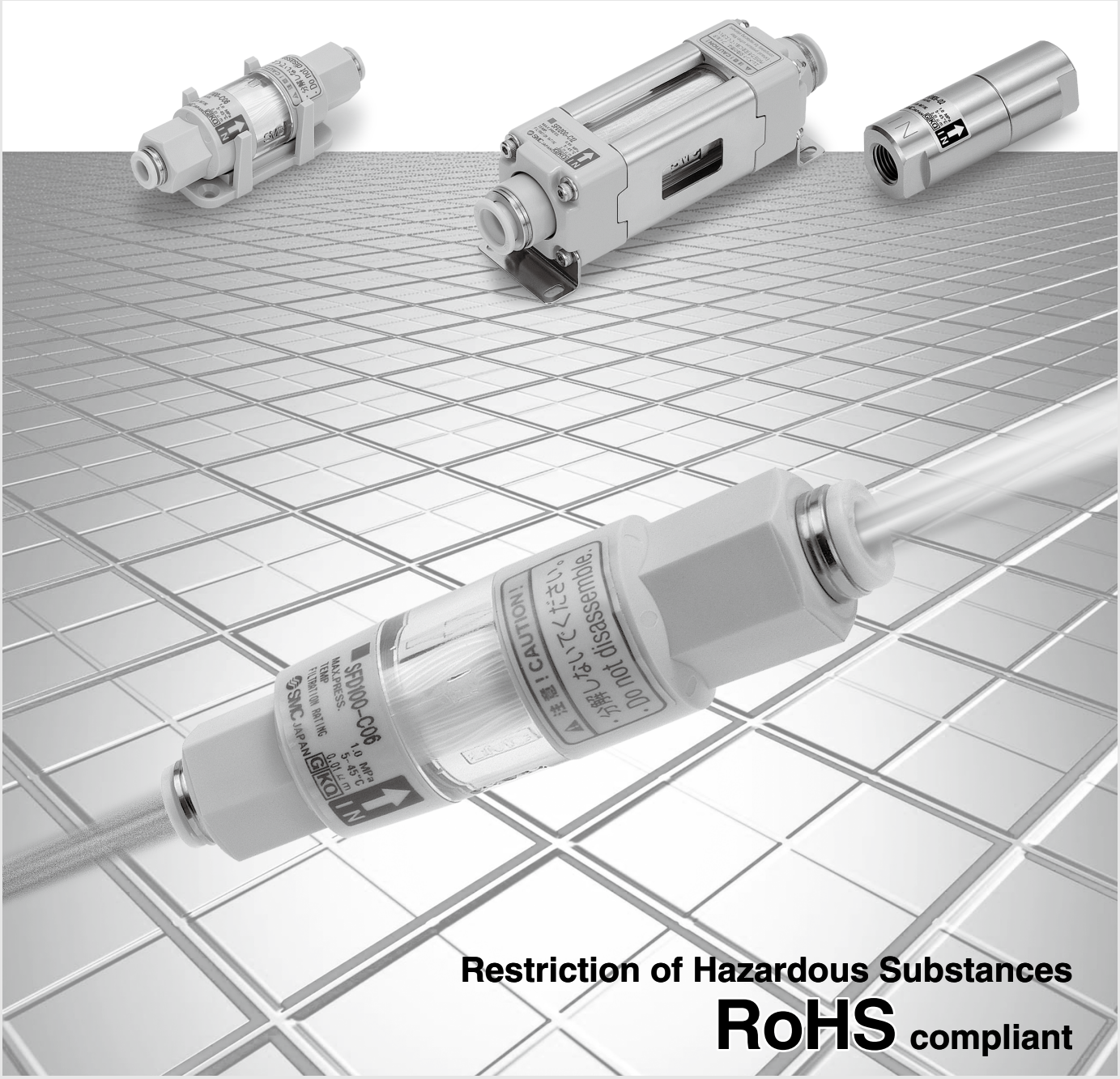
SFD Series

RoHS

Hollow Fiber Element

- **Nominal filtration rating: 0.01** μm (filtration efficiency 99.99%)
- **Initial pressure drop: 0.03** MPa (at inlet pressure 0.7 MPa, maximum flow)
- **Maximum operating pressure: 1.0** MPa (at 20°C)

SFD100/110	SFD200	SFD101/102 Made to Order
Up to **100** L/min(ANR)/Up to **120** L/min(ANR)	Up to **500** L/min(ANR)	Up to **100** L/min(ANR)



Restriction of Hazardous Substances

RoHS compliant

SMC

Exhaust Cleaner for Clean Room

25A-AMP Series

RoHS



How to Order

25A – AMP 2 20 – ☐ 03 ☐ – ☐

Series compatible with secondary batteries

Size

2
3
4

Thread type

Symbol	Type
Nil	Rc
N	NPT
F	G

Port size

Symbol	Port size	Size		
		2	**3**	**4**
02	1/4	●	—	—
03	3/8	●	●	—
04	1/2	—	●	●
06	3/4	—	—	●

Accessories

Symbol	Name
Nil	None
B	With bracket*1

*1 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory but does not come assembled.

Semi-standard specifications

Symbol	Description
Nil	None
R	Flow direction Right→Down*3
T	With element service indicator

*3 Flow direction when the nameplate is viewed from the front. Indicate RT when combining.

Bracket Assembly Part Nos.*2

Applicable model	Part no.
25A-AMP220	**25A-BM66**
25A-AMP320	**25A-BM67**
25A-AMP420	**25A-BM68**

*2 The assembly consists of a bracket and 2 mounting screws.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Clean Exhaust Filter

SFE Series

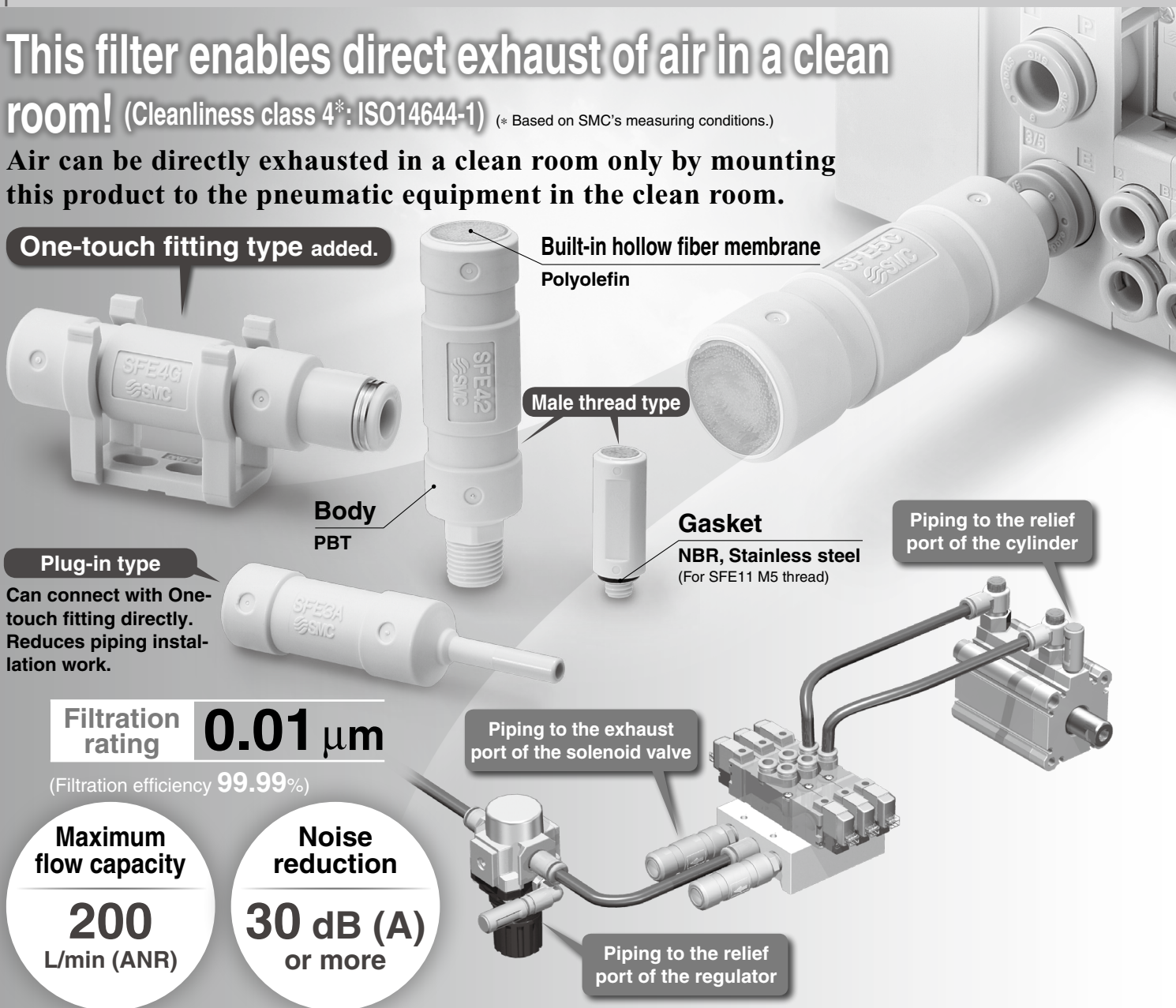
This product (standard product) is a secondary battery compatible product. For details, refer to the **Web Catalog**.

RoHS

This filter enables direct exhaust of air in a clean room! (Cleanliness class 4*: ISO14644-1)

(* Based on SMC's measuring conditions.)

Air can be directly exhausted in a clean room only by mounting this product to the pneumatic equipment in the clean room.



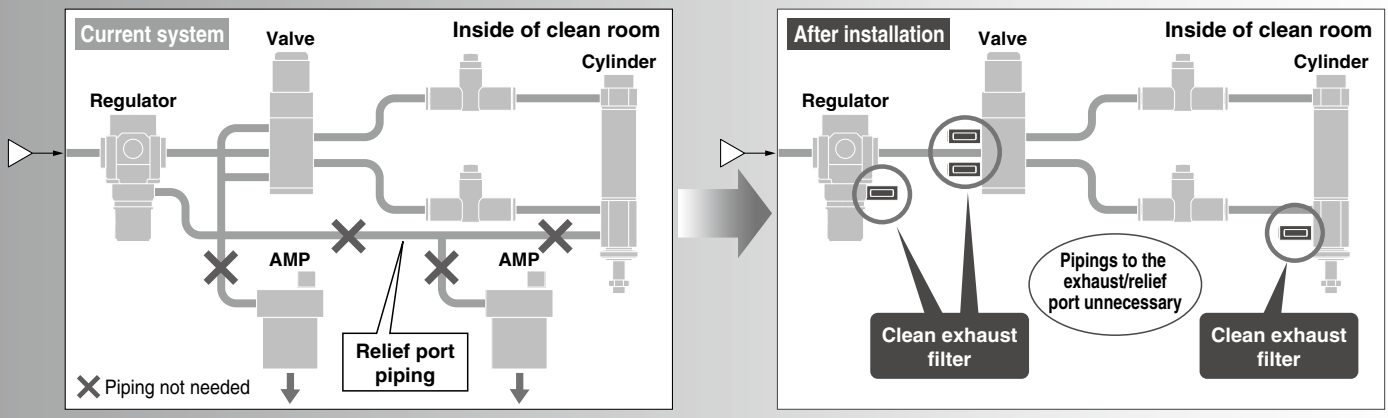
Filtration rating **0.01 μm**

(Filtration efficiency **99.99**%)

Maximum flow capacity
200 L/min (ANR)

Noise reduction
30 dB (A) or more

No need for piping for exhaust air and relief air. Reduces piping installation work and space.



SMC

Modular Type
Air Combination

AC-D Series

Modular connection units are available through the Simple Specials System.

Please contact your local sales representative for more details.

Examples of Simple Specials

Combination example ❶

＊ Please contact your local sales representative for ordering procedures.

Piping adapter
E300-04-D ····· 2 pcs.

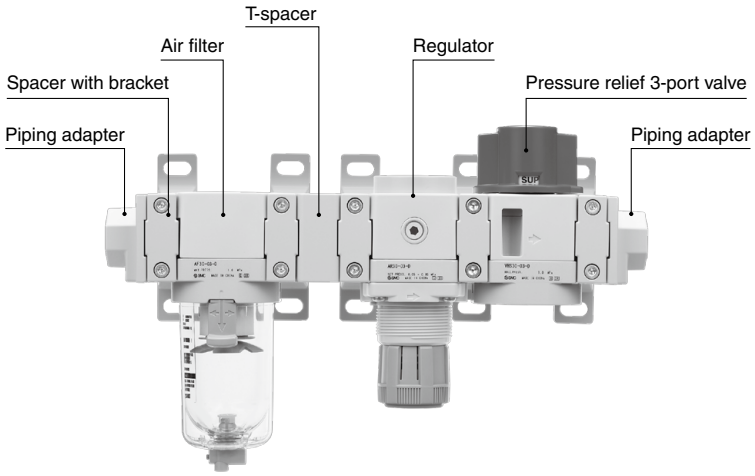
Spacer with bracket
25A-Y300T-D ····· 5 pcs.

Air filter
25A-AF30-03-D ····· 1 pc.

T-spacer
Y310-03-D ····· 1 pc.

Regulator
25A-AR30-03-D ····· 1 pc.

Pressure relief 3-port valve
25A-VHS30-03-D ····· 1 pc.



Combination example ❷

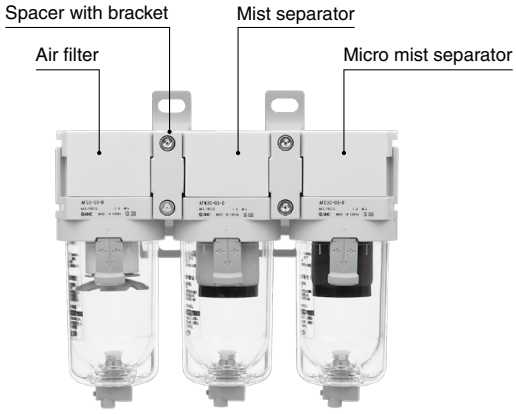
＊ Please contact your local sales representative for ordering procedures.

Air filter
25A-AF30-03-D ····· 1 pc.

Spacer with bracket
25A-Y300T-D ····· 2 pcs.

Mist separator
25A-AFM30-03-D ····· 1 pc.

Micro mist separator
25A-AFD30-03-D ····· 1 pc.



AC-D Series
Option / Accessory / Attachment Part No. List

Section	Description		Part no.					
	Body size		20	30	40	40□-06-D	50	60
Accessory	**Spacer** 		25A-Y200-D	25A-Y300-D	25A-Y400-D	25A-Y500-D	25A-Y600-D	
	Spacer with bracket 		25A-Y200T-D	25A-Y300T-D	25A-Y400T-D	25A-Y500T-D	25A-Y600T-D	
Attachment	**Pressure relief 3-port valve**∗1, ∗2 		25A-VHS20-□01-D 25A-VHS20-□02-D	25A-VHS30-□02-D 25A-VHS30-□03-D	25A-VHS40-□02-D 25A-VHS40-□03-D 25A-VHS40-□04-D	25A-VHS40-□06-D	25A-VHS50-□06-D 25A-VHS50-□10-D	—
	Piping adapter∗1, ∗2 		E200-□01-D E200-□02-D E200-□03-D	E300-□02-D E300-□03-D E300-□04-D	E400-□02-D E400-□03-D E400-□04-D E400-□06-D	E500-□06-D E500-□10-D	E600-□06-D E600-□10-D E600-□12-D E600-□14-D	
	L-shaped piping adapter∗1, ∗2 		E200L-□01-D E200L-□02-D	E300L-□01-D E300L-□02-D E300L-□03-D	E400L-□02-D E400L-□03-D E400L-□04-D	E500L-□04-D E500L-□06-D	E600L-□04-D E600L-□06-D E600L-□10-D	
	T-shaped piping adapter∗1, ∗2 		E200T-□01-D E200T-□02-D	E300T-□01-D E300T-□02-D E300T-□03-D	E400T-□02-D E400T-□03-D E400T-□04-D	E500T-□04-D E500T-□06-D	E600T-□04-D E600T-□06-D E600T-□10-D	
	T-spacer∗1, ∗2 	Standard	Y210-□01-D Y210-□02-D	Y310-□01-D Y310-□02-D Y310-□03-D	Y410-□02-D Y410-□03-D Y410-□04-D	Y510-□02-D Y510-□03-D Y510-□04-D Y510-□06-D	Y610-□03-D Y610-□04-D Y610-□06-D	
		Slim type	Y210-□01-1-D Y210-□02-1-D	Y310-□01-1-D Y310-□02-1-D	Y410-□02-1-D Y410-□03-1-D	Y510-□02-1-D Y510-□03-1-D	Y610-□03-1-D Y610-□04-1-D	
	Cross spacer∗1, ∗2 	Standard	25A-Y24-□01-D 25A-Y24-□02-D	25A-Y34-□01-D 25A-Y34-□02-D 25A-Y34-□03-D	25A-Y44-□02-D 25A-Y44-□03-D 25A-Y44-□04-D	25A-Y54-□02-D 25A-Y54-□03-D 25A-Y54-□04-D 25A-Y54-□06-D	25A-Y64-□03-D 25A-Y64-□04-D 25A-Y64-□06-D	
		Front and back port selectable type	25A-Y24-□01-1-D 25A-Y24-□02-1-D	25A-Y34-□01-1-D 25A-Y34-□02-1-D 25A-Y34-□03-1-D	25A-Y44-□02-1-D 25A-Y44-□03-1-D 25A-Y44-□04-1-D	25A-Y54-□03-1-D 25A-Y54-□04-1-D 25A-Y54-□06-1-D	—	
	Right angle adapter∗2 		E210T-D	E310T-D	E410T-D	—	—	—
	Reducing adapter∗2 		E310R-D	E310R-D E410R-D	E410R-D	—	—	—
	End plate∗2 		E200E-D	E300E-D	E400E-D	—	—	—

∗1 □ in attachment part numbers indicates a pipe thread type. No indication is necessary for Rc thread; however, indicate N for NPT thread, and F for G thread.
∗2 Separate spacers are required for modular units.

Air Filter
25A-AF20-D to 25A-AF60-D



How to Order

25A – AF [30] – [ ] [03] [B] – [ ] – D

❶ ❷ ❸ ❹ ❺

• **Series compatible with secondary batteries**

- Semi-standard: Select one each for **a** and **b**.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.

Example) 25A-AF30-N03B-RZ-D

		Symbol	Description	❶ Body size 20	30	40	50	60
❷	Pipe thread type	**Nil**	Rc	●	●	●	●	●
		N	NPT	●	●	●	●	●
		F	G	●	●	●	●	●
		+						
❸	Port size	**01**	1/8	●	—	—	—	—
		02	1/4	●	●	●	—	—
		03	3/8	—	●	●	—	—
		04	1/2	—	—	●	—	—
		06	3/4	—	—	●	●	—
		10	1	—	—	—	●	●
		+						
❹	Option: Mounting	**Nil**	Without mounting option	●	●	●	●	●
		B∗1	With bracket	●	●	●	●	●
		+						
❺	Semi-standard **a** Flow direction	**Nil**	Flow direction: Left to right	●	●	●	●	●
		R	Flow direction: Right to left	●	●	●	●	●
		+						
	Semi-standard **b** Unit	**Nil**	Unit on product label: MPa, °C	●	●	●	●	●
		Z∗2	Unit on product label: psi, °F	○∗2	○∗2	○∗2	○∗2	○∗2

∗1 Option B is included in the package with the product but does not come assembled. The assembly consists of 2 types of brackets and 2 mounting screws.
∗2 ○: For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act.
(The SI unit type is provided for use in Japan.)

Bracket, Bowl Assembly Part Nos. for the 25A- Series

Option	Model					
	25A-AF20-D	**25A-AF30-D**	**25A-AF40-D**	**25A-AF40-06-D**	**25A-AF50-D**	**25A-AF60-D**
Bracket assembly∗1	25A-AF24P-070AS	25A-AF34P-070AS	25A-AF44P-070AS	25A-AF49P-070AS	25A-AF54P-070AS	
Bowl assembly	25A-C2SF-D	25A-C3SF-D	25A-C4SF-D			

∗1 The assembly consists of an A and B bracket and 2 mounting screws.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Air Filter
25A-AF20-A to 25A-AF60-A



How to Order

25A – AF [30] – [ ] [03] [B] – [ ] – A

❶ ❷ ❸ ❹ ❺

• **Series compatible with secondary batteries**

- Semi-standard: Select one each for **a** and **b**.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.

Example) 25A-AF30-N03B-RZ-A

		Symbol	Description	❶ Body size 20	30	40	50	60
❷	Pipe thread type	**Nil**	Rc	●	●	●	●	●
		N	NPT	●	●	●	●	●
		F	G	●	●	●	●	●
		+						
❸	Port size	**01**	1/8	●	—	—	—	—
		02	1/4	●	●	●	—	—
		03	3/8	—	●	●	—	—
		04	1/2	—	—	●	—	—
		06	3/4	—	—	●	●	—
		10	1	—	—	—	●	●
		+						
❹	Option: Mounting	**Nil**	Without mounting option	●	●	●	●	●
		B∗1	With bracket	●	●	●	●	●
		+						
❺	Semi-standard: **a** Flow direction	**Nil**	Flow direction: Left to right	●	●	●	●	●
		R	Flow direction: Right to left	●	●	●	●	●
		+						
	Semi-standard: **b** Pressure unit	**Nil**	Name plate and caution plate for bowl in SI units: MPa	●	●	●	●	●
		Z∗2	Name plate and caution plate for bowl in imperial units: psi, °F	○∗2	○∗2	○∗2	○∗2	○∗2

∗1 A bracket is not assembled and supplied loose at the time of shipment. Including 2 mounting screws.
∗2 ○: For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

Bracket, Bowl Assembly Part Nos. for the 25A- Series

Model / Option	25A-AF20-A	25A-AF30-A	25A-AF40-A	25A-AF40-06-A	25A-AF50-A 25A-AF60-A
Bracket assembly∗1	25A-AF22P-050AS	25A-AF32P-050AS	25A-AF42P-050AS	25A-AF42P-070AS	25A-AF52P-050AS
Bowl assembly	25A-C2SF-A	25A-C3SF-A	25A-C4SF-A		

∗1 The assembly consists of a bracket and 2 mounting screws.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mist Separator

25A-AFM20-D to 25A-AFM40-06-D

Micro Mist Separator

25A-AFD20-D to 25A-AFD40-06-D



- 25A-AFM Series Nominal filtration rating: 0.3 μm
- 25A-AFD Series Nominal filtration rating: 0.01 μm

How to Order

25A-AFM 30 - ❶ ❷ 03 ❸ B ❹ - ❺ - D

25A-AFD 30 - ❶ ❷ 03 ❸ B ❹ - ❺ - D

- Series compatible with secondary batteries

- Semi-standard: Select one each for **a** and **b**.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.

Example) 25A-AFM30-N03B-RZ-D

			Symbol	Description	❶ Body size 20	30	40
❷	Pipe thread type		**Nil**	Rc	●	●	●
			N	NPT	●	●	●
			F	G	●	●	●
			+				
❸	Port size		**01**	1/8	●	—	—
			02	1/4	●	●	●
			03	3/8	—	●	●
			04	1/2	—	—	●
			06	3/4	—	—	●
			+				
❹	Option	Mounting	**Nil**	Without mounting option	●	●	●
			B∗1	With bracket	●	●	●
			+				
❺	Semi-standard	**a** Flow direction	**Nil**	Flow direction: Left to right	●	●	●
			R	Flow direction: Right to left	●	●	●
			+				
		b Unit	**Nil**	Unit on product label: MPa, °C	●	●	●
			Z∗2	Unit on product label: psi, °F	○∗2	○∗2	○∗2

∗1 Option B is included in the package with the product but does not come assembled. The assembly consists of 2 types of brackets and 2 mounting screws.

∗2 ○: For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

Bracket, Bowl Assembly Part Nos. for the 25A- Series

Option	Model			
	25A-AFM20-D 25A-AFD20-D	**25A-AFM30-D 25A-AFD30-D**	**25A-AFM40-D 25A-AFD40-D**	**25A-AFM40-06-D 25A-AFD40-06-D**
Bracket assembly∗1	25A-AF24P-070AS	25A-AF34P-070AS	25A-AF44P-070AS	25A-AF49P-070AS
Bowl assembly	25A-C2SF-D	25A-C3SF-D	25A-C4SF-D	

∗1 The assembly consists of an A and B bracket and 2 mounting screws.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mist Separator
25A-AFM20-A to 25A-AFM40-A
Micro Mist Separator
25A-AFD20-A to 25A-AFD40-A



- 25A-AFM Series Nominal filtration rating: 0.3 μm
- 25A-AFD Series Nominal filtration rating: 0.01 μm

How to Order

25A-AFM 30 - ❶ ❷ 03 ❸ B ❹ - ❺ - A

25A-AFD 30 - ❶ ❷ 03 ❸ B ❹ - ❺ - A

- Series compatible with secondary batteries

- Semi-standard: Select one each for **a** and **b**.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.

Example) 25A-AFM30-N03B-RZ-A

		Symbol	Description	❶ Body size 20	30	40
❷	Pipe thread type	**Nil**	Rc	●	●	●
		N	NPT	●	●	●
		F	G	●	●	●
		+				
❸	Port size	**01**	1/8	●	—	—
		02	1/4	●	●	●
		03	3/8	—	●	●
		04	1/2	—	—	●
		06	3/4	—	—	●
		+				
❹	Option: Mounting	**Nil**	Without mounting option	●	●	●
		B∗1	With bracket	●	●	●
		+				
❺	Semi-standard: **a** Flow direction	**Nil**	Flow direction: Left to right	●	●	●
		R	Flow direction: Right to left	●	●	●
		+				
	Semi-standard: **b** Pressure unit	**Nil**	Name plate and caution plate for bowl in SI units: MPa	●	●	●
		Z∗2	Name plate and caution plate for bowl in imperial units: psi, °F	○∗2	○∗2	○∗2

∗1 A bracket is not assembled and supplied loose at the time of shipment. Including 2 mounting screws.
∗2 ○: For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

Bracket, Bowl Assembly Part Nos. for the 25A- Series

Option \ Model	25A-AFM20-A 25A-AFD20-A	25A-AFM30-A 25A-AFD30-A	25A-AFM40-A 25A-AFD40-A	25A-AFM40-06-A 25A-AFD40-06-A
Bracket assembly∗1	25A-AF22P-050AS	25A-AF32P-050AS	25A-AF42P-050AS	25A-AF42P-070AS
Bowl assembly	25A-C2SF-A	25A-C3SF-A	25A-C4SF-A	

∗1 The assembly consists of a bracket and 2 mounting screws.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Regulator

25A-AR20-D to 25A-AR60-D

Regulator with Backflow Function

25A-AR20K-D to 25A-AR60K-D



How to Order

25A – AR [30] [K] – [ ] [03] [B] – [ ] – D

❶ ❷ ❸ ❹ ❺ ❻

• **Series compatible with secondary batteries**

- Semi-standard: Select one each for **a** to **e**.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.

Example) 25A-AR30K-03B-1NR-D

		Symbol	Description	❶ Body size 20	30	40	50	60
❷	With backflow function	**Nil**	Without backflow function	●	●	●	●	●
		K∗1	With backflow function	●	●	●	●	●
		+						
❸	Pipe thread type	**Nil**	Rc	●	●	●	●	●
		N	NPT	●	●	●	●	●
		F	G	●	●	●	●	●
		+						
❹	Port size	**01**	1/8	●	—	—	—	—
		02	1/4	●	●	●	—	—
		03	3/8	—	●	●	—	—
		04	1/2	—	—	●	—	—
		06	3/4	—	—	●	●	—
		10	1	—	—	—	●	●
		+						
❺	Option∗2 Mounting	**Nil**	Without mounting option	●	●	●	●	●
		B∗3	With bracket	●	●	●	●	●
		H	With set nut (For panel fitting)	●	●	●	—	—
		+						
❻	Semi-standard **a** Set pressure	**Nil**	0.05 to 0.85 MPa setting	●	●	●	●	●
		1∗4	0.02 to 0.2 MPa setting	●	●	●	●	●
		+						
	b Exhaust mechanism	**Nil**	Relieving type	●	●	●	●	●
		N	Non-relieving type	●	●	●	●	●
		+						
	c Flow direction	**Nil**	Flow direction: Left to right	●	●	●	●	●
		R	Flow direction: Right to left	●	●	●	●	●
		+						
	d Knob	**Nil**	Downward	●	●	●	●	●
		Y	Upward	●	●	●	●	●
		+						
	e Unit	**Nil**	Unit on product label: MPa, Pressure gauge in SI units: MPa	●	●	●	●	●
		Z∗5	Unit on product label: psi, Pressure gauge: MPa/psi dual scale	○∗5	○∗5	○∗5	○∗5	○∗5

∗1 Set the inlet pressure to at least 0.05 MPa higher than the set pressure.
∗2 Options B and H are not assembled and supplied loose at the time of shipment.
∗3 The assembly consists of a bracket and set nuts.
∗4 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.
∗5 ○: For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

Bracket, Set Nut Part Nos. for the 25A- Series

Option	Model					
	25A-AR20(K)-D	**25A-AR30(K)-D**	**25A-AR40(K)-D**	**25A-AR40(K)-06-D**	**25A-AR50(K)-D**	**25A-AR60(K)-D**
Bracket assembly∗1	25A-AR23P-270AS	25A-AR33P-270AS	25A-AR43P-270AS		25A-AR54P-270AS	
Set nut	AR23P-260S	AR33P-260S	AR43P-260S		—∗2	

∗1 The assembly consists of a bracket and set nuts. For the 25A-AR50(K)-D and 25A-AR60(K)-D, the assembly consists of an A and B bracket and 2 mounting screws.
∗2 Please contact SMC regarding the set nuts for the 25A-AR50(K)-D and 25A-AR60(K)-D.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Regulator

25A-AR20-B to 25A-AR60-B

Regulator with Backflow Function

25A-AR20K-B to 25A-AR60K-B



How to Order

25A – AR ❶30 ❷K – ❸□ ❹03 ❺B – ❻□ – B

❶ Series compatible with secondary batteries

- Semi-standard: Select one each for **a** to **e**.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.

Example) 25A-AR30K-03B-1NR-B

		Symbol	Description	❶ Body size 20	25	30	40	50	60
❷	With backflow function	**Nil**	Without backflow function	●	●	●	●	●	●
		K	With backflow function	●	●	●	●	●	●
		+							
❸	Pipe thread type	**Nil**	Rc	●	●	●	●	●	●
		N	NPT	●	●	●	●	●	●
		F	G	●	●	●	●	●	●
		+							
❹	Port size	**01**	1/8	●	—	—	—	—	—
		02	1/4	●	●	●	●	—	—
		03	3/8	—	●	●	●	—	—
		04	1/2	—	—	—	●	—	—
		06	3/4	—	—	—	●	●	—
		10	1	—	—	—	—	●	●
		+							
❺	Option*1 Mounting	**Nil**	Without mounting option	●	●	●	●	●	●
		B*2	With bracket	●	●	●	●	●	●
		H	With set nut (For panel fitting)	●	●	●	●	—	—
		+							
❻	Semi-standard **a** Set pressure	**Nil**	0.05 to 0.85 MPa setting	●	●	●	●	●	●
		1*3	0.02 to 0.2 MPa setting	●	●	●	●	●	●
		+							
	b Exhaust mechanism	**Nil**	Relieving type	●	●	●	●	●	●
		N	Non-relieving type	●	●	●	●	●	●
		+							
	c Flow direction	**Nil**	Flow direction: Left to right	●	●	●	●	●	●
		R	Flow direction: Right to left	●	●	●	●	●	●
		+							
	d Knob	**Nil**	Downward	●	●	●	●	●	●
		Y	Upward	●	●	●	●	●	●
		+							
	e Pressure unit	**Nil**	Name plate in SI units: MPa	●	●	●	●	●	●
		Z*4	Name plate in imperial units: psi	○*4	○*4	○*4	○*4	○*4	○*4

*1 Options B and H are not assembled and supplied loose at the time of shipment.
*2 The assembly consists of a bracket and set nuts (25A-AR20(K) to 25A-AR40(K)). Including 2 mounting screws for the 25A-AR50(K) and 25A-AR60(K).
*3 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.
*4 ○: For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

Bracket, Set Nut Part Nos. for the 25A- Series

Model / Option	25A-AR20(K)-B	25A-AR25(K)-B	25A-AR30(K)-B	25A-AR40(K)-B	25A-AR50(K)-B 25A-AR60(K)-B
Bracket assembly*1	25A-AR23P-270AS	25A-AR28P-270AS	25A-AR33P-270AS	25A-AR43P-270AS	25A-AR52P-270AS*2
Set nut	AR23P-260S	AR28P-260S	AR33P-260S	AR43P-260S	—*3

*1 The assembly consists of a bracket and set nuts.
*2 The assembly consists of a bracket and 2 mounting screws.
*3 Please contact SMC regarding the set nuts for the 25A-AR50(K) and 25A-AR60(K).

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Filter Regulator

25A-AW20-D to 25A-AW60-D

Filter Regulator with Backflow Function

25A-AW20K-D to 25A-AW60K-D



How to Order

25A – AW [30] [K] – [ ] [03] [B] – [ ] – D

❶ ❷ ❸ ❹ ❺ ❻

❶ Series compatible with secondary batteries

- Semi-standard: Select one each for **a** to **d**.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.

Example) 25A-AW30K-03B-1N-D

		Symbol	Description	❶ Body size 20	30	40	60
❷	With backflow function	**Nil**	Without backflow function	●	●	●	●
		K∗1	With backflow function	●	●	●	●
		+					
❸	Pipe thread type	**Nil**	Rc	●	●	●	●
		N	NPT	●	●	●	●
		F	G	●	●	●	●
		+					
❹	Port size	**01**	1/8	●	—	—	—
		02	1/4	●	●	●	—
		03	3/8	—	●	●	—
		04	1/2	—	—	●	—
		06	3/4	—	—	●	●
		10	1	—	—	—	●
		+					
❺	Option∗2 Mounting	**Nil**	Without mounting option	●	●	●	●
		B∗3	With bracket	●	●	●	●
		H	With set nut (For panel fitting)	●	●	●	—
		+					
❻	Semi-standard **a** Set pressure	**Nil**	0.05 to 0.85 MPa setting	●	●	●	●
		1∗4	0.02 to 0.2 MPa setting	●	●	●	●
		+					
	b Exhaust mechanism	**Nil**	Relieving type	●	●	●	●
		N	Non-relieving type	●	●	●	●
		+					
	c Flow direction	**Nil**	Flow direction: Left to right	●	●	●	●
		R	Flow direction: Right to left	●	●	●	●
		+					
	d Unit	**Nil**	Unit on product label: MPa, °C, Pressure gauge in SI units: MPa	●	●	●	●
		Z∗5	Unit on product label: psi, °F, Pressure gauge: MPa/psi dual scale	○∗5	○∗5	○∗5	○∗5

∗1 Set the inlet pressure to at least 0.05 MPa higher than the set pressure.
∗2 Options B and H are not assembled and supplied loose at the time of shipment.
∗3 The assembly consists of a bracket and set nuts
∗4 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.
∗5 ○ : For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

Bracket, Set Nut, Bowl Assembly Part Nos. for the 25A- Series

Option	Model				
	25A-AW20(K)-D	**25A-AW30(K)-D**	**25A-AW40(K)-D**	**25A-AW40(K)-06-D**	**25A-AW60(K)-D**
Bracket assembly∗1	25A-AW23P-270AS	25A-AR33P-270AS	25A-AR43P-270AS		25A-AR54P-270AS
Set nut	AR23P-260S	AR33P-260S	AR43P-260S		—∗2
Bowl assembly	25A-C2SF-D	25A-C3SF-D	25A-C4SF-D		

∗1 The assembly consists of a bracket and set nuts.
∗2 For the 25A-AW60(K)-D, the assembly consists of an A and B bracket and 2 mounting screws. Please contact SMC regarding the set nuts for the 25A-AW60(K)-D.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Filter Regulator

25A-AW20-B to 25A-AW60-B

Filter Regulator with Backflow Function

25A-AW20K-B to 25A-AW60K-B



How to Order

25A – AW [30] [K] – [ ] [03] [B] – [ ] – B

❶ ❷ ❸ ❹ ❺ ❻

• Series compatible with secondary batteries

- Semi-standard: Select one each for **a** to **d**.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.

Example) 25A-AW30K-03B-1N-B

		Symbol	Description	❶ Body size 20	30	40	60
❷	With backflow function	**Nil**	Without backflow function	●	●	●	●
		K	With backflow function	●	●	●	●
❸	Pipe thread type	**Nil**	Rc	●	●	●	●
		N	NPT	●	●	●	●
		F	G	●	●	●	●
❹	Port size	**01**	1/8	●	—	—	—
		02	1/4	●	●	●	—
		03	3/8	—	●	●	—
		04	1/2	—	—	●	—
		06	3/4	—	—	●	●
		10	1	—	—	—	●
❺	Option *1 — Mounting	**Nil**	Without mounting option	●	●	●	●
		B*2	With bracket	●	●	●	●
		H	With set nut (For panel fitting)	●	●	●	—
❻	Semi-standard — **a** Set pressure	**Nil**	0.05 to 0.85 MPa setting	●	●	●	●
		1*3	0.02 to 0.2 MPa setting	●	●	●	●
	b Exhaust mechanism	**Nil**	Relieving type	●	●	●	●
		N	Non-relieving type	●	●	●	●
	c Flow direction	**Nil**	Flow direction: Left to right	●	●	●	●
		R	Flow direction: Right to left	●	●	●	●
	d Pressure unit	**Nil**	Name plate and caution plate for bowl in SI units: MPa	●	●	●	●
		Z*4	Name plate and caution plate for bowl in imperial units: psi, °F	○*4	○*4	○*4	○*4

*1 Options B and H are not assembled and supplied loose at the time of shipment.
*2 The assembly consists of a bracket and set nuts (25A-AW20(K) to 25A-AW40(K)). Including 2 mounting screws for the 25A-AW60(K).
*3 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.
*4 ○ : For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

Bracket, Set Nut, Bowl Assembly Part Nos. for the 25A- Series

Option \ Model	25A-AW20(K)-B	25A-AW30(K)-B	25A-AW40(K)-B	25A-AW60(K)-B
Bracket assembly*1	25A-AW23P-270AS	25A-AR33P-270AS	25A-AR43P-270AS	25A-AW62P-270AS*2
Set nut	AR23P-260S	AR33P-260S	AR43P-260S	—*3
Bowl assembly	25A-C2SF-A	25A-C3SF-A	25A-C4SF-A	

*1 The assembly consists of a bracket and set nuts.
*2 The assembly consists of a bracket and 2 mounting screws.
*3 Please contact SMC regarding the set nuts for the 25A-AW60(K).

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Mist Separator Regulator
25A-AWM30, AWM40-D
Micro Mist Separator Regulator
25A-AWD30, AWD40-D

- 25A-AWM Series Nominal filtration rating: 0.3 μm
- 25A-AWD Series Nominal filtration rating: 0.01 μm



25A-AWM30-D 25A-AWD30-D

How to Order

25A-AWM 30 - ☐ 03 B - ☐ - D

25A-AWD 30 - ☐ 03 B - ☐ - D

25A: Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺

- Semi-standard: Select one each for **a** to **d**.
- Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
  Example) 25A-AWM30-F03B-1NR-D

			Symbol	Description	❶ Body size 30	❶ Body size 40
❷	Pipe thread type		**Nil**	Rc	●	●
			N	NPT	●	●
			F	G	●	●
			+			
❸	Port size		**02**	1/4	●	●
			03	3/8	●	●
			04	1/2	—	●
			+			
❹	Option *1	Mounting	**Nil**	Without mounting option	●	●
			B*2	With bracket	●	●
			H	With set nut (for panel mount)	●	●
			+			
❺	Semi-standard	**a** Set pressure*3	**Nil**	0.05 to 0.85 MPa setting	●	●
			1	0.05 to 0.2 MPa setting	●	●
			+			
		b Exhaust mechanism	**Nil**	Relieving type	●	●
			N	Non-relieving type	●	●
			+			
		c Flow direction	**Nil**	Flow direction: Left to right	●	●
			R	Flow direction: Right to left	●	●
			+			
		d Unit	**Nil**	Unit on product label: MPa, °C	●	●
			Z*4	Unit on product label: psi, °F	○*5	○*5

*1 Options B and H are not assembled and supplied loose at the time of shipment.
*2 The assembly consists of a bracket and set nuts.
*3 Pressure can be set higher than the specification pressure in some cases, but use pressure within the specification range.
*4 For the pipe thread type: NPT
This product is for overseas use only according to the New Measurement Act.
(The SI unit type is provided for use in Japan.)
*5 ○: For the pipe thread type: NPT only

Bracket, Set Nut, Bowl Assembly Part Nos. for the 25A- Series

Optional specifications	Model: 25A-AWM30-D, 25A-AWD30-D	Model: 25A-AWM40-D, 25A-AWD40-D
Bracket assembly*1	25A-AR33P-270AS	25A-AR43P-270AS
Set nut	AR33P-260S	AR43P-260S
Bowl assembly	25A-C3SF-D	25A-C4SF-D

*1 The assembly consists of a bracket and set nuts.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Soft Start-up Valve

25A-AV2000-A to 25A-AV5000-A



How to Order

25A – AV [20] 00 – [ ] [02] [B] – [1] [D] [ ] [B] – [ ] – A

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾

- **Series compatible with secondary batteries**∗7

· Select one each for options "**a**" and semi-standard options "**b**" and "**c**."
· Option/Semi-standard symbol: When more than one specification is required, indicate in alphabetical order.
Example) 25A-AV2000-N02B-1DB-RZ-A

∗ CE/UKCA compliant: ●

	Electrical entry		
	Grommet	DIN terminal	M12 connector
AC	—	●	—
DC	●	●	●

			Symbol	Description	❶ Body size 20	30	40	50
❷	Thread type		**Nil**	Rc	●	●	●	●
			N	NPT	●	●	●	●
			F	G	●	●	●	●
			+					
❸	Port size 1(P), 2(A)		**02**	1/4	●	—	—	—
			03	3/8	—	●	—	—
			04	1/2	—	—	●	—
			06	3/4	—	—	—	●
			10	1	—	—	—	●
			+					
❹	Option	**a** Mounting	**Nil**	Without mounting option	●	●	●	●
			B	With bracket	●	●	●	●
			+					
❺	Rated coil voltage	AC (50/60 Hz)	**1**	100 VAC	●	●	●	●
			2	200 VAC	●	●	●	●
			3	110 VAC [115 VAC]∗1	●	●	●	●
			4	220 VAC [230 VAC]∗1	●	●	●	●
		DC	**5**	24 VDC	●	●	●	●
			6	12 VDC	●	●	●	●
			+					
❻	Electrical entry		**G**	Grommet (Lead wire length: 300 mm)	●	●	●	●
			D	Type D (DIN terminal/With connector)	●	●	●	●
			Y	Type Y (DIN terminal/With connector)∗2	●	●	●	●
			KO	M12 connector (Without cable)	○∗3	○∗3	○∗3	○∗3
			+					
❼	Light/surge voltage suppressor		**Nil**	None	●	●	●	●
			Z	With light/surge voltage suppressor	○∗4	○∗4	○∗4	○∗4
			+					
❽	Manual override		**Nil**	Non-locking push type	●	●	●	●
			B	Push-turn locking slotted type	●	●	●	●
			C	Push-turn locking lever type	●	●	●	●
			+					
❾	Semi-standard	**b** Flow direction	**Nil**	Flow direction: Left to right	●	●	●	●
			R	Flow direction: Right to left	●	●	●	●
			+					
		c Pressure unit	**Nil**	Unit on product label: MPa, Pressure gauge: MPa	●	●	●	●
			Z∗5	Unit on product label: psi, Pressure gauge: MPa/psi dual scale	○∗6	○∗6	○∗6	○∗6

∗1 The 110 VAC and the 115 VAC are interchangeable. The 220 VAC and the 230 VAC are interchangeable as well. The allowable voltage fluctuation is –15% to +5% of the rated voltage for the 115 VAC or the 230 VAC.
∗2 Type "Y" is a DIN terminal in compliance with EN-175301-803C (former DIN43650C).
∗3 When the electrical entry is "KO," only the DC specifications (5 or 6) can be selected for the rated coil voltage.
∗4 When it is "KO," only the "With light/surge voltage suppressor" option can be selected.
∗5 For the pipe thread type: NPT
This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)
∗6 Pressure unit Z: For the pipe thread type: NPT only
∗7 Coils for pilot valve assemblies, connector pins, and lead wires are made of copper.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Bracket/Option Part Nos., Pilot Valve Assembly/Replacement Parts for the 25A- Series

Description	Series			
	25A-AV2000-A	**25A-AV3000-A**	**25A-AV4000-A**	**25A-AV5000-A**
Bracket assembly∗1	25A-AV22P-210AS	25A-AV32P-210AS	25A-AV42P-210AS	25A-AV52P-210AS
Pilot valve assembly	Refer to the How to Order below.			

∗1 Bracket: 1 pc., Mounting screw: 2 pcs. (3 pcs. for the 25A-AV5000-A)

How to Order Pilot Valve Assembly

25A−AV[2]0−[1][G][ ][B]A

❶ ❷ ❸ ❹ ❺

Series compatible with secondary batteries

			Symbol	Description	Applicable body size			
					20	**30**	**40**	**50**
❶	Body size		**2**	For the AV2000-A, AV3000-A	●	●	—	—
			4	For the AV4000-A, AV5000-A	—	—	●	●
			+					
❷	Rated coil voltage	AC (50/60 Hz)	**1**	100 VAC	●	●	●	●
			2	200 VAC	●	●	●	●
			3	110 VAC [115 VAC]∗1	●	●	●	●
			4	220 VAC [230 VAC]∗1	●	●	●	●
		DC	**5**	24 VDC	●	●	●	●
			6	12 VDC	●	●	●	●
			+					
❸	Electrical entry		**G**	Grommet (Lead wire length: 300 mm)	●	●	●	●
			D	Type D (DIN terminal/With connector)	●	●	●	●
			Y	Type Y (DIN terminal/With connector)∗2	●	●	●	●
			KO	M12 connector (Without cable)	○∗3	○∗3	○∗3	○∗3
			+					
❹	Light/surge voltage suppressor		**Nil**	None	●	●	●	●
			Z	With light/surge voltage suppressor	○∗4	○∗4	○∗4	○∗4
			+					
❺	Manual override		**Nil**	Non-locking push type	●	●	●	●
			B	Push-turn locking slotted type	●	●	●	●
			C	Push-turn locking lever type	●	●	●	●

∗1 The 110 VAC and the 115 VAC are interchangeable. The 220 VAC and the 230 VAC are interchangeable as well.
The allowable voltage fluctuation is –15% to +5% of the rated voltage for the 115 VAC or the 230 VAC.
∗2 Type “Y” is a DIN terminal in compliance with EN-175301-803C (former DIN43650C).
∗3 When the electrical entry is “KO,” only the DC specifications (5 or 6) can be selected for the rated coil voltage.
∗4 When it is “KO,” only the “With light/surge voltage suppressor” option can be selected.

Precision Regulator

RoHS

25A-IR1000/2000/3000-A Series



How to Order

25A-IR ❶ 0 ❷❸ - ❹ ❺ ❻ - ❼ - A

- Option/Semi-standard: Select one each for **a**, **b**, and **c**.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.

			Symbol	Description	❶ Body size 1	2	3
❷	Set pressure range		**0**	0.005 to 0.2 MPa	●	●	—
				0.01 to 0.2 MPa	—	—	●
			1	0.01 to 0.4 MPa	●	●	●
			2	0.01 to 0.8 MPa	●	●	●
❸	Exhaust direction		**0**	Bottom exhaust	●	●	●
			1	Front exhaust	—	—	●
			2	Rear exhaust	—	—	●
❹	Pipe thread type		**Nil**	Rc	●	●	●
			N	NPT	●	●	●
			F	G	●	●	●
❺	Port size		**01**	1/8	●	—	—
			02	1/4	—	●	●
			03	3/8	—	—	●
			04	1/2	—	—	●
❻	Option *1	**a** Mounting	**Nil**	Without mounting option	●	●	●
			B*2	With bracket	●	●	●
			H	With hexagon panel nut (for panel mount)	●	●	●
		b With digital pressure switch	**EA**	NPN open collector 1 output	●	●	●
			EB	PNP open collector 1 output	●	●	●
			EC	NPN open collector 2 outputs + Analog voltage output	●	●	●
			ED	NPN open collector 2 outputs + Analog current output	●	●	●
❼	Semi-standard	**c** Flow direction	**Nil**	Flow direction: Left to right	●	●	●
			R	Flow direction: Right to left	●	●	●
		d Knob	**Nil**	Upward	●	●	●
			V	Downward	●	●	●
		e Pressure unit*3	**Nil**	Name plate and pressure gauge in imperial units: MPa	●	●	●
			Z	Name plate and pressure gauge in imperial units: psi	●	●	●
			ZA	Digital pressure switch: With unit conversion function	●	●	●

*1 Options are shipped together with the product but do not come assembled. B and H cannot be selected at the same time. The current bracket cannot be used for this product.
*2 The assembly consists of a bracket and set nuts
*3 See pressure unit table below.

	Pipe thread type	Name plate in imperial units	Pressure switch in imperial units **EA, EB, EC, ED**	Sales*6
Nil	Rc	MPa	Fixed SI unit	Japan, Overseas
	NPT			
	G			
Z*4	Rc	—	—	Only overseas
	NPT	psi	With unit conversion function (Initial value psi)	
	G	—	—	
ZA*5	Rc	MPa	With unit conversion function	Only overseas
	NPT			
	G			

*4 For pipe thread type: NPT
*5 For options: EA, EB, EC, ED
*6 According to the new Measurement Law, only the SI unit type is provided for use in Japan.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Electro-Pneumatic Regulator

25A-ITV1000/2000/3000 Series



How to Order

25A – ITV 2 0 1 0 – 0 1 □ 2 □ S □

Series compatible with secondary batteries

Model

1	1000 type
2	2000 type
3	3000 type

Pressure range

1	0.1 MPa
3	0.5 MPa
5	0.9 MPa

Power supply voltage

0	24 VDC
1	12 to 15 VDC

Input signal

0	Current type 4 to 20 mADC (Sink type)
1	Current type 0 to 20 mADC (Sink type)
2	Voltage type 0 to 5 VDC
3	Voltage type 0 to 10 VDC
40	4 points preset input

Monitor output

1	Analog output 1 to 5 VDC
2	Switch output/NPN output
3	Switch output/PNP output
4	Analog output 4 to 20 mADC (Sink type)
Nil	None (For 4 points preset input)

Thread type

Nil	Rc
N	NPT
T	NPTF
F	G

Port size

1	1/8 (1000 type)
2	1/4 (1000, 2000, 3000 type)
3	3/8 (2000, 3000 type)
4	1/2 (3000 type)

Bracket

Nil	Without bracket
B	Flat bracket
C	L-bracket

∗ The bracket is made with a special black chromium treatment. The bracket is shipped with the product.

Cable connector type

S	Straight type 3 m
L	Right angle type 3 m
N	Without cable connector

∗ A dedicated cable connector whose material was changed is used.

Pressure display unit

Nil	MPa
2∗1	kgf/cm²
3	bar
4∗1	psi
5	kPa

∗1 This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

∗ Since the lead wires and electrical circuits are used, this product is not completely copper-free. Only the wetted parts are copper-free.

∗ Copper and zinc materials are used for solenoid valve coils, connector pins, and lead wire substrate.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Electronic Vacuum Regulator

25A-ITV209□ Series



How to Order

25A – ITV 209 0 – 0 1 □ 2 □ S 5

Series compatible with secondary batteries

Pressure range

9	–1.3 to 80 kPa

Power supply voltage

0	24 VDC
1	12 to 15 VDC

Input signal

0	Current type 4 to 20 mADC
1	Current type 0 to 20 mADC
2	Voltage type 0 to 5 VDC
3	Voltage type 0 to 10 VDC
40	Preset input (Negative common)

Monitor output

1	Analog output 1 to 5 VDC
2	Switch output/NPN output
3	Switch output/PNP output
4	Analog output 4 to 20 mADC (Sink type)
Nil	None (For Preset input)

Thread type

Nil	Rc
N	NPT
T	NPTF
F	G

Port size

2	1/4

Bracket

Nil	Without bracket
B	Flat bracket
C	L-bracket

* The bracket is made with a special black chromium treatment. The bracket is shipped with the product.

Cable connector type

S	Straight type 3 m
L	Right angle type 3 m
N	Without cable connector

* A dedicated cable connector whose material was changed is used.

Pressure display unit

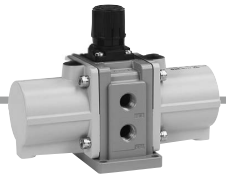
5	kPa

* Since the lead wires and electrical circuits are used, this product is not completely copper-free. Only the wetted parts are copper-free.
* Copper and zinc materials are used for solenoid valve coils, connector pins, and lead wire substrate.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Booster Regulator
25A-VBA Series RoHS



How to Order

25A – VBA [40A] – [ ] [04] [ ]

Series compatible with secondary batteries

Body size

10A	1/4", Handle-operated type	Pressure increase ratio: Twice
20A	3/8", Handle-operated type	
40A	1/2", Handle-operated type	

Thread type∗1

Symbol	Thread type
Nil	Rc
F	G
N	NPT
T	NPTF

∗1 Thread types apply to the IN, OUT, and EXH ports of the VBA10A and to the IN, OUT, EXH, and gauge ports of the VBA20A and VBA40A. The gauge ports of the VBA10A are Rc thread type regardless of the thread type indication.

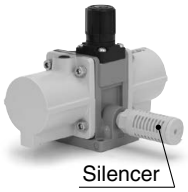
Port size

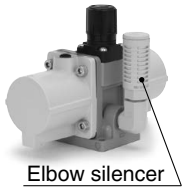
Symbol	Port size	Applicable series
02	1/4	VBA10A
03	3/8	VBA20A
04	1/2	VBA40A

Option

Symbol	Option
Nil	None
N	Silencer
S	High-noise reduction silencer∗1
LN	Elbow silencer∗1
LS	Elbow high-noise reduction silencer∗1

∗1 Refer to "Combination of Thread Type and Options."
∗ Pressure gauge is not available as an option.


Silencer


Elbow silencer

Combination of Thread Type and Options

Body size	Thread type	Option				
		Nil	**N**	**S**	**LN**	**LS**
10A	**Nil**	●	●	●	●	●
	F	●	●	●	●	●
	N	●	●	—	●	—
	T	●	●	—	●	—
20A	**Nil**	●	●	●		
	F	●	●	●		
	N	●	●	●		
	T	●	●	●		
40A	**Nil**	●	●	●		
	F	●	●	●		
	N	●	●	●		
	T	●	●	●		

⚠Caution

- Not compatible with a low dew point
- VBA10A: Due to the close proximity of the IN and OUT sides of the gauge port and the handle of the booster regulator, a G43-10-01-X300/G46-SRB pressure gauge cannot be mounted as it will interfere with the handle.
  VBA20A/40A: The G43-10-01-X300/G46-SRB pressure gauge cannot be mounted as the mounting pitch of the IN and OUT sides of the gauge port of the booster regulator is smaller than the diameter of the pressure gauge. In order to mount the pressure gauge, piping which does not cause any interference must be prepared separately.

Air Tank Compatibility Chart

Air tank \ Booster regulator	25A-VBA10A	25A-VBA20A	25A-VBA40A
25A-VBAT05A1	●	—	—
25A-VBAT05S1			
25A-VBAT10A1	●	●	—
25A-VBAT10S1			
25A-VBAT20A1	—	●	●
25A-VBAT20S1			
25A-VBAT38A1	—	●	●
25A-VBAT38S1			

∗ Refer to page 251 for details on air tanks.

∗ The 25A- series specifications and dimensions are the same as those of the standard model. **For details, refer to the Web Catalog.**

Air Tank
25A-VBAT Series

RoHS



How to Order

- **For the booster regulator, use the 25A-VBA.**
- **It can be used alone as a tank.**

Standard product
(For Japanese market)

＊ The thread type for each port is Rc.

25A – VBAT 10 A 1

Tank internal capacity

Symbol	Internal capacity
05	5 L
10	10 L
20	20 L
38	38 L

Material

Symbol	Material
A	Carbon steel (SS400)
S	Stainless steel

＊ Order drain valve (VBAT-V2) separately.
＊ Safety valve is not available as an option.

Series compatible with secondary batteries

⚠Caution

- When used as a single unit (not connected with a booster regulator) and pressurized at over 1 MPa at normal temperatures, the air tank falls under the scope of the “High Pressure Gas Safety Act” in Japan.

＊ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Pressure Gauge for General Purpose

G43-10-01-X300

RoHS



How to Order

G43−10−01−X300

Internal/external parts copper-free type

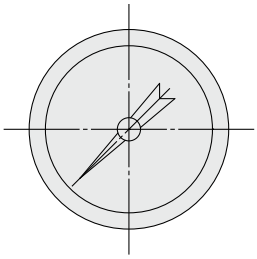
Specifications

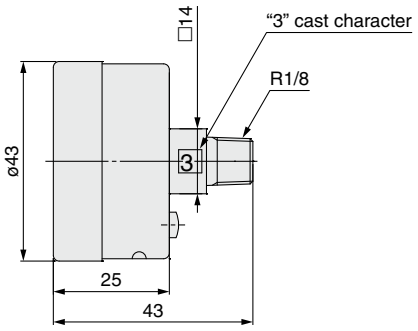
Type	Back side thread
Thread type	R
Pressure range	0–1.0 MPa
Accuracy	±3% F.S
Weight	82 g

∗ The dimensions and shape may differ in some parts from those of the standard product.

Dimensions

G43-10-01-X300





Pressure Gauge for Clean Regulator/ With Limit Indicator

G46-SRB

RoHS



How to Order

G46 – ❶ – ❷ ❸ – SRB – ❹ – ❺ – ❻

Pressure gauge

		Symbol	Description	G46
		+		
❶	Max. display pressure	**2**	0.2 MPa	●
		4	0.4 MPa	●
		7	0.7 MPa	●
		10	1.0 MPa	●
		P2 (1)	0.2 MPa, 30 psi	○ (2)
		P10 (1)	1.0 MPa, 150 psi	○ (2)
		+		
❷	Connection thread	**01**	R 1/8	●
		02	R 1/4	●
		+		
❸	Option	**Nil**	—	●
		M (3)	With M5 (Female thread)	●
		+		
❹	Grade	**SRB**	Component parts: General degreasing Assembly: General production line	●
		+		
❺	Attachment	**Nil**	Without cover ring assembly	●
		C	Clear cover has no protrusion. (Clear cover is irremovable.)	●
		C2	Clear cover has protrusion. (Clear cover is removable.) The wrench flats protrude.	●
		+		
❻	Special specification	**Nil**	—	●
		X30	Both MPa and psi	○ (2)

Note 1) This symbol must be used with Special specification "X30."
Note 2) Under the New Measurement Law, products for overseas use only (SI unit type for use in Japan)
Note 3) To use the pressure gauge with M5 (female thread), attach the joint when piping the tube. For combinations with the special specification products, please consult SMC separately.

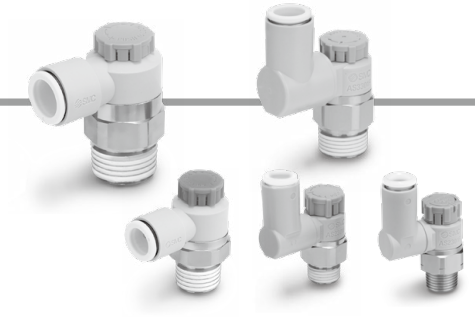
For details, refer to the **Web Catalog**.

Speed Controller with One-touch Fitting
Stainless Steel Type Push-lock Type
Elbow Type/Universal Type
AS-FG Series
In-line Type
AS-FG Series

This product (standard product) is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.

RoHS

Elbow | Universal | Stainless steel



How to Order

Applicable tubing O.D. *1

Metric size		Inch size	
02	ø2	01	ø1/8"
23	ø3.2 *2	03	ø5/32"
04	ø4	07	ø1/4"
06	ø6		

*1 For selecting applicable tubing O.D., refer to the "Model" on the **Web Catalog**. The color of the release button is white (metric, inch).
*2 Use ø1/8" tube.

Body size

1	M5 x 0.8 10-32 UNF

Port size

M5	M5 x 0.8
U10/32	10-32 UNF

Body size 1

AS 1 2 0 1 F G – M5 – 06 A

Body size 2/3/4

AS 2 2 0 1 F G – ☐ 01 – 06 S A

Push-lock type

Body size

2	1/8, 1/4
3	3/8
4	1/2

Type

2	Elbow
3	Universal

Thread type

Nil	R
N	NPT
G	G

Port size

01	1/8
02	1/4
03	3/8
04	1/2

Seal method

Nil	Without sealant
S	With sealant

* Face seal method is used for the G thread type.
Select "Nil/Without sealant."
Example) AS2201FG-G01-06A

Control type *1

0	Meter-out
1	Meter-in

*1 Meter-out and meter-in types can be visually identified by color of the knob.
Meter-out: Gray
Meter-in: Light blue

Applicable tubing O.D. *1

Metric size		Inch size *3	
23	ø3.2 *2	01	ø1/8"
04	ø4	03	ø5/32"
06	ø6	07	ø1/4"
08	ø8	09	ø5/16"
10	ø10	11	ø3/8"
12	ø12	13	ø1/2"
16	ø16		

*1 For selecting applicable tubing O.D., refer to the "Model" on the **Web Catalog**.
The color of the release button is white (metric, inch).
*2 Use ø1/8" tube.
*3 Only the metric size is available for the G thread type.

Stainless steel type (Stainless steel 303)

* The material can be visually identified by color of the release button.
Stainless steel type: White
* White is also used for inch size.

In-line | Stainless steel



How to Order

AS 200 2 F G – 06 A

Body size

100	M5 standard
200	1/8 standard
205	1/4 standard
300	3/8 standard
400	1/2 standard

With One-touch fittings

Stainless steel type (Stainless steel 303)

* The material can be visually identified by color of the release button.
Stainless steel type: White
* White is also used for inch size.

Push-lock type

Applicable tubing O.D. *1

Metric size		Inch size	
23	ø3.2*2	01	ø1/8"
04	ø4	03	ø5/32"
06	ø6	07	ø1/4"
08	ø8	09	ø5/16"
10	ø10	11	ø3/8"
12	ø12	13	ø1/2"

*1 For selecting applicable tubing O.D., refer to the "Model" on the **Web Catalog**.
*2 Use ø1/8" tubing.

Speed Controller with Indicator
Stainless Steel Series
Elbow Type/Universal Type
AS-FSG Series
In-line Type
AS-FSG Series

This product (standard product) is a secondary battery compatible product. For details on specifications and dimensions, refer to the **Web Catalog**.

RoHS



Elbow | Universal | Stainless steel



How to Order

Body size 1

AS **1** **2** **0** 1F **S** **G** □ – **M5** – **06**

Body size 2/3/4

AS **2** **2** **0** 1F **S** **G** □ – □ **01** – **06** **S**

❹ ❺ ❻ With indicator ❼ ❽ ❾ ❿ ⓫ ⓬

❶ Body size

1	M5 x 0.8 10-32 UNF

❷ Port size

M5	M5 x 0.8
U10/32	10-32 UNF

❸ Applicable tubing O.D.*1

Metric size		Inch size	
02	ø2	01	ø1/8"
23	ø3.2*2	03	ø5/32"
04	ø4	07	ø1/4"
06	ø6		

*1 For selecting applicable tubing O.D., refer to the "Model" on the **Web Catalog**. Metric size and inch size types can be visually identified by color of the release button. Stainless steel type: White. White is also used for inch size.
*2 Use ø1/8" tubing.

❹ Body size

2	1/8, 1/4
3	3/8
4	1/2

❺ Type

2	Elbow
3	Universal

❻ Control type*1

0	Meter-out
1	Meter-in

*1 Meter-out and meter-in types can be visually identified by color of the knob. Meter-out: Gray. Meter-in: Light blue

❼ Stainless steel type

* Metric size and inch size types can be visually identified by color of the release button. Stainless steel type: White
* White is also used for inch size.

❽ Indicator window direction

		Elbow	Universal
Nil	0° (Indicator window)	●	—
1	180° (Indicator window)	●	●
2	90° (Indicator window)	●	—
3	270° (Indicator window)	●	—

* Orientation of indicator direction is fixed when manufacturing, and cannot be changed by the user. In addition, the universal type is only available with 180° setting.

❾ Thread type

Nil	R
N	NPT
G	G

❿ Port size

01	1/8
02	1/4
03	3/8
04	1/2

⓫ Applicable tubing O.D.*1

Metric size		Inch size*3	
23	ø3.2*2	01	ø1/8"
04	ø4	03	ø5/32"
06	ø6	07	ø1/4"
08	ø8	09	ø5/16"
10	ø10	11	ø3/8"
12	ø12	13	ø1/2"
16	ø16		

*1 For selecting applicable tubing O.D., refer to the "Model" on the **Web Catalog**.
*2 Use ø1/8" tubing.
*3 Only the metric size is available for the G thread type.

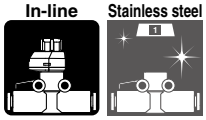
⓬ Seal method

Nil	Without sealant
S	With sealant

* Face seal type is used for the G thread type. Select "Nil/Without sealant".

Example) AS2201FSG-G01-06

In-line | Stainless steel





How to Order

AS **200** **2** F **S** **G** **1** – **06**

❶ With indicator ❷ ❸ ❹

❶ Body size

100	M5 standard
200	1/8 standard
205	1/4 standard
300	3/8 standard
400	1/2 standard

❷ Stainless steel type (Stainless steel 303)

* The material can be visually identified by color of the release button. Stainless steel type: White
* White is also used for inch size.

❸ Indicator direction

Nil	0°	Indicator window, Index plate	2	90°	Index plate
1	180°	Indicator window, Index plate	3	270°	Indicator window, Index plate

❹ Applicable tubing O.D.*1

Metric size				Inch size			
23	ø3.2*2	08	ø8	01	ø1/8"	09	ø5/16"
04	ø4	10	ø10	03	ø5/32"	11	ø3/8"
06	ø6	12	ø12	07	ø1/4"	13	ø1/2"

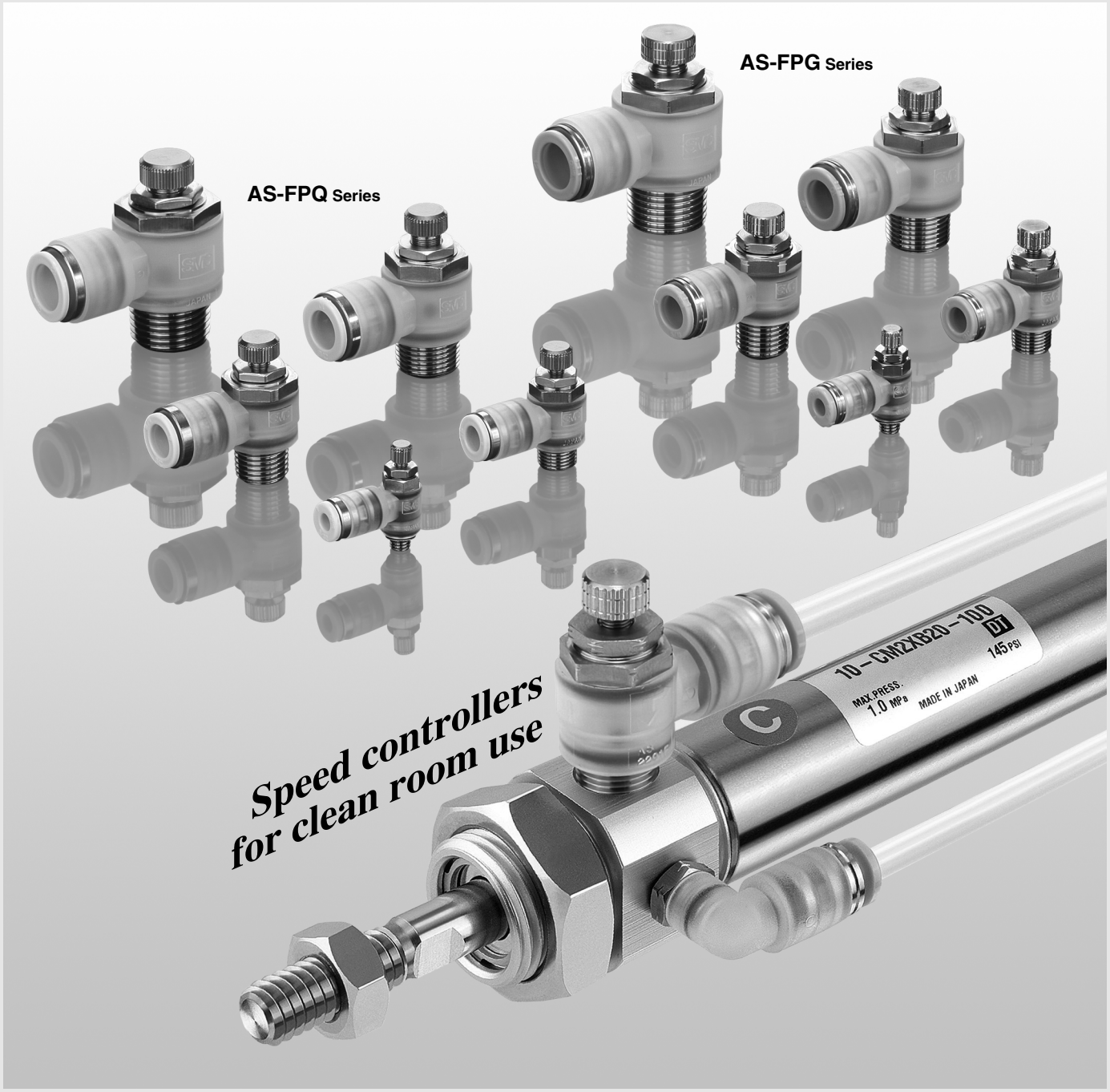
*1 For selecting applicable tubing O.D., refer to the "Model" on the **Web Catalog**.
*2 Use ø1/8" tubing.

Clean Speed Controller with One-touch Fitting

This product (only the stainless steel metal parts type) is a secondary battery compatible product. For details, refer to the **Web Catalog**.

AS-FPQ/AS-FPG Series

RoHS



AS-FPQ: Brass (electroless nickel plated) and AS-FPG: Stainless steel 304 are now available as a series.

Quick Exhaust Valve with One-touch Fittings

RoHS

25A-AQ240F/340F Series



How to Order

IN, OUT port applicable tubing O.D.

04	ø4

Body size

2	M5

Exhaust port

04	Applicable tubing O.D. ø4

25A-AQ240F-04-04

25A-AQ340F-06-06

Series compatible with secondary batteries

Quick exhaust valve

Body size

3	1/8

In-line type

With One-touch fittings

IN, OUT port applicable tubing O.D.

06	ø6

Exhaust port

06	Applicable tubing O.D. ø6

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Check Valve with One-touch Fittings

25A-AKH Series

RoHS

How to Order



Straight type **25A – AKH 04 – 00**

Series compatible with secondary batteries

Applicable tubing O.D.

Metric size

04	ø4
06	ø6
08	ø8
10	ø10
12	ø12

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Rotary One-touch Fittings

25A-KX Series

High Speed Type

RoHS



How to Order

25A – KX H 06 – 01S

Series compatible with secondary batteries

Rotary One-touch fittings
High speed type

Model

Symbol	Model
H	Male connector
L	Male elbow

Applicable tubing O.D.

Symbol	Size
04	ø4
06	ø6
08	ø8
10	ø10

Bore size

Symbol		Size	Male thread seal method
Thread connection	**M5**	M5 x 0.8	Gasket seal
	01S	R1/8	With sealant
	02S	R1/4	
	G01	G1/8	Face seal
	G02	G1/4	

Applicable Tubing

Tubing material	FEP, PFA, Nylon, Soft nylon, Polyurethane
Tubing O.D.	ø4, ø6, ø8, ø10

KX Series

Model	Connection thread	Applicable tubing O.D. [mm] ø4	ø6	ø8	ø10
Male connector **25A-KXH** 	M5 x 0.8	●	●		
	R 1/8		●	●	
	R 1/4				●
	G 1/8		●	●	
	G 1/4				●
Male elbow **25A-KXL** 	M5 x 0.8	●	●		
	R 1/8		●	●	
	R 1/4				●
	G 1/8		●	●	
	G 1/4				●

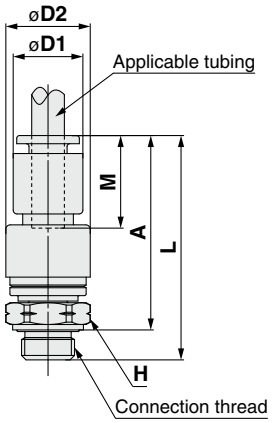
∗ The 25A- series specifications are the same as those of the standard model. For the G thread dimensions, refer to page 258-2 for details.

For details, refer to the Web Catalog.

Male Connector: KXH (High speed)



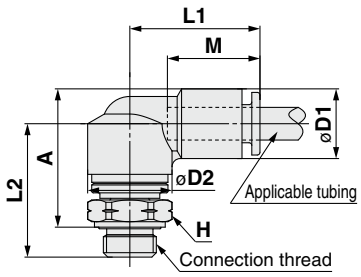
Applicable tubing O.D. [mm]	Connection thread	Model	H (Width across flats)	øD1	øD2	L	A	M	Min. port size	Effective area [mm²]		Weight [g]
										Nylon	Urethane	
6	G1/8	**25A-KXH06-G01**	14	12.8	15.5	41.2	35.7	17	4	10.4	10.4	21
8	G1/8	**25A-KXH08-G01**	17	15.2	18	46.1	40.6	18.5	6	26.1	18	30
10	G1/4	**25A-KXH10-G02**	22	18.5	24.5	55.1	48.6	21	7	36.3	29.5	67



Male Elbow: KXL (High speed)



Applicable tubing O.D. [mm]	Connection thread	Model	H (Width across flats)	øD1	øD2	L1	L2	A	M	Min. port size	Effective area [mm²]		Weight [g]
											Nylon	Urethane	
6	G1/8	**25A-KXL06-G01**	14	12.8	15.5	24	24.5	25.4	17	4	8.6	8.6	21
8	G1/8	**25A-KXL08-G01**	17	15.2	18	27	28.5	30.6	18.5	6	21.6	14.9	30
10	G1/4	**25A-KXL10-G02**	22	18.5	24.5	32	35.2	37.9	21	7	30.5	25	68



This product (standard product) is a secondary battery compatible product. For details, refer to the **Web Catalog**.

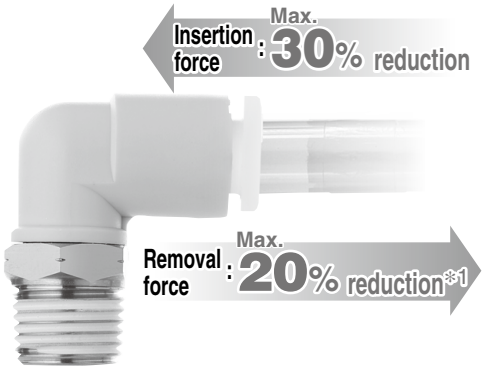
One-touch Fittings Stainless Steel

KQ2-G Series

RoHS

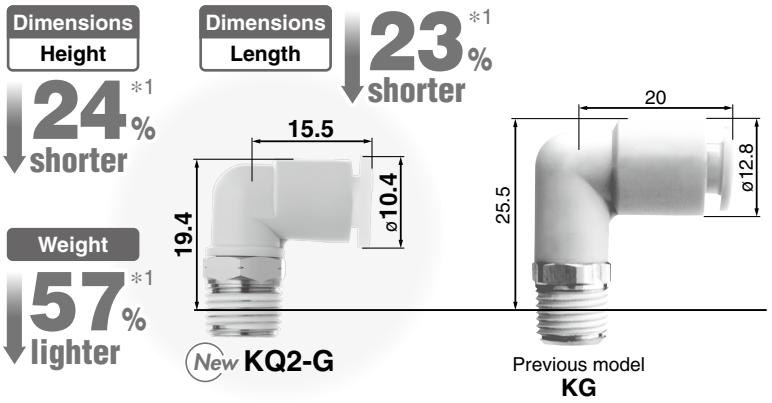
Metal material: Stainless steel 303

Improved tube insertion/removal



*1: Tube removal strength is ensured to be equivalent to previous model.

Compact and lightweight



*1: Previous KG series model: Male elbow, applicable tubing O.D. ø6, connection thread R1/8

Body type: total of 27 models



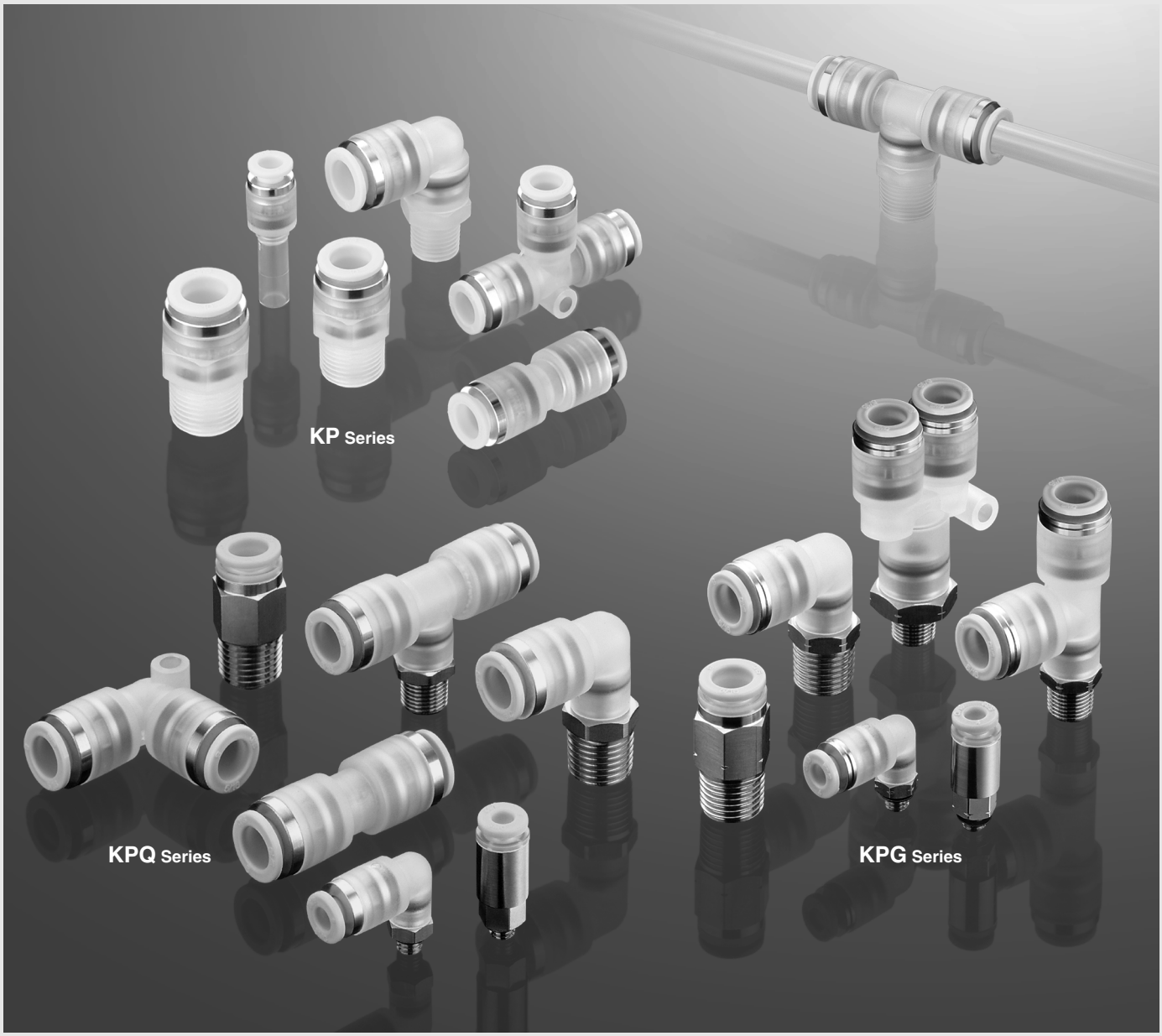
SMC

This product (only the stainless steel metal parts type) is a secondary battery compatible product. For details, refer to the **Web Catalog**.

Clean One-touch Fittings

KP/KPQ/KPG Series

RoHS



This product (standard product) is a secondary battery compatible product. For details, refer to the **Web Catalog**.

Stainless Steel 316 Fittings

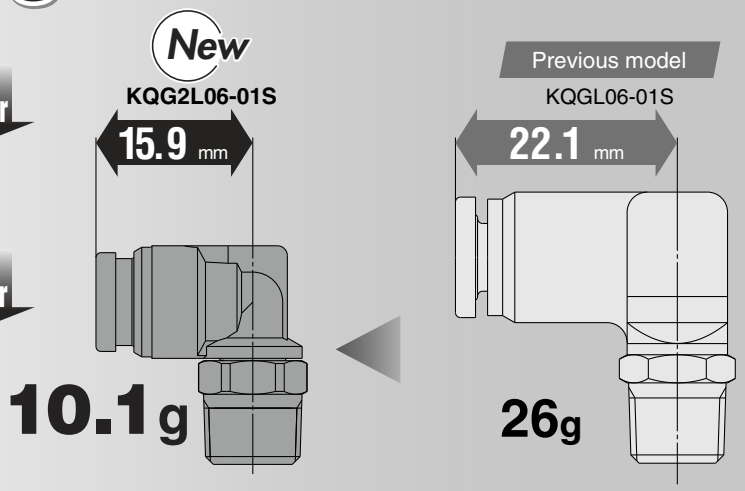
KQG2 Series

RoHS

Compact and Light

Dimensions Approx. **30%** Shorter
∗ KQG2L06-01S

Weight Approx. **62%** Lighter
∗ KQG2L06-01S



Material

Stainless steel 316

Seal parts: Special FKM

- Grease-free/Can be used with steam.
- Certified to meet current Food Sanitation Law standards.
  (Component materials have met apparatuses and container-packages standards.)

Fluid temperature

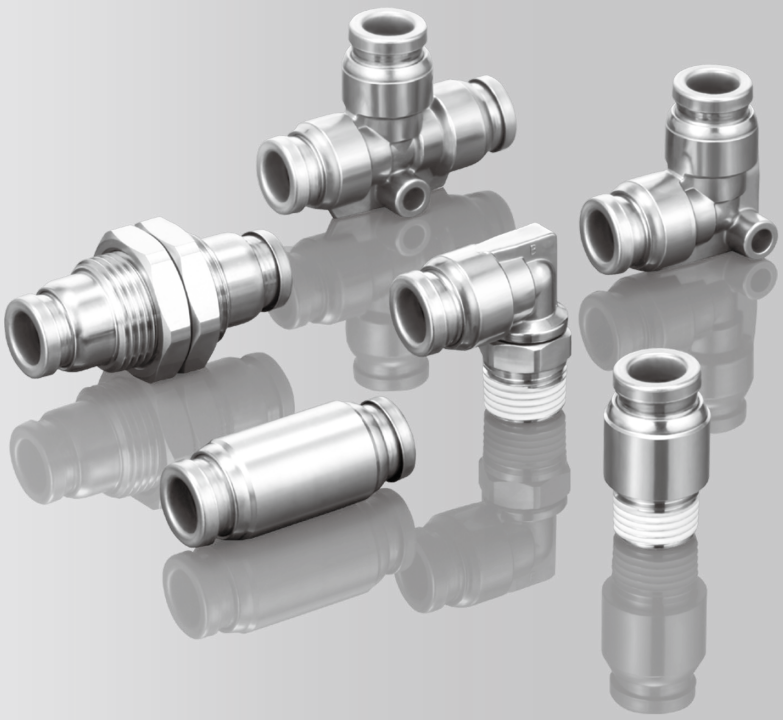
−5 to 150°C

Applicable tubing

Metric size, Inch size

Connection thread

M, R, Rc, UNF, NPT



SMC

This product (standard product) is a secondary battery compatible product. For details, refer to the **Web Catalog**.

Stainless Steel 316 Fittings

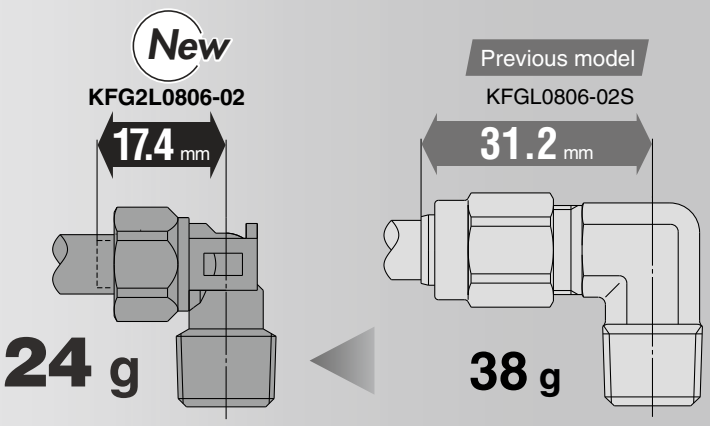
KFG2 Series

RoHS

Compact and Light

Dimensions Approx. **44%** Shorter
∗ KFG2L0806-02

Weight Approx. **37%** Lighter
∗ KFG2L0806-02



Material

Stainless steel 316

Rubber material is not used.
(Except swivel elbow)

- Grease-free/Can be used with steam.
- Certified to meet current Food Sanitation Law standards.
  (Component materials have met apparatuses and container-packages standards.)

Fluid temperature

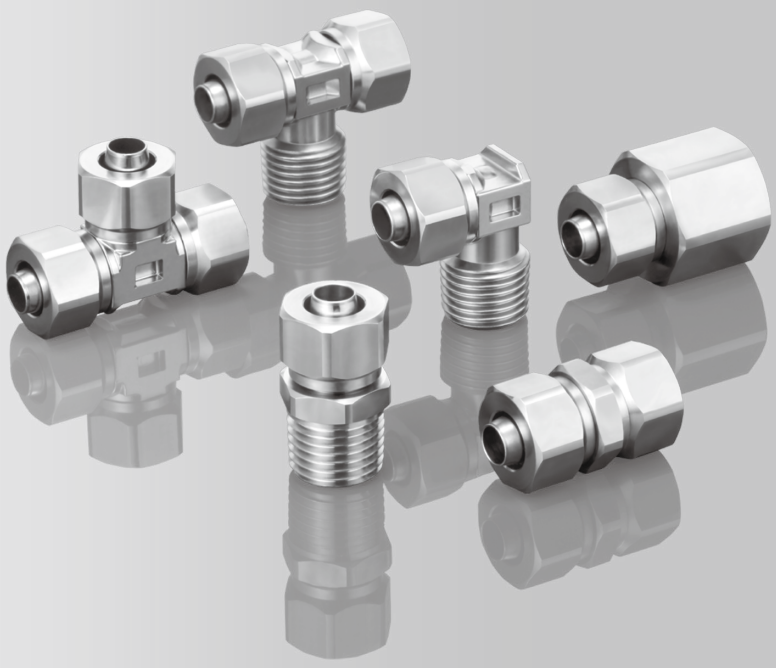
−65 to 260°C
(Swivel elbow: −5 to 150°C)

Applicable tubing

Metric size, Inch size

Connection thread

R, Rc, NPT



Miniature Fittings
Stainless Steel 316
MS Series

RoHS

Applicable Tubes: ø3.2, ø4, ø6 Connection Thread: M5, R 1/8

This product (standard product) is a secondary battery compatible product. For details, refer to the **Web Catalog**.

For use in corrosive environments
Stainless steel 316
Compact piping space
Tube has a large retaining force. Hose nipple assures easy installation and removal.

Line up various types
Possible for special tubing in the same direction. Accepts many types of plastic tubing

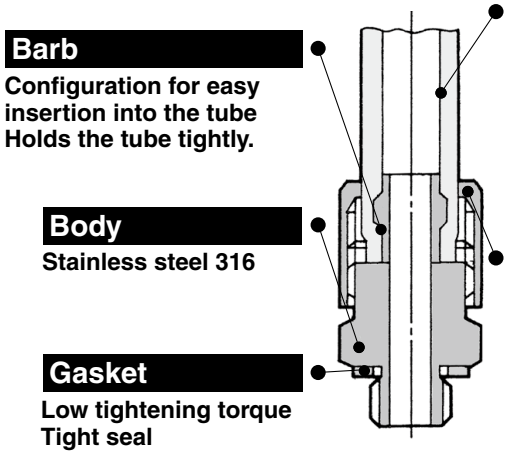
Hose nipple and hose elbow
Accepts nylon, soft nylon, and polyurethane tubing.



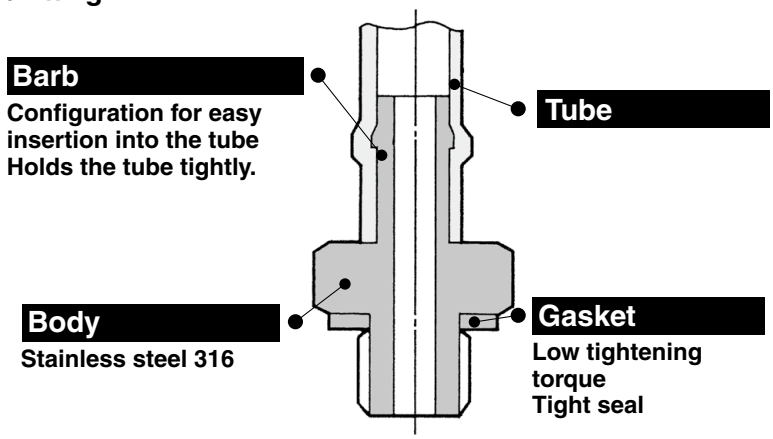
Made to Order

Made to Order
(Refer to the **Web Catalog** for details.)

Hose nipple



Barb fitting



Specifications

Applicable tubing material	Nylon	Soft nylon		Polyurethane	PFA (1)	FEP (2)	Modified PTFE (3)	Wear resistant polyurethane (4)
Applicable tubing O.D./I.D.	ø4/ø2.5 ø6/ø4	ø3.18/ø2.18	ø4/ø2.5 ø6/ø4	ø3.18/ø2 ø4/ø2.5 ø6/ø4	ø4/ø2.5 ø6/ø4	ø4/ø2.5 ø6/ø4	ø4/ø2.5 ø6/ø4	ø4/ø2.5 ø6/ø4
Fluid	Air, N_2, Water (5, 6, 7)							
Maximum operating pressure (at 20°C)	1.5 MPa	1 MPa		0.8 MPa	1 MPa	1.5 MPa	1.4 MPa	0.8 MPa
Ambient and fluid temperature	–5 to 60°C, Water: 0 to 40°C (No freezing)							
Connection size	M5, R1/8				M5			
Thread	JIS B0205 (Metric fine thread) JIS B0203 (Taper thread for piping)				JIS B0205, Class 2 (Metric fine thread)			

Note 1) , Note 2) , Note 3) , Note 4) Applicable only for hose nipple type.
Note 5) Barb fitting, barb elbow and barb tee are not compatible with water.
Note 6) Deionized water is not recommended for use as it may affect the material used in the fittings. In addition, it is known to degrade the water quality.
Note 7) As the universal nipple comes with grease, it cannot be used when N_2 is used as clean, dry air.

Principal Parts Material

Material	Body	Stainless steel 316
	Gasket	PVC, Nylon 66, GF30%

Rectangular Multi-connector

25A-KDM Series

No. of Connecting Tubes: 20

RoHS

How to Order

25A – KDM 20 – 06

- **25A**: Series compatible with secondary batteries
- **20**: No. of connecting tubes
- **06**: Tubing O.D.

Metric size

Symbol	Size	Color of release button
23	ø3.2	Blue
04	ø4	
06	ø6	

Inch size

Symbol	Size	Color of release button
01	ø1/8"	Red
03	ø5/32"	
07	ø1/4"	

Applicable Tubing

Tubing material	FEP, PFA, Nylon, Soft nylon, Polyurethane

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

This product (standard product) is a secondary battery compatible product. For details, refer to the **Web Catalog**.

S Couplers Stainless steel type

KKA Series

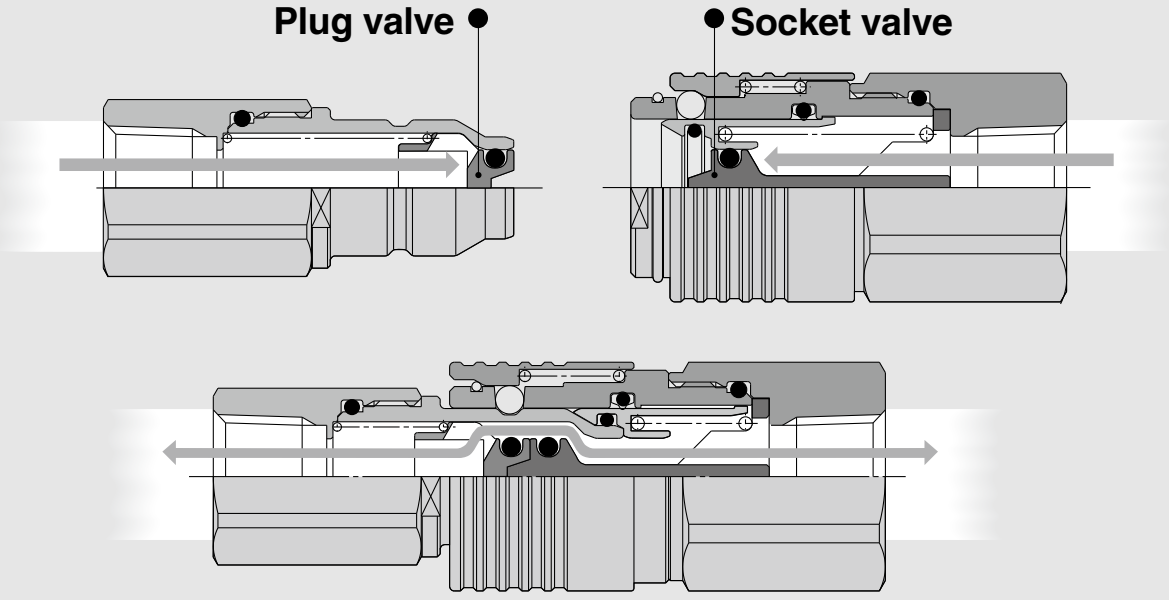
RoHS



- **Body material: Stainless steel 304**
  Seal material: Fluororubber (Special FKM)

- **Both plug and socket have an integral check valve.**
  Available with and without check valves depending on the operating conditions.

- **Reduces liquid dripping when the plug and socket are uncoupled.**
  Liquid dripping: 0.02 to 0.77 cm^3 at each removal
  Aeration: 0.1 to 2.7 cm^3 at each removal



- **Non-greased specification (standard)**
  Allows smooth installation and removal even without grease
  • O-ring: Fluorine coated
  • Sliding parts of plug and socket: Fluorine coated is used.

- **Fluid: Water, Air**

- **Operating temperature range: –5 to 150°C**
  Note) This product should not be used with steam.

This product (standard product) is a secondary battery compatible product. For details, refer to the **Web Catalog**.

Nylon Tubing T

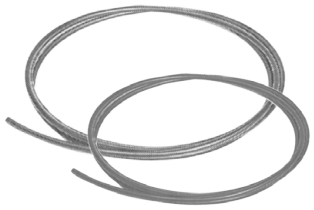


- General pneumatic tubing
- Max. operating pressure: 3.0 MPa (T0604, at 20°C)

Series	Tubing O.D.		Color	Fluid
	Metric size	Inch size		
T/TIA	ø4, ø6, ø8, ø10 ø12, ø16	ø1/8", ø3/16", ø1/4" ø3/8", ø1/2"	Black, White, Red, Blue, Yellow, Green	Air, Water Turbine oil class 1 (ISO VG32)*1

*1 Refer to the catalog for more information on using the product.

Soft Nylon Tubing TS

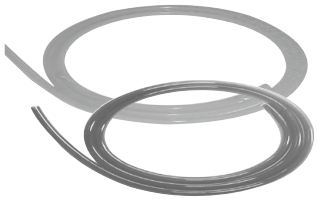


- Max. operating pressure: 1.7 MPa (TS0604, at 20°C)

Series	Tubing O.D.		Color	Fluid
	Metric size	Inch size		
TS/TISA	ø4, ø6, ø8, ø10 ø12, ø16	ø1/8", ø3/16", ø1/4" ø3/8", ø1/2"	Black, White, Red, Blue, Yellow, Green	Air, Water Turbine oil class 1 (ISO VG32)*1

*1 Refer to the catalog for more information on using the product.

Polyurethane Tubing TU



- Max. operating pressure: 0.8 MPa (at 20°C)
- Made to Order
  100 m reel/Longer length reel/20 m roll (-X4)
  Compatible with the Food Sanitation Law/FDA (U.S. Food and Drug Administration)/
  Complies with the EU No 10/2011 dissolution test

Series	Tubing O.D.		Color	Fluid
	Metric size	Inch size		
TU/TIUB	ø2, ø4, ø6, ø8 ø10, ø12, ø16	ø1/8", ø3/16", ø1/4" ø3/8", ø1/2"	Black, White, Red, Blue, Yellow, Green, Clear, Orange, and more (Total 29 colors)	Air, Water

Antistatic Soft Nylon Tubing TAS



- Max. operating pressure: 1.2 MPa (at 20°C)
- For preventing static electricity

Series	Tubing O.D.	Color	Fluid
	Metric size		
TAS	ø3.2, ø4, ø6, ø8, ø10, ø12	Black	Air

Antistatic Polyurethane Tubing TAU



- Max. operating pressure: 0.9 MPa (at 20°C)
- For preventing static electricity

Series	Tubing O.D.	Color	Fluid
	Metric size		
TAU	ø3.2, ø4, ø6, ø8, ø10, ø12	Black	Air

This product (standard product) is a secondary battery compatible product. For details, refer to the **Web Catalog**.

Fluoropolymer Tubing TL/TIL



- Max. operating pressure: 1.0 MPa (at 20°C)
- Operating temperature (fixed usage): –65 to 260°C
- Food Sanitation Law compliant
- Complies with the FDA (Food and Drug Administration) § 177.1550 dissolution test

Series	Tubing O.D.		Color
	Metric size	Inch size	
TL/TIL	ø4, ø6, ø8, ø10 ø12, ø19	ø1/8", ø3/16", ø1/4" ø3/8", ø1/2", ø3/4", ø1"	Translucent

FEP Tubing (Fluoropolymer) TH/TIH



- Max. operating pressure: 2.3 MPa (at 20°C)*1
- Food Sanitation Law compliant
- Complies with the FDA (Food and Drug Administration) § 177.1550 dissolution test
- Operating temperature (fixed usage): Air, Inert gas: –65 to 200°C
  Water: 0 to 100°C (No freezing)

*1 This may vary according to size.

Series	Tubing O.D.		Color
	Metric size	Inch size	
TH/TIH	ø4, ø6, ø8, ø10, ø12	ø1/8", ø3/16", ø1/4", ø3/8", ø1/2", ø3/4"	Translucent, Black, Red, Blue

Soft Fluoropolymer Tubing TD/TID

- Max. operating pressure: 1.6 MPa (at 20°C)*1
- Food Sanitation Law compliant
- Complies with the FDA (Food and Drug Administration) § 177.1550 dissolution test
- Operating temperature (fixed usage): Air, Inert gas: –65 to 260°C
  Water: 0 to 100°C (No freezing)

*1 This may vary according to size.

Series	Tubing O.D.		Color
	Metric size	Inch size	
TD/TID	ø4, ø6, ø8, ø10, ø12	ø1/8", ø3/16", ø1/4", ø3/8", ø1/2"	Translucent

Soft Polyolefin Tubing TPS

- Max. operating pressure (at 20°C): 0.7 MPa (ø4 to ø12)
- Complies with the FDA (Food and Drug Administration) § 175.300 dissolution test (White, Blue, Yellow only)

Series	Applicable tubing O.D.	Color	Fluid
TPS	ø4, ø6, ø8, ø10, ø12	Black, White, Red, Blue, Yellow, Green	Air, Water, etc.

Moisture Control Tube IDK



- Prevents condensation in piping for small cylinders/air grippers
- Diffuses water vapor in the piping to the outside
- All you have to do is install the moisture control tube.
  Additional power supplies and works are not necessary.

Series	O.D./I.D. [mm]	Effective length [mm]	Applicable fittings
IDK02 (Linear shape)	2/1.2	100 200	KQ2
IDK04 (Linear shape)	4/2.5		KQ2
IDK06 (Linear shape)	6/4		KQ2
IDK04-100-C1 (Coil shape)	4/2.5	100	KQ2

1 Output

3-Screen Display High-Precision Digital Pressure Switch

25A-ZSE20(F)/ISE20 Series

IP40



How to Order

Rated pressure range

ISE20	−0.1 to 1 MPa

For positive pressure: **25A − ISE20 − N − M − M5 − □□□**

For vacuum/compound pressure: **25A − ZSE20 − N − M − M5 − □□□**

❶ ❷ ❸ ❹ ❺ ❻ ❼

Series compatible with secondary batteries

❶ Rated pressure range

ZSE20	0 to −101 kPa
ZSE20F	−100 to 100 kPa

❷ Output specification

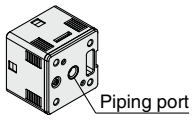
Symbol	Description
N	NPN open collector 1 output
P	PNP open collector 1 output

❸ Unit specification

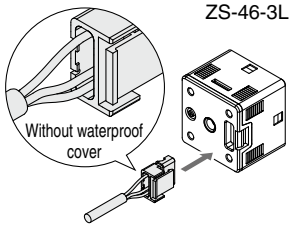
Symbol	Description
Nil	Units selection function*1
M	SI unit only*2
P	Units selection function (Initial value psi)*1

*1 Under the New Measurement Act, switches with the units selection function are not permitted for use in Japan.
*2 Fixed unit: kPa, MPa

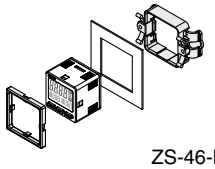
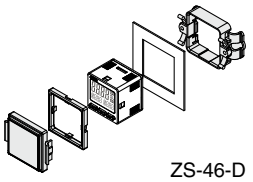
❹ Piping specification

Symbol	Description
M5	M5 female thread 

❺ Option 1

Symbol	Description	
Nil	Without lead wire	
L	Lead wire with connector (3-core, 2 m lead wire)	ZS-46-3L 

❻ Option 2

Symbol	Description	
Nil	None	
B	Panel mount adapter	 ZS-46-B
D	Panel mount adapter + Front protection cover	 ZS-46-D

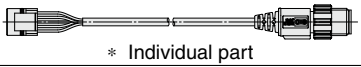
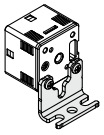
❼ Option 3

Symbol	Operation manual*1	Calibration certificate*1
Nil	○	—
Y	—	—
K	○	○
T	—	○

*1 All texts are in both English and Japanese.

Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Note
Panel mount adapter	**ZS-46-B**	—
Panel mount adapter + Front protection cover	**ZS-46-D**	—
Lead wire with connector	**ZS-46-3L**	3-core, 2 m, Non-waterproof (Without waterproof cover)
Lead wire with M12 connector	**25A-ZS-46-5FM12**	 * Individual part
Front protection cover	**ZS-27-01**	—
Bracket A	**25A-ZS-46-A1**	 * Individual part

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

2 Outputs + Analog Output (Voltage/Current)

3-Screen Display High-Precision Digital Pressure Switch

25A-ZSE20A(F)/ISE20A Series

IP40



How to Order

Rated pressure range

ISE20A	−0.1 to 1 MPa

For positive pressure: **25A − ISE20A − X − M − M5 − □□□**

For vacuum/compound pressure: **25A − ZSE20A − X − M − M5 − □□□**

❶ ❷ ❸ ❹ ❺ ❻ ❼

Series compatible with secondary batteries

❶ Rated pressure range

ZSE20A	0 to −101 kPa
ZSE20AF	−100 to 100 kPa

❷ Output specification

Symbol	Description
R	NPN open collector 2 outputs + Analog voltage output*1
S	NPN open collector 2 outputs + Analog current output*1
T	PNP open collector 2 outputs + Analog voltage output*1
V	PNP open collector 2 outputs + Analog current output*1
X	NPN open collector 2 outputs + Copy function
Y	PNP open collector 2 outputs + Copy function

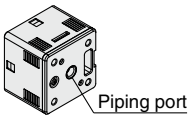
*1 Can be switched to auto-shift or copy function

❸ Unit specification

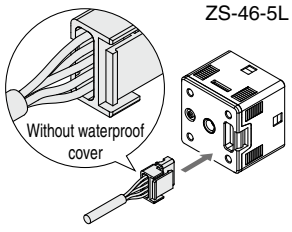
Symbol	Description
Nil	Units selection function*1
M	SI unit only*2
P	Units selection function (Initial value psi)*1

*1 Under the New Measurement Act, switches with the units selection function are not permitted for use in Japan.
*2 Fixed unit: kPa, MPa

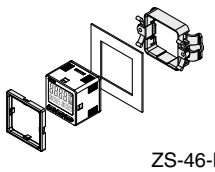
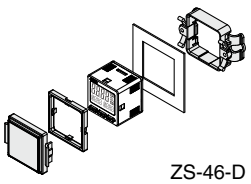
❹ Piping specification

Symbol	Description
M5	M5 female thread 

❺ Option 1

Symbol	Description	
Nil	Without lead wire	
J	Lead wire with connector (5-core, 2 m lead wire)	ZS-46-5L 

❻ Option 2

Symbol	Description	
Nil	None	
B	Panel mount adapter	 ZS-46-B
D	Panel mount adapter + Front protection cover	 ZS-46-D

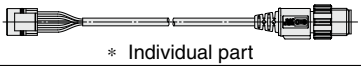
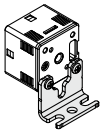
❼ Option 3

Symbol	Operation manual*1	Calibration certificate*1
Nil	○	—
Y	—	—
K	○	○
T	—	○

*1 All texts are in both English and Japanese.

Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Note
Panel mount adapter	ZS-46-B	—
Panel mount adapter + Front protection cover	ZS-46-D	—
Lead wire with connector	ZS-46-5L	5-core, 2 m, Non-waterproof (Without waterproof cover)
Lead wire with M12 connector	25A-ZS-46-5FM12	 * Individual part
Front protection cover	ZS-27-01	—
Bracket A	25A-ZS-46-A1	 * Individual part

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

2 Outputs + Analog Output (Voltage/Current)

3-Screen Display High-Precision Digital Pressure Switch

25A-ZSE20B(F)/ISE20B Series

IP65



How to Order

Rated pressure range

ISE20B	−0.1 to 1 MPa

For positive pressure: **25A-ISE20B-X-M-M5-** ❶ ❷ ❸ ❹ ❺ ❻ ❼

For vacuum/compound pressure: **25A-ZSE20B-X-M-M5-** ❶ ❷ ❸ ❹ ❺ ❻ ❼

Series compatible with secondary batteries

❶ Rated pressure range

ZSE20B	0 to −101 kPa
ZSE20BF	−100 to 100 kPa

❷ Output specification

Symbol	Description
R	NPN open collector 2 outputs + Analog voltage output *1
S	NPN open collector 2 outputs + Analog current output *1
T	PNP open collector 2 outputs + Analog voltage output *1
V	PNP open collector 2 outputs + Analog current output *1
X	NPN open collector 2 outputs + Copy function
Y	PNP open collector 2 outputs + Copy function

∗1 Can be switched to auto-shift or copy function

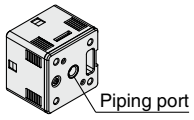
❸ Unit specification

Symbol	Description
Nil	Units selection function*1
M	SI unit only*2
P	Units selection function (Initial value psi)*1

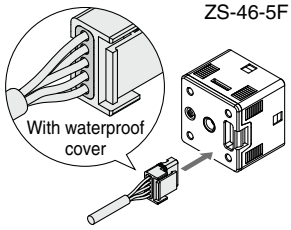
∗1 Under the New Measurement Act, switches with the units selection function are not permitted for use in Japan.

∗2 Fixed unit: kPa, MPa

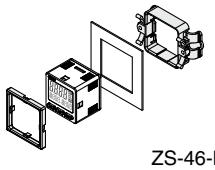
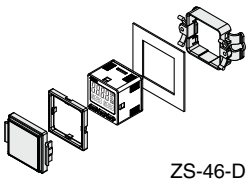
❹ Piping specification

Symbol	Description
M5	M5 female thread 

❺ Option 1

Symbol	Description	
Nil	Without lead wire	
W	Lead wire with connector (5-core, 2 m lead wire, With waterproof cover)	ZS-46-5F 

❻ Option 2

Symbol	Description	
Nil	None	
B	Panel mount adapter	 ZS-46-B
D	Panel mount adapter + Front protection cover	 ZS-46-D

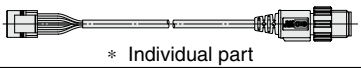
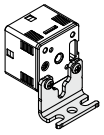
❼ Option 3

Symbol	Operation manual*1	Calibration certificate*1
Nil	○	—
Y	—	—
K	○	○
T	—	○

∗1 All texts are in both English and Japanese.

Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Note
Panel mount adapter	**ZS-46-B**	—
Panel mount adapter + Front protection cover	**ZS-46-D**	—
Lead wire with connector	**ZS-46-5F**	5-core, 2 m, Waterproof (With waterproof cover)
Lead wire with M12 connector	**25A-ZS-46-5FM12**	 ∗ Individual part
Front protection cover	**ZS-27-01**	—
Bracket A	**25A-ZS-46-A1**	 ∗ Individual part

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

IO-Link Compatible (1 Output)

RoHS

IP65

3-Screen Display High-Precision Digital Pressure Switch

25A-ZSE20B(F)-L/ISE20B-L Series



How to Order

Rated pressure range

ISE20B	−0.1 to 1 MPa

For Positive Pressure: **25A − ISE20B − L − M − M5 − □□□**

For Vacuum/ Compound Pressure: **25A − ZSE20B − L − M − M5 − □□□**

❶ ❷ ❸ ❹ ❺ ❻ ❼

Series compatible with secondary batteries

❶ Rated pressure range

ZSE20B	0 to −101 kPa
ZSE20BF	−100 to 100 kPa

❷ Output specification

Symbol	Description
L	IO-Link/Switch: 1 output ⇐ (PNP or NPN switching type for switch output)

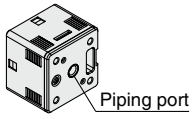
❸ Unit specification

Symbol	Description
Nil	Units selection function*1
M	SI units only*2
P	Units selection function (Initial value psi)*1

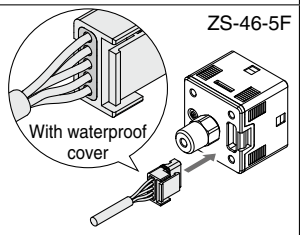
*1 Under the New Measurement Act, switches with the units selection function are no longer allowed for use in Japan.

*2 Fixed units: kPa, MPa

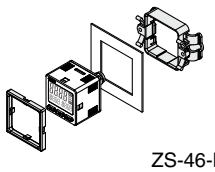
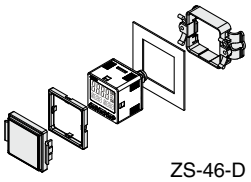
❹ Piping specification

Symbol	Description
M5	M5 female thread 

❺ Option 1

Symbol	Description	
Nil	Without lead wire	
W	Lead wire with connector (5-core, 2 m lead wire, With waterproof cover)	

❻ Option 2

Symbol	Description	
Nil	None	
B	Panel mount adapter	 ZS-46-B
D	Panel mount adapter + Front protection cover	 ZS-46-D

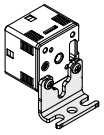
❼ Option 3

Symbol	Operation manual*1	Calibration certificate*1
Nil	○	—
Y	—	—
K	○	○
T	—	○

*1 All texts are in both English and Japanese.

Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Note
Panel mount adapter	**ZS-46-B**	—
Panel mount adapter + Front protection cover	**ZS-46-D**	—
Lead wire with connector	**ZS-46-5F**	5-core, 2 m, Waterproof (With waterproof cover)
Lead wire with M12 connector	**25A-ZS-46-5FM12**	 * Individual part
Front protection cover	**ZS-27-01**	—
Bracket A	**25A-ZS-46-A1**	 * Individual part

* The 25A- series specifications and dimensions are the same as those of the standard model.

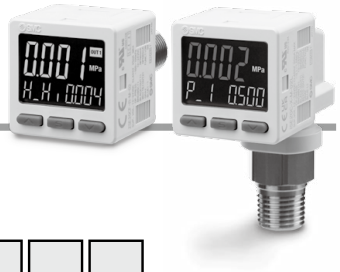
For details, refer to the Web Catalog.

2 Outputs + Analog Output (Voltage/Current)

3-Screen Display High-Precision Digital Pressure Switch for General Fluids

25A-ZSE20C(F)/ISE20C(H) Series

IP65



How to Order

Rated pressure range

ISE20C	−0.1 to 1 MPa
ISE20CH	−0.1 to 2 MPa

For positive pressure: **25A − ISE20C − X − M − 02 □ − □ □ □**

For vacuum/compound pressure: **25A − ZSE20C − X − M − 02 □ − □ □ □**

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

Series compatible with secondary batteries

❶ Rated pressure range

ZSE20C	0 to −101 kPa
ZSE20CF	−100 to 100 kPa

❸ Unit specification

Symbol	Description
Nil	Units selection function*1
M	SI unit only*2
P	Units selection function (Initial value psi)*1

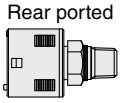
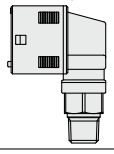
*1 Under the New Measurement Act, switches with the units selection function are not permitted for use in Japan.

*2 Fixed unit: kPa, MPa

❹ Piping specification

Symbol	Description
02	R1/4 (M5 female threaded)
F02	G1/4 (M5 female threaded)

❺ Piping direction

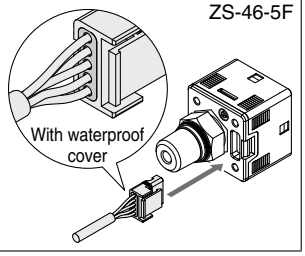
Nil	Rear ported 
L	Bottom ported 

❷ Output specification

Symbol	Description
R	NPN open collector 2 outputs + Analog voltage output*1
S	NPN open collector 2 outputs + Analog current output*1
T	PNP open collector 2 outputs + Analog voltage output*1
V	PNP open collector 2 outputs + Analog current output*1
X	NPN open collector 2 outputs + Copy function
Y	PNP open collector 2 outputs + Copy function

*1 Can be switched to auto-shift or copy function

❻ Option 1

Symbol	Description	
Nil	Without lead wire	
W	Lead wire with connector, 5-core (2 m lead wire, With waterproof cover)	ZS-46-5F 

❽ Option 3

Symbol	Operation manual*1	Calibration certificate*1
Nil	○	—
Y	—	—
K	○	○
T	—	○

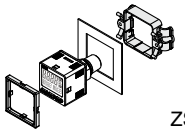
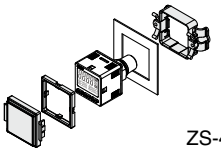
*1 All texts are in both English and Japanese.

❼ Option 2

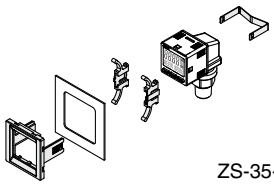
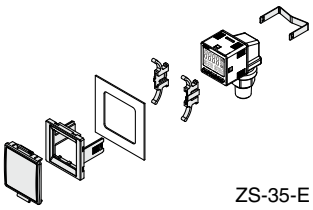
* Note that the optional parts that can be used vary depending on the piping direction.

Symbol	Description
Nil	None

Rear ported (❺ Piping direction: Nil)

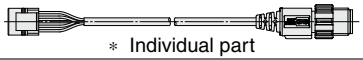
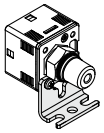
Symbol	Description	
B	Panel mount adapter	ZS-46-B 
D	Panel mount adapter + Front protection cover	ZS-46-D 

Bottom ported (❺ Piping direction: L)

Symbol	Description	
E	Panel mount adapter	ZS-35-B 
F	Panel mount adapter + Front protection cover	ZS-35-E 

Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Note
Panel mount adapter	**ZS-46-B**	Rear ported
Panel mount adapter	**ZS-35-B**	Bottom ported
Panel mount adapter + Front protection cover	**ZS-46-D**	Rear ported
	ZS-35-E	Bottom ported
Lead wire with connector	**ZS-46-5F**	5-core, 2 m, Waterproof (With waterproof cover)
Lead wire with M12 connector	**25A-ZS-46-5FM12**	 * Individual part
Front protection cover	**ZS-27-01**	Rear ported
Bracket A	**25A-ZS-46-A1**	Rear ported  * Individual part

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

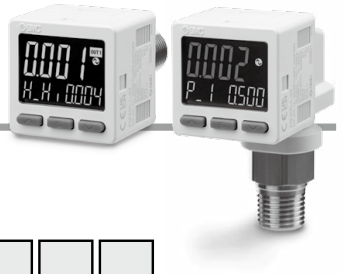
IO-Link Compatible (1 Output)

3-Screen Display High-Precision Digital Pressure Switch for General Fluids

25A-ZSE20C(F)-L/ISE20C(H)-L Series

RoHS

IP65



How to Order

Rated pressure range

ISE20C	−0.1 to 1 MPa
ISE20CH	−0.1 to 2 MPa

For Positive Pressure 25A − ISE20C − L − M − 02 □ − □ □ □

For Vacuum/ Compound Pressure 25A − ZSE20C − L − M − 02 □ − □ □ □

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

Series compatible with secondary batteries

❶ Rated pressure range

ZSE20C	0 to −101 kPa
ZSE20CF	−100 to 100 kPa

❷ Output specification

Symbol	Description
L	IO-Link/Switch: 1 output ⇐ (PNP or NPN switching type for switch output)

❸ Unit specification

Symbol	Description
Nil	Units selection function*1
M	SI units only*2
P	Units selection function (Initial value psi)*1

*1 Under the New Measurement Act, switches with the units selection function are no longer allowed for use in Japan.

*2 Fixed units: kPa, MPa

❹ Piping specification

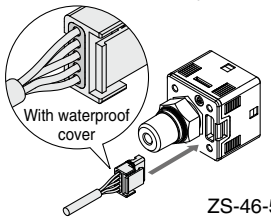
Symbol	Description
02	R1/4 (M5 female threaded)
F02	G1/4 (M5 female threaded)

❺ Piping direction

Nil	Rear ported
L	Bottom ported

❻ Option 1

Symbol	Description
Nil	Without lead wire
W	Lead wire with connector, 5-core (2 m lead wire, With waterproof cover)



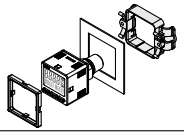
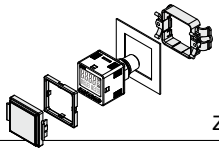
ZS-46-5F

❼ Option 2

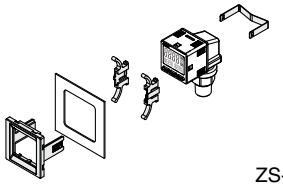
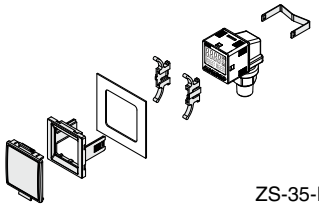
* Note that the optional parts that can be used vary depending on the piping direction.

Symbol	Description
Nil	None

Rear ported (❺ Piping direction: Nil)

Symbol	Description	
B	Panel mount adapter	 ZS-46-B
D	Panel mount adapter + Front protection cover	 ZS-46-D

Bottom ported (❺ Piping direction: L)

Symbol	Description	
E	Panel mount adapter	 ZS-35-B
F	Panel mount adapter + Front protection cover	 ZS-35-E

❽ Option 3

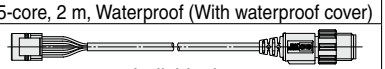
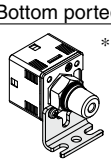
Symbol	Operation manual*3	Calibration certificate*3
Nil	○	—
Y	—	—
K	○	○
T	—	○

*3 All texts are in both English and Japanese.

* The 25A- series specifications and dimensions are the same as those of the standard model.

Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Note
Panel mount adapter	ZS-46-B	Rear ported
	ZS-35-B	Bottom ported
Panel mount adapter + Front protection cover	ZS-46-D	Rear ported
	ZS-35-E	Bottom ported
Lead wire with connector	ZS-46-5F	5-core, 2 m, Waterproof (With waterproof cover)
Lead wire with M12 connector	25A-ZS-46-5FM12	 * Individual part
Front protection cover	ZS-27-01	Rear ported
	ZS-35-01	Bottom ported
Bracket A	25A-ZS-46-A1	Rear ported  * Individual part

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

2-Color Display
Digital Flow Switch
25A-PF2M7 Series

RoHS



How to Order

25A – PF2M 7 10 ❶ ❷ – C6 ❸ – A ❹ W ❺ – M ❻ ❼ ❽

Series compatible with secondary batteries

Integrated display

❶ Rated flow range

01	0.01 to 1 L/min	**25**	0.3 to 25 L/min
02	0.02 to 2 L/min	**50**	0.5 to 50 L/min
05	0.05 to 5 L/min	**11**	1 to 100 L/min
10	0.1 to 10 L/min	**21**	2 to 200 L/min

❷ Piping entry direction

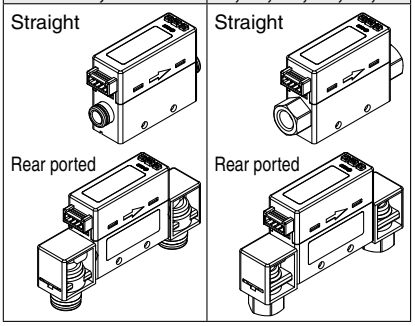
Symbol	Piping entry direction	Rated flow range							
		1	2	5	10	25	50	100	200
Nil	Straight	●	●	●	●	●	●	●	●
L	Rear ported	●	●	●	●	●	●	●	●

❸ Port size

Symbol	Port size	Rated flow range							
		1	2	5	10	25	50	100	200
01	Rc1/8	●	●	●	●	●	●	—	—
N1	NPT1/8	●	●	●	●	●	●	—	—
F1	G1/8	●	●	●	●	●	●	—	—
02	Rc1/4	—	—	—	—	—	—	●	●
N2	NPT1/4	—	—	—	—	—	—	●	●
F2	G1/4	—	—	—	—	—	—	●	●
C6	ø6	●	●	●	●	●	●	—	—
C8	ø8	—	—	—	—	—	—	●	●

Piping variations

With One-touch fitting	Female thread
C6, C8	**01, 02, N1, N2, F1, F2**



❹ Output specification

Symbol	OUT1	OUT2
A	NPN	NPN
B	PNP	PNP
C	NPN	Analog 1 to 5 V ⇔ Analog 0 to 10 V*1
D	NPN	Analog 4 to 20 mA
E	PNP	Analog 1 to 5 V ⇔ Analog 0 to 10 V*1
F	PNP	Analog 4 to 20 mA

*1 1 to 5 V or 0 to 10 V can be selected by pressing the button.
The default setting is 1 to 5 V.

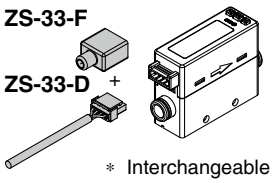
❺ Option 1

W

Lead wire with connector (2 m)
+
Connector cover (Silicone rubber)

ZS-33-F

ZS-33-D +



* Interchangeable with the existing PFM7 series

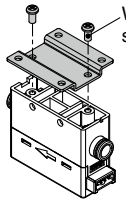
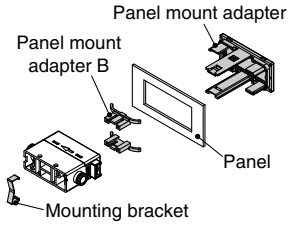
❻ Unit specification

M	SI unit only*2
Nil	Unit selection function*3

*2 Fixed unit: Instantaneous flow: L/min
Accumulated flow: L

*3 This product is for overseas use only.
(The SI unit type is provided for use in Japan in accordance with the New Measurement Act.)
The unit can be changed.
Instantaneous flow: L/min ⇔ cfm
Accumulated flow: L ⇔ ft³

❼ Option 2

Nil	R	T
Without bracket	Bracket (For the type without a flow adjustment valve) **25A-ZS-33-M**  With 2 tapping screws (3 x 6) * Interchangeable with the existing PFM series	Panel mount adapter (For the type without a flow adjustment valve) **ZS-33-2J**  Panel mount adapter Panel mount adapter B Panel Mounting bracket

* Options are shipped together with the product but do not come assembled.

❽ Calibration certificate*4

Nil	None
A	Yes

*4 Made to order
The certificate is in both English and Japanese.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

IO-Link

2-Color Display **Digital Flow Switch**

25A-PF2M7-L Series



How to Order

25A – PF2M 7 10 ❶ ❷ – C6 ❸ – L ❹ W ❺ – M ❻ ❼ ❽

Series compatible with secondary batteries

Integrated display

❶ Rated flow range

01	0.01 to 1 L/min	**25**	0.3 to 25 L/min
02	0.02 to 2 L/min	**50**	0.5 to 50 L/min
05	0.05 to 5 L/min	**11**	1 to 100 L/min
10	0.1 to 10 L/min	**21**	2 to 200 L/min

❷ Piping entry direction

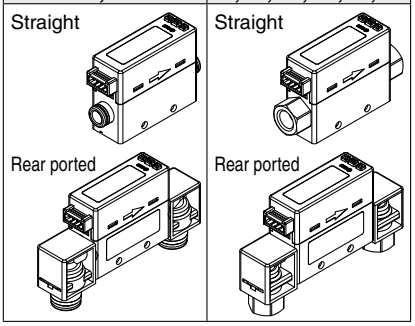
Symbol	Piping entry direction	Rated flow range							
		1	2	5	10	25	50	100	200
Nil	Straight	●	●	●	●	●	●	●	●
L	Rear ported	●	●	●	●	●	●	●	●

❸ Port size

Symbol	Port size	Rated flow range							
		1	2	5	10	25	50	100	200
01	Rc1/8	●	●	●	●	●	●	—	—
N1	NPT1/8	●	●	●	●	●	●	—	—
F1	G1/8	●	●	●	●	●	●	—	—
02	Rc1/4	—	—	—	—	—	—	●	●
N2	NPT1/4	—	—	—	—	—	—	●	●
F2	G1/4	—	—	—	—	—	—	●	●
C6	ø6	●	●	●	●	●	●	—	—
C8	ø8	—	—	—	—	—	—	●	●

Piping variations

With One-touch fitting	Female thread
C6, C8	**01, 02, N1, N2, F1, F2**



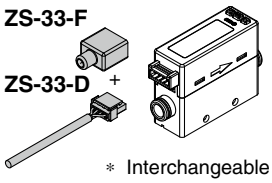
❹ Output specification

Symbol	OUT1	OUT2
L	IO-Link/ NPN/PNP	—
L2	IO-Link/ NPN/PNP	NPN/PNP/External input
L3	IO-Link/ NPN/PNP	Analog 1 to 5 V ⇔ Analog 0 to 10 V*1
L4	IO-Link/ NPN/PNP	Analog 4 to 20 mA

*1 1 to 5 V or 0 to 10 V can be selected by pressing the button.
The default setting is 1 to 5 V.

❺ Option 1

W
Lead wire with connector (2 m) + Connector cover (Silicone rubber)



* Interchangeable with the existing PFM7 series

❻ Unit specification

M	SI unit only*2
Nil	Unit selection function*3

*2 Fixed unit: Instantaneous flow: L/min
Accumulated flow: L

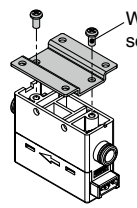
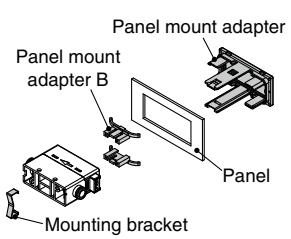
*3 This product is for overseas use only. (The SI unit type is provided for use in Japan in accordance with the New Measurement Act.)
The unit can be changed.
Instantaneous flow: L/min ⇔ cfm
Accumulated flow: L ⇔ ft³

❽ Calibration certificate*4

Nil	None
A	Yes

*4 Made to order
The certificate is in both English and Japanese.

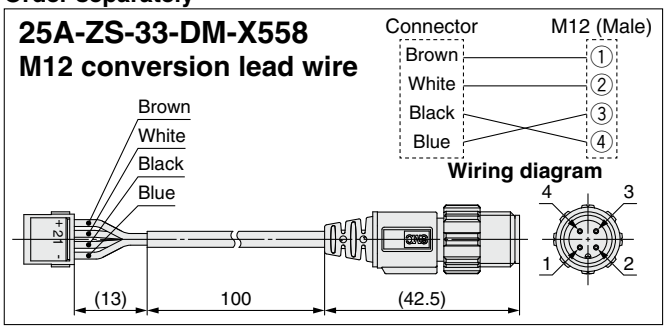
❼ Option 2

Nil	R	T
Without bracket	Bracket (For the type without a flow adjustment valve) **25A-ZS-33-M**  * Interchangeable with the existing PFM series	Panel mount adapter (For the type without a flow adjustment valve) **ZS-33-2J** 

* Options are shipped together with the product but do not come assembled.

Order separately

25A-ZS-33-DM-X558
M12 conversion lead wire



* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

2-Color Display
Digital Flow Switch

Integrated display

25A-PFM7 Series



How to Order

Integrated display **25A – PFM7 10 – C6 □ – A – M □ □ – W □**

Series compatible with secondary batteries

Type

7	Integrated display

Rated flow range (Flow rate range)

10	0.2 to 10 (5) L/min
25	0.5 to 25 (12.5) L/min
50	1 to 50 (25) L/min
11	2 to 100 (50) L/min

∗ ( ): Fluid: CO_2

Port size

Symbol	Description	Flow rate range			
		10	25	50	11
01	Rc1/8	●	●	●	—
02	Rc1/4	—	—	—	●
N01	NPT1/8	●	●	●	—
N02	NPT1/4	—	—	—	●
F01	G1/8	●	●	●	—
F02	G1/4	—	—	—	●
C6	ø6 One-touch fitting	●	●	●	●
C8	ø8 (5/16") One-touch fitting	—	●	●	●

Piping entry direction

Nil	Straight
L	Bottom

Output specifications

A	2 NPN outputs
B	2 PNP outputs
C	1 NPN output + Analog output (1 to 5 V)
D	1 NPN output + Analog output (4 to 20 mA)
E	1 PNP output + Analog output (1 to 5 V)
F	1 PNP output + Analog output (4 to 20 mA)
G	1 NPN output + External input∗3
H	1 PNP output + External input∗3

∗3 User can select from accumulated value external reset, auto-shift and auto-shift zero.

Unit specifications

Nil	With unit switching function∗2
M	Fixed SI unit∗1

∗1 Fixed unit: Instantaneous flow: L/min
Accumulated flow: L

∗2 This product is for overseas use only. (The SI unit type is provided for use in Japan in accordance with the New Measurement Act.)

Operation manual

Nil	With operation manual (Japanese and English)
N	None

Calibration certificate

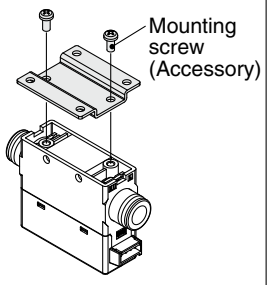
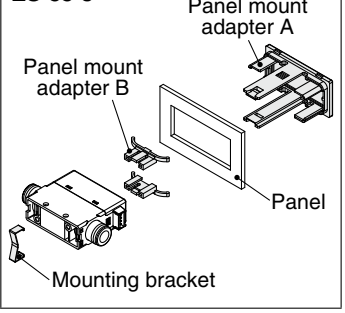
Nil	None
A	With calibration certificate

∗ The certificate is written in both English and Japanese.
Other languages are available as specials.

Option 1

W	Lead wire with connector (2 m) + Rubber cover for connector (Silicon rubber)

Option 2

Nil	None
R	Bracket (For the type without a flow adjustment valve) **25A-ZS-33-M** 
T	Panel mount adapter (For the type without a flow adjustment valve) **ZS-33-J** 

∗ The 25A- series specifications and dimensions are the same as those of the standard model.
∗ Digital flow switch with flow adjustment valve is not standard product. It can be supplied as Made-to-Order separately.

For details, refer to the Web Catalog.

2-Color Display

Digital Flow Switch Remote sensor unit

25A-PFM5 Series



How to Order

Remote sensor unit **25A – PFM 5 10 – C6 ☐ – 1 – ☐☐ – W ☐**

Series compatible with secondary batteries

Type

5	Remote sensor unit

Rated flow range (Flow rate range)

10	0.2 to 10 (5) L/min
25	0.5 to 25 (12.5) L/min
50	1 to 50 (25) L/min
11	2 to 100 (50) L/min

∗ ( ): Fluid: CO_2

Port size

Symbol	Description	Flow rate range			
		10	25	50	11
01	Rc1/8	●	●	●	
02	Rc1/4				●
N01	NPT1/8	●	●	●	
N02	NPT1/4				●
F01	G1/8∗1	●	●	●	
F02	G1/4∗1				●
C6	ø6 One-touch fitting	●	●	●	●
C8	ø8 (5/16") One-touch fitting		●	●	●

∗1 ISO 228-1 compliant

Piping entry direction

Nil	Straight
L	Bottom

Output specification

No.	Description	Applicable display unit
1	Analog output (1 to 5 V)	25A-PFM30☐
2	Analog output (4 to 20 mA)	25A-PFM31☐

Calibration certificate

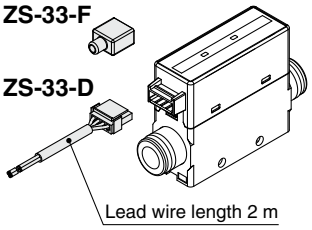
Nil	None
A	With calibration certificate

∗ The certificate is written in both English and Japanese.
Other languages are available as specials.

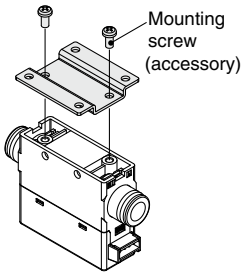
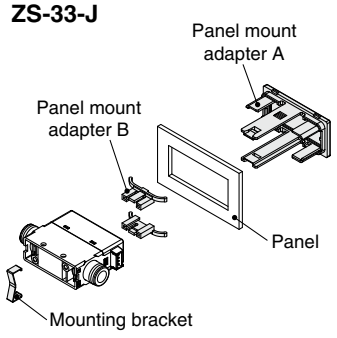
Operation manual

Nil	With operation manual (Japanese and English)
N	None

Option 1

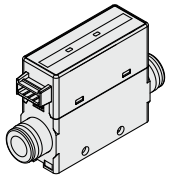
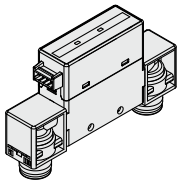
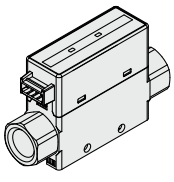
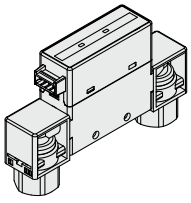
W	With lead wire with connector (2 m) + Rubber cover for connector (silicon rubber) ZS-33-F ZS-33-D 

Option 2

Nil	R	T
None	Bracket (For the type without a flow adjustment valve) **25A-ZS-33-M**  	Panel mount adapter (For the type without a flow adjustment valve) **ZS-33-J** 

• **Options are shipped together with the product but do not come assembled.**

Piping Variations

	With One-touch fittings (C6, C8)		Female thread (01, 02, N01, N02, F01, F02)	
	Straight (Nil)	Bottom (L)	Straight (Nil)	Bottom (L)
Without flow adjustment valve (Nil)				

∗ The 25A- series specifications and dimensions are the same as those of the standard model. **For details, refer to the Web Catalog.**

For 25A-PFM5

Flow Sensor Monitor

25A-PFM3 Series

How to Order



Output specification

0	2 NPN outputs + 1 to 5 V output
1	2 NPN outputs + 4 to 20 mA output
2	2 NPN outputs + External input*1
3	2 PNP outputs + 1 to 5 V output
4	2 PNP outputs + 4 to 20 mA output
5	2 PNP outputs + External input*1

*1 User can select from accumulated value external reset, auto-shift and auto-shift zero.

Operation manual

Nil	With operation manual (Japanese and English)
N	None

Calibration certificate

Nil	None
A	With calibration certificate

* The certificate is written in both English and Japanese. Other languages are available as specials.

25A – PFM3 [0][0] – [M][L][ ][ ] – [ ][ ]

Series compatible with secondary batteries

Type

3	Remote display unit

Input specification

Symbol	Content	Applicable remote type sensor unit
0	Voltage input	25A-PFM5□□-□-1-□
1	Current input	25A-PFM5□□-□-2-□

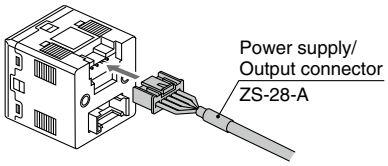
Unit specification

Nil	With unit switching function*1
M	Fixed SI unit*2

*1 Under the New Measurement Act, flow sensor monitors with the unit switching function are not permitted for use in Japan.

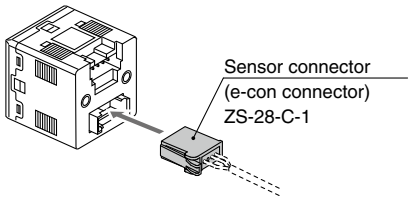
*2 Fixed unit: Instantaneous flow: L/min
Accumulated flow: L

Option 1

Nil	None
L	Power supply/Output connector 

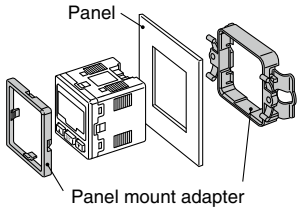
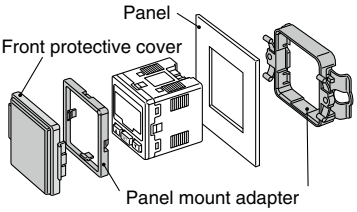
* The cable does not come connected, but it is shipped together with the product.

Option 3

Nil	None
F	With sensor connector 

* The connector does not come connected, but it is shipped together with the product.

Option 2

Nil	None
B	Panel mount adapter 
D	Panel mount adapter + Front protective cover 

* Options are shipped together with the product but do not come assembled.

Options/Part Nos.

Description	Part no.	Note
Power supply/Output connector (2 m)	ZS-28-A	
Sensor connector	ZS-28-C-1	1 pc.
Panel mount adapter	ZS-46-B	
Panel mount adapter + Front protective cover	ZS-46-D	

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

2-Color Display
Digital Flow Switch
25A-PFMB7 Series



How to Order

25A – PFMB7 [501] – [ ] [04] – [A] [W] – [M] [ ] [ ]

Series compatible with secondary batteries

Rated flow range (Flow rate range)

501	5 to 500 L/min
102	10 to 1000 L/min
202	20 to 2000 L/min

Thread type

Nil	Rc
N	NPT
F	G *1

*1 ISO 228 compliant

Port size

	Port size	Rated flow range		
		501	**102**	**202**
04	1/2	●	●	—
06	3/4	—	—	●

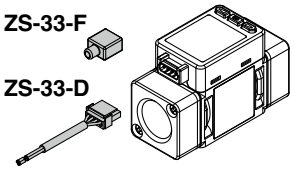
Output specification

	OUT1	OUT2	Applicable monitor unit model
A	NPN	NPN	—
B	PNP	PNP	—
C	NPN	Analog 1 to 5 V	PFG300 series
D	NPN	Analog 4 to 20 mA	PFG310 series
E*1	PNP	Analog 1 to 5 V	PFG300 series
F*1	PNP	Analog 4 to 20 mA	PFG310 series
G*1	NPN	External input *2	—
H*1	PNP	External input *2	—

*1 Made to order
*2 Accumulated flow value, peak/bottom flow value can be reset by external signal input.

Option 1

W
Lead wire with connector (2 m) + Rubber cover for connector (Silicone rubber)



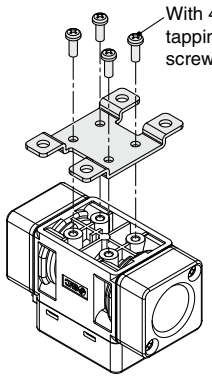
* When only optional parts are required, refer to Option 1/Part Nos. below.

Calibration certificate *1

Nil	None
A*2	With calibration certificate

*1 The certificate is written in both English and Japanese.
*2 Made to order

Option 2

Nil	**R**
No bracket	With bracket 

* Options are shipped together with the product but do not come assembled. When only optional parts are required, refer to Option 2/Part Nos. below.

Unit specification

M	SI unit only *1
Nil	Units selection function *2

*1 Fixed unit: Instantaneous flow: L/min
Accumulated flow: L
*2 This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)
The unit can be changed. Instantaneous flow: L/min ⇔ cfm
Accumulated flow: L ⇔ ft³

Option 1/Part Nos.

Option	Part no.	Qty.	Note
Lead wire with connector	**ZS-33-D**	1	Lead wire: 2 m
Rubber cover (Silicone rubber)	**ZS-33-F**	1	For connector

Option 2/Part Nos.

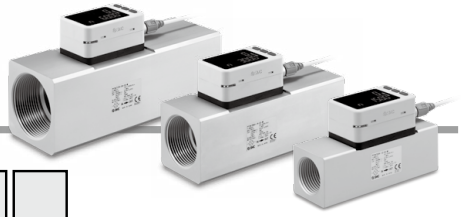
Option	Part no.	Qty.	Note
Bracket (for PFMB7201)	**25A-ZS-33-M**	1	With 2 tapping screws (3 x 6)
Panel mount adapter (for PFMB7201)	**ZS-33-J**	1	
Bracket (for PFMB7501/7102)	**25A-ZS-42-C**	1	With 4 tapping screws (3 x 6)
Bracket (for PFMB7202)	**25A-ZS-42-D**	1	With 4 tapping screws (3 x 6)

* The 25A- series specifications and dimensions are the same as those of the standard model. **For details, refer to the Web Catalog.**

Body Ported Type

3-Color Display Digital Flow Switch

25A-PF3A7□H Series



How to Order

25A – PF3A 7 03 H – □ 10 – CS □ – M □

Series compatible with secondary batteries

Type

7	Integrated display

Rated flow range

03	30 to 3000 L/min
06	60 to 6000 L/min
12	120 to 12000 L/min

Large flow type

Thread type

Nil	Rc
N	NPT
F[*1]	G

∗1 ISO 1179-1 compliant

Port size

Symbol	Port size	Rated flow range		
		03	**06**	**12**
10	1	●	—	—
14	1 1/2	—	●	—
20	2	—	—	●

Output specification

Symbol	OUT	FUNC[*2]	Applicable monitor unit model
CS	NPN	Analog voltage output[*3] ⇔ External input[*4]	PFG300 series
DS	NPN	Analog current output ⇔ External input[*4]	PFG310 series
ES	PNP	Analog voltage output[*3] ⇔ External input[*4]	PFG300 series
FS	PNP	Analog current output ⇔ External input[*4]	PFG310 series

∗2 Analog output or external input can be selected by pressing the buttons. Analog output is set as default setting.
∗3 1 to 5 V or 0 to 10 V can be selected by pressing the button. The default setting is 1 to 5 V.
∗4 The accumulated value, peak value, and bottom value can be reset.

Options

Nil	With lead wire with M12 connector (3 m)[*5]
N	Without lead wire with M12 connector

∗5 Options are shipped together with the product but do not come assembled.

Unit specification

Nil	Units selection function[*6]
M	SI units only[*7]

∗6 This product is for overseas use only. (The SI unit type is provided for use in Japan in accordance with the New Measurement Act.)
∗7 Fixed units: Instantaneous flow: L/min
Accumulated flow: L

Calibration certificate[*8]

Nil	None
A[*9]	Yes

∗8 The certificate is in both English and Japanese.
∗9 Made to order

Option/Part No.

When only optional parts are required, order with the part number listed below.

Part no.	Option	Note
90-ZS-37-A-X258	Lead wire with M12 connector	Length: 3 m

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Body Ported Type IO-Link

3-Color Display Digital Flow Switch

25A-PF3A7□H-L Series



How to Order

25A – PF3A 7 03 H – □ 10 – L □ – M □

Series compatible with secondary batteries

Type

7	Integrated display

Rated flow range

03	30 to 3000 L/min
06	60 to 6000 L/min
12	120 to 12000 L/min

Large flow type

Thread type

Nil	Rc
N	NPT
F∗1	G

∗1 ISO 1179-1 compliant

Port size

Symbol	Port size	Rated flow range		
		03	**06**	**12**
10	1	●	—	—
14	1 1/2	—	●	—
20	2	—	—	●

Output specification

Symbol	OUT	FUNC∗2	Applicable monitor unit model
L	IO-Link: Switch output (N/P)	—	—
L3	IO-Link: Switch output (N/P)	Analog voltage output∗3 ⇔ External input∗4	PFG300 series
L4	IO-Link: Switch output (N/P)	Analog current output ⇔ External input∗4	PFG310 series

∗2 Analog output or external input can be selected by pressing the buttons. Analog output is set as default setting. Output symbol "L" cannot be used as the FUNC terminal is not connected.

∗3 1 to 5 V or 0 to 10 V can be selected by pressing the button. The default setting is 1 to 5 V.

∗4 The accumulated value, peak value, and bottom value can be reset.

Options

Nil	With lead wire with M12 connector (3 m)∗5
N	Without lead wire with M12 connector

∗5 Options are shipped together with the product but do not come assembled.

Unit specification

Nil	Units selection function∗6
M	SI units only∗7

∗6 This product is for overseas use only. (The SI unit type is provided for use in Japan in accordance with the New Measurement Act.)

∗7 Fixed units: Instantaneous flow: L/min
Accumulated flow: L

Calibration certificate∗8

Nil	None
A∗9	Yes

∗8 The certificate is in both English and Japanese.

∗9 Made to order

Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Part no.	Option	Note
90-ZS-37-A-X258	Lead wire with M12 connector	Length: 3 m

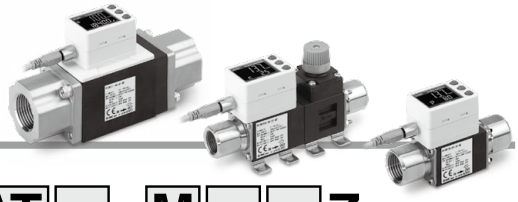
∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Integrated Display

3-Color Display Digital Flow Switch for Water

25A-PF3W7-Z Series



How to Order

25A – PF3W 7 ❶ 04 ❷ ☐ ❸ – ☐ ❹ 03 ❺ – AT ❻ ☐ ❼ – M ❽ ☐ ❾ ☐ ❿ Z

Series compatible with secondary batteries

❶ Type

7	Integrated display

❷ Rated flow range (Flow range)

Symbol	Rated flow range
04	0.5 to 4 L/min
20	2 to 16 L/min
40	5 to 40 L/min
11	10 to 100 L/min

❸ Flow adjustment valve

Symbol	With/without flow adjustment valve	Rated flow range			
		04	**20**	**40**	**11**
Nil	None	●	●	●	●
S	Yes	●	●	●	—

∗ 100 L/min type with flow adjustment valve is not available.
∗ The flow adjustment valve of this product is not suitable for applications which require constant adjustment of flow rate.

❹ Thread type

Nil	Rc
N	NPT
F	G∗1

∗1 ISO 228 compliant

❺ Port size

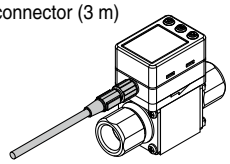
Symbol	Port size	Rated flow range			
		04	**20**	**40**	**11**
03	3/8	●	●	—	—
04	1/2	—	●	●	—
06	3/4	—	—	●	●
10	1/1	—	—	—	●

❻ Output specification/Temperature sensor

Symbol	OUT1	OUT2		Temperature sensor
	Flow rate	Flow rate	Temperature	
A	NPN	NPN	—	None
B	PNP	PNP	—	
C	NPN	Analog 1 to 5 V	—	
D	NPN	Analog 4 to 20 mA	—	
E	PNP	Analog 1 to 5 V	—	
F	PNP	Analog 4 to 20 mA	—	
G	NPN	External input∗1	—	
H	PNP	External input∗1	—	
AT	NPN	(NPN) ∗2 ⟷	NPN	With temperature sensor
BT	PNP	(PNP) ∗2 ⟷	PNP	
CT	NPN	(Analog 1 to 5 V) ∗2 ⟷	Analog 1 to 5 V	
DT	NPN	(Analog 4 to 20 mA) ∗2 ⟷	Analog 4 to 20 mA	
ET	PNP	(Analog 1 to 5 V) ∗2 ⟷	Analog 1 to 5 V	
FT	PNP	(Analog 4 to 20 mA) ∗2 ⟷	Analog 4 to 20 mA	

∗1 External input: The accumulated value, peak value, and bottom value can be reset.
∗2 For units with temperature sensor, only OUT2 can be set as either temperature output or flow rate output. Setting when shipped is for temperature output.

❼ Lead wire (Option)

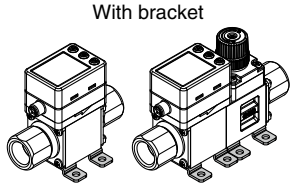
Nil	N
With lead wire with M8 connector (3 m)	Without lead wire with M8 connector
	

❽ Integrated display/Unit specification

Symbol	Instantaneous flow	Accumulated flow	Temperature
M	L/min	L	°C
G	gal/min	gal	°C
F	gal/min	gal	°F
J	L/min	L	°F

∗ Under the New Measurement Act, units other than SI (symbol "M") cannot be used in Japan.
∗ G, F, J: Made to order
Reference: 1 [L/min] ⟷ 0.2642 [gal/min]
1 [gal/min] ⟷ 3.785 [L/min]
°F = 9/5°C + 32

❾ Bracket (Option)

Nil	None
R	With bracket 

❿ Calibration certificate (Only for flow rate)

Nil	None
A	With calibration certificate

∗ The certificate is written in both Japanese and English.
Units with temperature sensor can only display the flow rate.

Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Qty.	Note	
Bracket∗1	**25A-ZS-40-K**	1	For PF3W704/720/504/520	With 4 tapping screws (3 x 8)
	25A-ZS-40-L	1	For PF3W740/540	With 4 tapping screws (3 x 8)
	25A-ZS-40-M	1	For PF3W711/511	With 4 tapping screws (4 x 10)
Lead wire with M8 connector	**25A-ZS-40-A**	1	Lead wire length: 3 m	

∗1 For units with flow adjustment valve, 2 brackets are required.

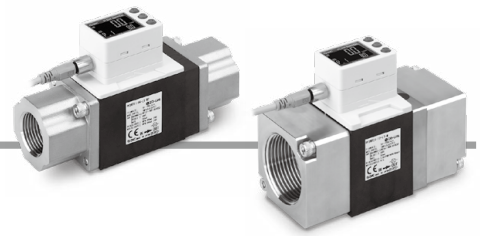
∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

IO-Link **Integrated Display**

3-Color Display **Digital Flow Switch for Water**

25A-PF3W7-L Series



How to Order

Flow range

0.5 to 4 L/min | 2 to 16 L/min
5 to 40 L/min | 10 to 100 L/min

25A – PF3W 7 ❶04 ❷ – ❸ 03 – ❺LT ❻Q – ❼M ❽ ❾Z

Flow range

50 to 250 L/min

25A – PF3W 7 21 – ❸ 12 – ❺LT ❻Q – ❼M ❽ ❾

Series compatible with secondary batteries

Type

7	Integrated display

Rated flow range (Flow range)

21	50 to 250 L/min

❶ Rated flow range (Flow range)

04	0.5 to 4 L/min
20	2 to 16 L/min
40	5 to 40 L/min
11	10 to 100 L/min

❷ Flow adjustment valve

Symbol	With/without flow adjustment valve	Rated flow range			
		04	**20**	**40**	**11**
Nil	None	●	●	●	●
S	Yes	●	●	●	—

∗ 100 L/min type with a flow adjustment valve is not available.
∗ The flow adjustment valve of this product is not suitable for applications which require the constant adjustment of the flow rate.

❸ Thread type

Nil	Rc
N	NPT
F	G∗1

∗1 ISO 228 compliant

❹ Piping port size

Symbol	Port size	Rated flow range				
		04	**20**	**40**	**11**	**21**
03	3/8	●	●	—	—	—
04	1/2	—	●	●	—	—
06	3/4	—	—	●	●	—
10	1	—	—	—	●	—
12	1-1/4	—	—	—	—	●
14	1-1/2	—	—	—	—	●

❺ Output specification/Temperature sensor

Symbol	OUT1	OUT2	Temperature sensor
	Flow rate/Temperature	Flow rate/Temperature	
L	IO-Link/Switch output (N/P)	—	None
L2	IO-Link/Switch output (N/P)	Switch output (N/P)	
LT	IO-Link/Switch output (N/P)	—	Yes
L2T	IO-Link/Switch output (N/P)	Switch output (N/P)	

∗ Temperature output or flow output can be selected for the digital flow switch with a temperature sensor.
∗ The output specification of L, L2, and L2T should be ordered as made to order.

❻ Lead wire (Option)

Nil	With lead wire with M8 connector (3 m)
N	None
Q	With M12-M8 conversion lead wire (0.1 m)∗1

∗1 A 3 m lead wire is also available separately.
∗ The lead wire with M8 connector and the M12-M8 conversion lead wire are interchangeable with the existing PF3W series.

❼ Integrated display/Unit specification

Symbol	Instantaneous flow	Accumulated flow	Temperature
Nil	With display unit switching function		°C
M	L/min	L	°C

∗ Under the New Measurement Act, units other than SI (symbol "M") cannot be used in Japan. Unit can be changed.
Instantaneous flow: L/min ↔ gal/min
Accumulated flow : L ↔ gal
∗ Reference: 1 [L/min] ↔ 0.2642 [gal/min]
1 [gal/min] ↔ 3.785 [L/min]

❽ Brackets (Option)

Nil	None
R	With brackets

∗ Brackets are interchangeable with the existing PF3W series.

❾ Calibration certificate (Only for flow rate)

Nil	None
A	With calibration certificate

∗ The certificate is written in both Japanese and English. The integrated display type with a temperature sensor can only display the flow rate. The temperature sensor is not calibrated.

Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Qty.	Note	
Bracket∗1	**25A-ZS-40-K**	1	For PF3W704/720/504/520	With 4 tapping screws (3 x 8)
	25A-ZS-40-L	1	For PF3W740/540	With 4 tapping screws (3 x 8)
	25A-ZS-40-M	1	For PF3W711/511	With 4 tapping screws (4 x 10)
Lead wire with M8 connector	**25A-ZS-40-A**	1	Lead wire length: 3 m	
M12-M8 conversion lead wire	**25A-ZS-40-M12M8-A**	1	Length 100 mm	

∗1 For units with flow adjustment valve, 2 brackets are required.

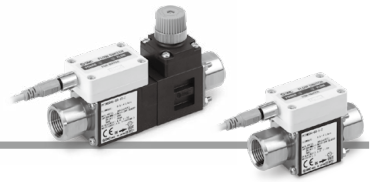
∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Remote Sensor Unit

3-Color Display Digital Flow Switch for Water

25A-PF3W5-Z Series



How to Order

25A – PF3W 5 [04] [ ] – [ ] [03] – [1T] [ ] – [ ] [ ] [ ] Z

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

❶ Type

5	Remote sensor unit

❷ Rated flow range (Flow range)

Symbol	Rated flow range
04	0.5 to 4 L/min
20	2 to 16 L/min
40	5 to 40 L/min
11	10 to 100 L/min

❸ Flow adjustment valve

Symbol	With/without flow adjustment valve	Rated flow range			
		04	20	40	11
Nil	None	●	●	●	●
S	Yes	●	●	●	—

∗ 100 L/min type with flow adjustment valve is not available.
∗ The flow adjustment valve of this product is not suitable for applications which require constant adjustment of flow rate.

❹ Thread type

Nil	Rc
N	NPT
F	G∗1

∗1 ISO 228 compliant

❺ Port size

Symbol	Port size	Rated flow range			
		04	20	40	11
03	3/8	●	●	—	—
04	1/2	—	●	●	—
06	3/4	—	—	●	●
10	1/1	—	—	—	●

❻ Output specification/Temperature sensor

Symbol	OUT1	OUT2	Temperature sensor
	Flow rate	Temperature	
1	Analog 1 to 5 V	—	None
2	Analog 4 to 20 mA	—	
1T	Analog 1 to 5 V	Analog 1 to 5 V	With temperature sensor

∗ To use in combination with remote monitor (PF3W3 series), select analog output of 1 to 5 V of flow rate (output symbol “-1” or “-1T”).

❼ Lead wire (Option)

Nil	With lead wire with M8 connector (3 m)
N	Without lead wire with M8 connector

❽ Remote sensor unit/Unit printed on label

Symbol	Instantaneous flow	Temperature
Nil	L/min	°C
G∗1	L/min (gal/min)	°C/°F

∗1 Under the New Measurement Act, units other than SI (symbol “Nil”) cannot be used in Japan.
∗ G: Made to order
Reference: 1 [L/min] ↔ 0.2642 [gal/min]
1 [gal/min] ↔ 3.785 [L/min]
°F = 9/5°C + 32

❾ Bracket (Option)

Nil	None
R	With bracket

❿ Calibration certificate (Only for flow rate)

Nil	None
A	With calibration certificate

∗ The certificate is written in both Japanese and English.
Units with temperature sensor can only display the flow rate.

Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Qty.	Note	
Bracket∗1	25A-ZS-40-K	1	For PF3W704/720/504/520	With 4 tapping screws (3 x 8)
	25A-ZS-40-L	1	For PF3W740/540	With 4 tapping screws (3 x 8)
	25A-ZS-40-M	1	For PF3W711/511	With 4 tapping screws (4 x 10)
Lead wire with M8 connector	25A-ZS-40-A	1	Lead wire length: 3 m	

∗1 For units with flow adjustment valve, 2 brackets are required.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

3-color display

Digital Flow Switch for Water

25A-PF3W Series

RoHS

How to Order



Remote sensor unit

Output specification/Temperature sensor

Symbol	OUT1	OUT2	Temperature sensor
	Flow rate	Temperature	
1	Analog 1 to 5 V	—	None
2	Analog 4 to 20 mA	—	
1T	Analog 1 to 5 V	Analog 1 to 5 V	With temperature sensor

∗ To use in combination with remote monitor (PF3W3 series), select analog output of 1 to 5 V of flow rate (output symbol "-1" or "-1T").

Remote sensor unit/Unit printed on label

Symbol	Instantaneous flow rate	Temperature
Nil	L/min	°C
G∗1	L/min (gal/min)	°C/°F

∗1 Under the New Measurement Act, units other than SI (symbol: "Nil") cannot be used in Japan.
∗ G: Made to Order
Reference: 1 [L/min]↔0.2642 [gal/min]
1 [gal/min]↔3.785 [L/min]
°F = 9/5°C + 32

Remote sensor unit 25A-PF3W 5 04 □ - □ 03 - 1T □ - □ □ □

Integrated display 25A-PF3W 7 04 □ - □ 03 - AT □ - M □ □

Series compatible with secondary batteries

Type

5	Remote sensor unit
7	Integrated display



Rated flow range (Flow range)

Symbol	Rated flow range
04	0.5 to 4 L/min
20	2 to 16 L/min
40	5 to 40 L/min
11	10 to 100 L/min
21	50 to 250 L/min

Thread type

Nil	Rc
N	NPT
F	G

Port size

Symbol	Port size	Rated flow range 04	20	40	11	21
03	3/8	●	●	—	—	—
04	1/2	—	●	●	—	—
06	3/4	—	—	●	●	—
10	1/1	—	—	—	●	—
12	1 1/4	—	—	—	—	●
14	1 1/2	—	—	—	—	●

Calibration certificate (Only flow sensor)

Nil	None
A	With calibration certificate

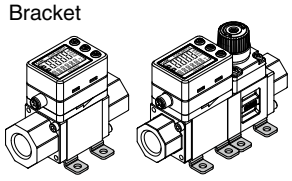
∗ The certificate is written in both English and Japanese. Integrated display type with temperature sensor can only display flow rate.

Flow adjustment valve

Symbol	With/without flow adjustment valve	Rated flow rate 04	20	40	11	21
Nil	None	●	●	●	●	●
S	Yes	●	●	●	—	—

∗ 100 and 250 L/min types with flow adjustment valves are not available.
∗ The flow adjustment valve of this product is not suitable for applications which require constant adjustment of flow rate.

Bracket (Option)

Nil	None
R	Bracket 

∗ With bracket is not available for 250 L/min type.

Integrated display

Output specification/Temperature sensor

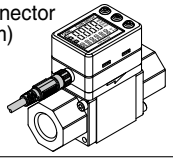
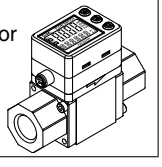
Symbol	OUT1	OUT2		Temperature sensor
	Flow rate	Flow rate	Temperature	
A	NPN	NPN	—	None
B	PNP	PNP	—	
C	NPN	Analog 1 to 5 V	—	
D	NPN	Analog 4 to 20 mA	—	
E	PNP	Analog 1 to 5 V	—	
F	PNP	Analog 4 to 20 mA	—	
G	NPN	External input∗1	—	
H	PNP	External input∗1	—	
AT	NPN	(NPN) ⟷∗2	NPN	With temperature sensor
BT	PNP	(PNP) ⟷∗2	PNP	
CT	NPN	(Analog 1 to 5 V) ⟷∗2	Analog 1 to 5 V	
DT	NPN	(Analog 4 to 20 mA) ⟷∗2	Analog 4 to 20 mA	
ET	PNP	(Analog 1 to 5 V) ⟷∗2	Analog 1 to 5 V	
FT	PNP	(Analog 4 to 20 mA) ⟷∗2	Analog 4 to 20 mA	

Integrated display/Unit specification

Symbol	Instantaneous flow rate	Accumulated flow	Temperature
M	L/min	L	°C
G	gal/min	gal	°C
F	gal/min	gal	°F
J	L/min	L	°F

∗ Under the New Measurement Act, units other than SI (symbol: "M") cannot be used in Japan.
∗ G, F, J: Made to Order
Reference: 1 [L/min]↔0.2642 [gal/min]
1 [gal/min]↔3.785 [L/min]
°F = 9/5°C + 32

Lead wire (Option)

Nil	N
With lead wire with M8 connector (3 m) 	Without lead wire with M8 connector 

∗ The 25A- series specifications and dimensions are the same as those of the standard model.
For details, refer to the Web Catalog.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.
For details, refer to the Web Catalog.

∗1 External input: The accumulated value, peak value, and bottom value can be reset.
∗2 For units with temperature sensor, OUT2 can be set as either temperature output or flow rate output. Setting when shipped is for temperature output.

Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no	Qty.	Note	
Bracket∗1	25A-ZS-40-K	1	For PF3W704/720/504/520	With 4 tapping screws (3 x 8)
	25A-ZS-40-L	1	For PF3W740/540	With 4 tapping screws (3 x 8)
	25A-ZS-40-M	1	For PF3W711/511	With 4 tapping screws (4 x 10)
Lead wire with M8 connector	25A-ZS-40-A	1	Lead wire length (3 m)	

∗1 For units with flow adjustment valve, 2 brackets are required.

3-color display

Digital Flow Switch for PVC Piping

25A-PF3W Series

RoHS

How to Order



Remote sensor unit

Output specification

Symbol	OUT1
1	Analog 1 to 5 V
2	Analog 4 to 20 mA

∗ To use in combination with remote monitor (PF3W3 series), select analog output of 1 to 5 V of flow rate (output symbol "-1").

Remote sensor unit/Unit printed on label

Symbol	Instantaneous flow rate
Nil	L/min
G∗1	L/min (gal/min)

∗1 Under the New Measurement Act, units other than SI (symbol: "Nil") cannot be used in Japan.
∗ G: Made to Order
Reference: 1 [L/min] ↔ 0.2642 [gal/min]
1 [gal/min] ↔ 3.785 [L/min]

Calibration certificate (Only flow sensor)

Nil	None
A	With calibration certificate

∗ The certificate is written in both English and Japanese.

Remote sensor unit 25A-PF3W 5 11-U 25-1 □-□□□

Integrated display 25A-PF3W 7 11-U 25-A □-M□□

Series compatible with secondary batteries



Type

5	Remote sensor unit
7	Integrated display

Rated flow range (Flow range)

Symbol	Rated flow range
11	10 to 100 L/min
21	30 to 250 L/min

Connection type

U	PVC pipe

PVC pipe O.D.

Symbol	Port size	Rated flow range 11	Rated flow range 21	Pipe O.D.∗1
25	25A	●	—	32 mm
30	30A	—	●	38 mm

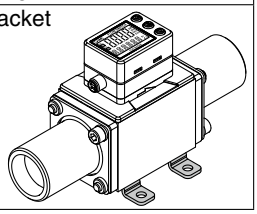
∗1 JIS K 6742 equivalent

Integrated display **Output specification**

Symbol	OUT1	OUT2
A	NPN	NPN
B	PNP	PNP
C	NPN	Analog 1 to 5 V
D	NPN	Analog 4 to 20 mA
E	PNP	Analog 1 to 5 V
F	PNP	Analog 4 to 20 mA
G	NPN	External input∗1
H	PNP	External input∗1

∗1 External input: The accumulated value, peak value, and bottom value can be reset.

Bracket (Option)

Nil	None
R	Bracket 

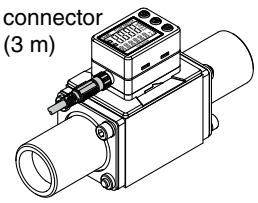
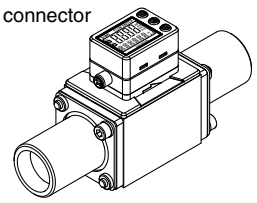
∗ With bracket is not available for 250 L/min type.

Integrated display/Unit specification

Symbol	Instantaneous flow rate	Accumulated flow
M	L/min	L
G	gal/min	gal

∗ Under the New Measurement Act, units other than SI (symbol: "M") cannot be used in Japan.
∗ G: Made to Order
Reference: 1 [L/min] ↔ 0.2642 [gal/min]
1 [gal/min] ↔ 3.785 [L/min]

Lead wire

Nil	N
With lead wire with M8 connector (3 m) 	Without lead wire with M8 connector 

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Qty.	Note	
Bracket	**25A-ZS-40-M**	1	For PF3W711/511	With 4 tapping screws (4 x 10)
Lead wire with M8 connector	**25A-ZS-40-A**	1	Lead wire length (3 m)	

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

For 25A-PF3W5(-Z) **3-Color Display**

Digital Flow Monitor for Water

25A-PF3W Series



How to Order

25A – PF3W 30 A □ – M V C □

Series compatible with secondary batteries

Type

3	Remote monitor unit

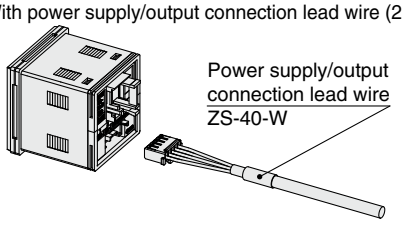
For remote sensor units, select the analog output 1 to 5 V type.
Applicable sensors: PF3W5□□-□□-1(T)

Output specification

Symbol	OUT1	OUT2
A	NPN	NPN
B	PNP	PNP
C	NPN	Analog 1 to 5 V
D	NPN	Analog 4 to 20 mA
E	PNP	Analog 1 to 5 V
F	PNP	Analog 4 to 20 mA
G	NPN	External input
H	PNP	External input
J	Analog 1 to 5 V	Analog 1 to 5 V
K	Analog 4 to 20 mA	Analog 4 to 20 mA

In combination with remote sensor unit with temperature sensor, only OUT2 can be set for temperature sensor output.

Lead wire

Nil	With power supply/output connection lead wire (2 m) 
N	Without power supply/output connection lead wire

The lead wire does not come connected, but it is shipped together with the product.

Remote monitor unit/Unit specification

Symbol	Instantaneous flow	Accumulated flow	Temperature
M	L/min	L	°C
G	gal/min	gal	°C
F	gal/min	gal	°F
J	L/min	L	°F

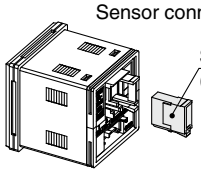
∗ Under the New Measurement Act, units other than SI (symbol "M") cannot be used in Japan.
∗ G, F, J: Made to order
Reference: 1 [L/min]↔0.2642 [gal/min]
1 [gal/min]↔3.785 [L/min]
°F = 9/5°C + 32

Calibration certificate (Only flow monitor)

Nil	None
A	With calibration certificate

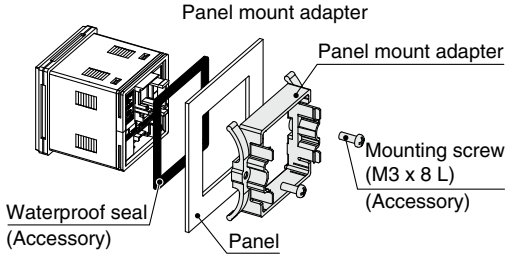
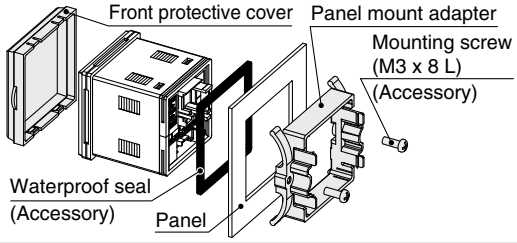
∗ The certificate is written in both Japanese and English.

Option 2

Nil	None
C	Sensor connector (1 pc.) 

The connector does not come connected, but it is shipped together with the product.

Option 1

Nil	None
T	Panel mount adapter 
V	Front protective cover + Panel mount adapter 

Options/Part Nos.

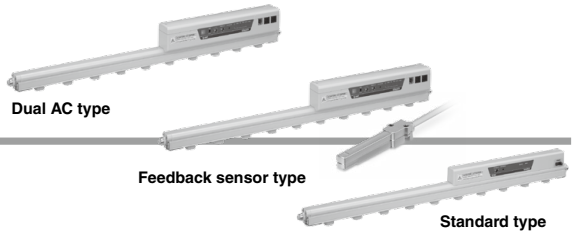
When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Note
Panel mount adapter	**25A-ZS-26-B**	With waterproof seal and screws
Front protective cover + Panel mount adapter	**25A-ZS-26-C**	With waterproof seal and screws
Front protective cover only	**ZS-26-01**	Separately order panel mount adapter, etc.
Power supply/output connection lead wire	**ZS-40-W**	Lead wire length: 2 m
Sensor connector (e-con)	**ZS-28-CA-4**	1 pc.
Lead wire with connector for copying	**ZS-40-Y**	Connect up to 10 copy destination units

∗ The 25A- series specifications and dimensions are the same as those of the standard model. **For details, refer to the Web Catalog.**

Ionizer

IZS40/41/42-X516 Series



How to Order

Type 40 IZS 40 – 1600 ❑ ❑ ❑ – 10 B – X516

Type 41, 42 IZS 42 – 1600 ❑ ❑ ❑ – 10 B – X516

Bar type ❷ ❸ ❹ ❺ ❻ ❼ ❽ Series compatible with secondary batteries

❶ Type

40	Standard type

❷ Type

41	Feedback sensor type
42	Dual AC type

❸ Bar length

Symbol	Bar length [mm]	Symbol	Bar length [mm]
340	340	**1120**	1120
400	400	**1300**	1300
460	460	**1600**	1600
580	580	**1900**	1900
640	640	**2320**	2320
820	820	**2500**	2500

❹ Emitter cartridge type/Emitter material

Symbol	Emitter cartridge type	Emitter material
Nil	High speed static neutralization cartridge	Tungsten
C		Silicon
J	Energy saving static neutralization cartridge	Tungsten
K		Silicon
V	Energy saving high-efficiency cartridge	Tungsten
S		Silicon

❺ Input/Output

Nil	NPN
P	PNP

∗ The input/output function cannot be used when an AC adapter is being used.

❻ Power supply cable

Nil	With power supply cable (3 m)
Z	With power supply cable (10 m)
N	Without power supply cable

∗ When only an e-con connector for the IZS40 is required, specify "N," and order the part (Model: ZS-28-C) separately.
∗ To use with an AC adapter, specify "N," and select the AC adapter on page 35 which is sold separately. (A cord is attached to the AC adapter.)

❼ One-touch fitting

06	ø6 One-touch fitting
08	ø8 One-touch fitting
10	ø10 One-touch fitting

∗ Refer to the recommended piping port size in the table on the right for selecting a One-touch fitting.
∗ Please order a plug (part no.: KQ2P-❑) separately if the product is to be used with piping only on one side.
∗ The One-touch fitting cannot be changed after the delivery of the product.

❽ Bracket

Symbol	Bracket
Nil	Without bracket
B	With bracket

∗ The number of intermediate brackets differ depending on the bar length. (Refer to the table below.)

Number of brackets

Bar length symbol	End bracket	Intermediate bracket
340 to 760	2	None
820 to 1600		1
1660 to 2380		2
2440 to 2500		3

Recommended piping port size for the IZS4❑

High speed static neutralization cartridge

One-touch fitting symbol	Applicable tubing O.D.	Bar length symbol											
		340	**400**	**460**	**580**	**640**	**820**	**1120**	**1300**	**1600**	**1900**	**2320**	**2500**
06	**ø6 mm**	○	○	○	○	○	●	●	●	—	—	—	—
08	**ø8 mm**	○	○	○	○	○	○	○	○	●	●	●	●
10	**ø10 mm**	○	○	○	○	○	○	○	○	○	○	○	○

○: With piping only on one side ●: With piping on both sides —: Unrecommended piping

Energy saving static neutralization cartridge

One-touch fitting symbol	Applicable tubing O.D.	Bar length symbol											
		340	**400**	**460**	**580**	**640**	**820**	**1120**	**1300**	**1600**	**1900**	**2320**	**2500**
06	**ø6 mm**	○	○	○	○	○	○	○	○	●	●	●	●
08	**ø8 mm**	○	○	○	○	○	○	○	○	○	○	○	○
10	**ø10 mm**	○	○	○	○	○	○	○	○	○	○	○	○

○: With piping only on one side ●: With piping on both sides

Energy saving high-efficiency cartridge

One-touch fitting symbol	Applicable tubing O.D.	Bar length symbol											
		340	**400**	**460**	**580**	**640**	**820**	**1120**	**1300**	**1600**	**1900**	**2320**	**2500**
06	**ø6 mm**	○	○	○	○	○	○	○	○	○	○	○	○
08	**ø8 mm**	○	○	○	○	○	○	○	○	○	○	○	○
10	**ø10 mm**	○	○	○	○	○	○	○	○	○	○	○	○

○: With piping only on one side

∗ The piping port of this product has been changed to a One-touch fitting.
Other specifications, including the dimensions, are the same as those of the standard product.

For details, refer to the Web Catalog.

Accessories (for Individual Parts)

Power supply cable

- **IZS40-CP (3 m)**
- **IZS41-CP (3 m)**
- **IZS40-CPZ (10 m)**
- **IZS41-CPZ (10 m)**



For IZS40

For IZS41, 42

Made to Order

How to Order

IZS□-CP□-X13

Type

40	For IZS40
41	For IZS41, 42

Power supply cable full length

Symbol	Cable full length
01	1 m
02	2 m
⋮	⋮
19	19 m
20	20 m

Model with made-to-order power supply cable
Available in 1 m increments from 1 m to 20 m

* Power cables 11 m or longer are not CE Marking-compliant.
* Use standard power supply cables for 3 m and 10 m lengths.

High speed static neutralization cartridge

- **IZS40-NT (Emitter material: Tungsten)**
- **IZS40-NC (Emitter material: Silicon)**

Energy saving static neutralization cartridge

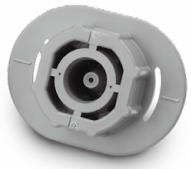
- **IZS40-NJ (Emitter material: Tungsten)**
- **IZS40-NK (Emitter material: Silicon)**

Energy saving high-efficiency cartridge

- **IZS40-NV (Emitter material: Tungsten)**
- **IZS40-NS (Emitter material: Silicon)**

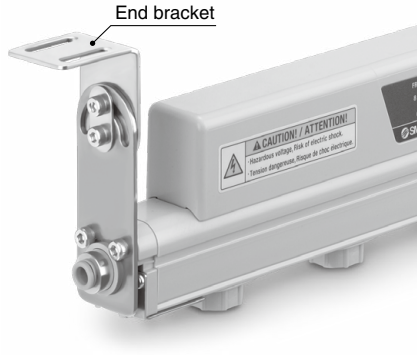


Tungsten
(Emitter cartridge color: White)



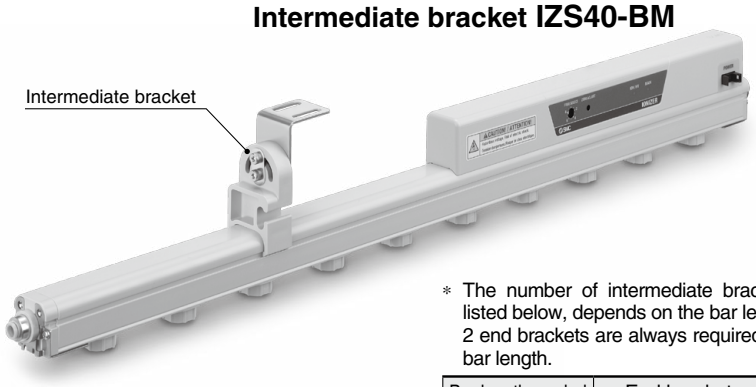
Silicon
(Emitter cartridge color: Gray)

End bracket IZS40-BE



* Ionizer mounting screws attached, M4 x 8, 2 pcs.

Intermediate bracket IZS40-BM



* The number of intermediate brackets required, as listed below, depends on the bar length.
  2 end brackets are always required regardless of the bar length.

Bar length symbol	End bracket	Intermediate bracket
340 to 760	With 2 pcs.	None
820 to 1600		With 1 pc.
1660 to 2380		With 2 pcs.
2440 to 2500		With 3 pcs.

* The model number is for a single bracket.

Accessories Sold Separately

Drop prevention cover

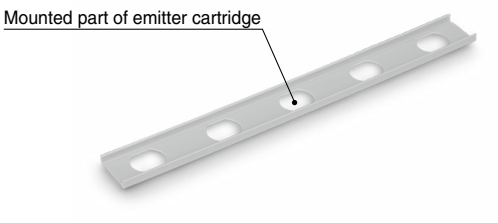
IZS40 − E 3

Number of fixed emitter cartridges

IZS40-E3	3
IZS40-E4	4
IZS40-E5	5

Number of required drop prevention covers

Bar length symbol	Number of required drop prevention covers		
	IZS40-E3	**IZS40-E4**	**IZS40-E5**
340	—	—	1
400	2	—	—
460	1	1	—
580	—	1	1
640	—	—	2
820	1	—	2
1120	1	—	3
1300	2	—	3
1600	2	—	4
1900	2	—	5
2320	1	—	7
2500	2	—	7





When attached to the body

Remote controller IZS41-RC



AC adapter For IZS40

IZF10 − C

AC adapter

G1	AC adapter + AC cord*1
G2	AC adapter (Without AC cord)

*1 When "G1" is selected, an AC cord with a rated voltage of 125 V is included. If using an input voltage exceeding 125 VAC, select "G2" (Without AC cord) and prepare a suitable AC cord separately.



For IZS40

For IZS41, 42

IZS41 − C

AC adapter

G1	AC adapter + AC cord*1
G2	AC adapter (Without AC cord)

*1 When "G1" is selected, an AC cord with a rated voltage of 125 V is included. If using an input voltage exceeding 125 VAC, select "G2" (Without AC cord) and prepare a suitable AC cord separately. The external input/output function of the IZS41 and 42 cannot be used when an AC adapter is being used.



For IZS41, 42

Transition wiring cable

IZS41 − CF

Transition wiring cable

02	Full length 2 m
05	Full length 5 m
08	Full length 8 m



Made to Order

How to Order

IZS41 − CF − X13

Transition wiring cable length

Symbol	Cable full length
01	1 m
03	3 m
⋮	⋮
19	19 m
20	20 m

Model with made-to-order transition wiring cable
Available in 1 m increments from 1 m to 20 m
* Power cables 11 m or longer are not CE Marking-compliant.
* Use standard power supply cables for 2 m, 5 m, and 8 m lengths.
* Transition wiring is not available for the IZS40.

Cleaning kit IZS30-M2

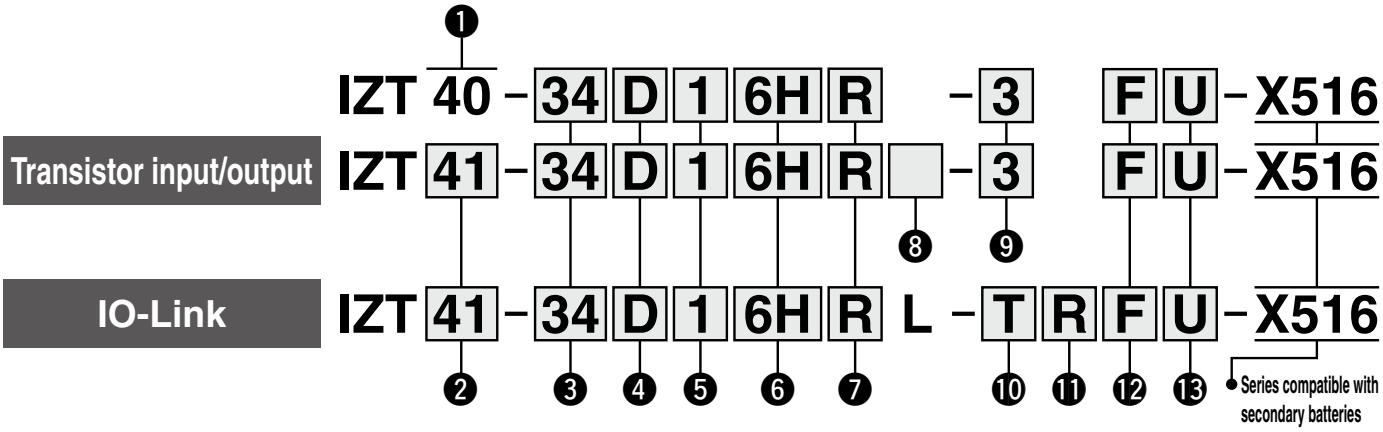


Separate Controller Bar Type Ionizer

IZT40/4□(-L)-X516

How to Order

Bar + **High voltage power supply module** + **Controller**



❶ Model

Symbol	Model
40	Standard type

❷ Model

Symbol	Model
41	AC type
42	Dual AC type

❸ Bar length

Symbol	Length [mm]	Symbol	Length [mm]
16	160	**82**	820
22	220	**112**	1120
34	340	**130**	1300
40	400	**160**	1600
46	460	**190**	1900
58	580	**232**	2320
64	640	**250**	2500

❹ Emitter cartridge type/ Emitter material

Symbol	Type	Material
D	High speed static neutralization cartridge	Tungsten
E		Silicon
L	Energy saving static neutralization cartridge	Tungsten
M		Silicon
V	Energy saving high-efficiency cartridge	Tungsten
S		Silicon

❺ High voltage cable length

Symbol	High voltage cable length [m]
1	1
2	2
3	3

∗ The number of included high voltage cable holders differs depending on the high voltage cable length. (Refer to the table below.)

Number of included high voltage cable holders

⇨ Refer to page 285-8.

Symbol	IZT40		IZT41		IZT42	
	Straight	Elbow	Straight	Elbow	Straight	Elbow
1	1	1	1	1	2	2
2	2	1	2	1	4	2
3	3	1	3	1	6	2

❻ One-touch fitting

Symbol	Metric size
6H	ø6 Straight
8H	ø8 Straight
AH	ø10 Straight

∗ Refer to the recommended piping port size on the next page for selecting a One-touch fitting.

❼ Plug position

Symbol	Plug position
Nil	Without plug
Q	High voltage cable side
R	Opposite side of the high voltage cable

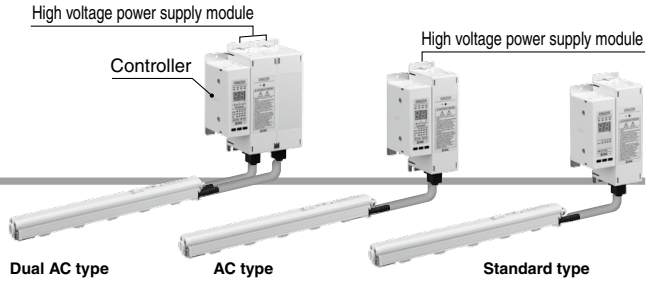
❽ Input/Output

Symbol	Input/Output
Nil	NPN
P	PNP

∗ The input/output function cannot be used when an AC adapter is being used.

∗ The piping port of this product has been changed to a One-touch fitting.
Other specifications, including the dimensions, are the same as those of the standard product.

For details, refer to the Web Catalog.



⑨ Power supply cable length

Symbol	Length [m]
3	3
5	5
10	10
15	15
N	None

∗ To use an AC adapter, specify "N", and select the AC adapter sold separately.

⑩ Power supply cable entry direction/length

Symbol	Entry direction	Length [m]
N	None	
J	Straight	3
K		5
M		10
S	Angled	3
T		5
Z		10

⑪ Communication cable entry direction/length

Symbol	Entry direction	Length [m]
N	None	
E	Straight	0.5
G		1
H		2
J		3
K		5
M		10
P	Angled	0.5
Q		1
R		2
S		3
T		5
Z		10

⑫ Bar bracket ⇨ Refer to page 285-8.

Symbol	Type
Nil	Without bracket
B	With bracket 1
F	With bracket 2

∗ The number of intermediate brackets differs depending on the bar length. (Refer to the table below.)

Number of brackets

Bar length [mm]	End bracket	Intermediate bracket
160 to 760	2	None
820 to 1600		1
1660 to 2380		2
2440 to 2500		3

⑬ DIN rail mounting bracket for controller and high voltage power supply module

⇨ Refer to page 285-8.

Symbol	For controller	For high voltage power supply module
Nil	None	None
U	Included	Included
W	Included	None
Y	None	Included

Recommended piping port size for the IZT4□
High speed static neutralization cartridge

One-touch fitting symbol	Applicable tubing O.D. [mm]	Bar length [mm] 160	220	340	400	460	580	640	820	1120	1300	1600	1900	2320	2500
6H	ø6	○	○	○	○	○	○	●	●	●	—	—	—	—	—
8H	ø8	○	○	○	○	○	○	○	○	●	●	●	●	—	—
AH	ø10	○	○	○	○	○	○	○	○	○	○	○	●	●	●

○: With piping only on one side ●: With piping on both sides —: Unrecommended piping

Energy saving static neutralization cartridge

One-touch fitting symbol	Applicable tubing O.D. [mm]	Bar length [mm] 160	220	340	400	460	580	640	820	1120	1300	1600	1900	2320	2500
6H	ø6	○	○	○	○	○	○	○	○	○	●	●	●	●	—
8H	ø8	○	○	○	○	○	○	○	○	○	○	○	○	●	●
AH	ø10	○	○	○	○	○	○	○	○	○	○	○	○	○	○

○: With piping only on one side ●: With piping on both sides —: Unrecommended piping

Energy saving high-efficiency cartridge

One-touch fitting symbol	Applicable tubing O.D. [mm]	Bar length [mm] 160	220	340	400	460	580	640	820	1120	1300	1600	1900	2320	2500
6H	ø6	○	○	○	○	○	○	○	○	○	○	○	○	○	○
8H	ø8	○	○	○	○	○	○	○	○	○	○	○	○	○	○
AH	ø10	○	○	○	○	○	○	○	○	○	○	○	○	○	○

○: With piping only on one side

IZT40/4□(-L)-X516

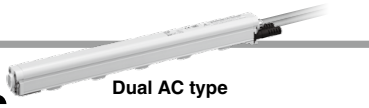
For Individual Parts

How to Order

Bar **IZTB 40 – 16 D 1 6H R – F – X516**

❶ ❷ ❸ ❹ ❺ ❻ ❼

● Series compatible with secondary batteries



Dual AC type



Standard, AC type

❶ Model

Symbol	Model
40	Standard type (For IZT40), AC type (For IZT41)
42	Dual AC type (For IZT42)

❷ Bar length

Symbol	Length [mm]	Symbol	Length [mm]
16	160	82	820
22	220	112	1120
34	340	130	1300
40	400	160	1600
46	460	190	1900
58	580	232	2320
64	640	250	2500

❸ Emitter cartridge type

Symbol	Type	Material
D	High speed static neutralization cartridge	Tungsten
E		Silicon
L	Energy saving static neutralization cartridge	Tungsten
M		Silicon
V	Energy saving high-efficiency cartridge	Tungsten
S		Silicon

❹ High voltage cable length

Symbol	High voltage cable length [m]
1	1
2	2
3	3

∗ The number of included high voltage cable holders differs depending on the high voltage cable length. (Refer to the table below.)

Number of included high voltage cable holders

⇨ Refer to page 77.

Symbol	IZT40		IZT41		IZT42	
	Straight	Elbow	Straight	Elbow	Straight	Elbow
1	1	1	1	1	2	2
2	2	1	2	1	4	2
3	3	1	3	1	6	2

❺ One-touch fitting

Symbol	Metric size
6H	ø6 Straight
8H	ø8 Straight
AH	ø10 Straight

∗ Refer to the table below for selecting a One-touch fitting.

∗ The position of the One-touch fitting and the plug cannot be changed after the delivery of the product.

❻ Plug position

Symbol	Position
Nil	Without plug
Q	High voltage cable side
R	Opposite side of the high voltage cable

❼ Bar bracket ⇨ Refer to page 285-8.

Symbol	Type
Nil	Without bracket
B	With bracket 1
F	With bracket 2

∗ The number of intermediate brackets differs depending on the bar length. (Refer to the table below.)

Number of brackets

Bar length	End bracket	Intermediate bracket
160 to 760	2	None
820 to 1600		1
1660 to 2380		2
2440 to 2500		3

Recommended piping port size for the IZT4□

High speed static neutralization cartridge

One-touch fitting symbol	Applicable tubing O.D.	Bar length [mm]													
		160	220	340	400	460	580	640	820	1120	1300	1600	1900	2320	2500
6H	ø6 mm	○	○	○	○	○	○	●	●	●	—	—	—	—	—
8H	ø8 mm	○	○	○	○	○	○	○	○	●	●	●	●	—	—
AH	ø10 mm	○	○	○	○	○	○	○	○	○	○	○	●	●	●

○: With piping only on one side ●: With piping on both sides —: Unrecommended piping

Energy saving static neutralization cartridge

One-touch fitting symbol	Applicable tubing O.D.	Bar length [mm]													
		160	220	340	400	460	580	640	820	1120	1300	1600	1900	2320	2500
6H	ø6 mm	○	○	○	○	○	○	○	○	○	●	●	●	●	—
8H	ø8 mm	○	○	○	○	○	○	○	○	○	○	○	○	●	●
AH	ø10 mm	○	○	○	○	○	○	○	○	○	○	○	○	○	○

○: With piping only on one side ●: With piping on both sides —: Unrecommended piping

Energy saving high-efficiency cartridge

One-touch fitting symbol	Applicable tubing O.D.	Bar length [mm]													
		160	220	340	400	460	580	640	820	1120	1300	1600	1900	2320	2500
6H	ø6 mm	○	○	○	○	○	○	○	○	○	○	○	○	○	○
8H	ø8 mm	○	○	○	○	○	○	○	○	○	○	○	○	○	○
AH	ø10 mm	○	○	○	○	○	○	○	○	○	○	○	○	○	○

○: With piping only on one side

∗ The piping port of this product has been changed to a One-touch fitting.
Other specifications, including the dimensions, are the same as those of the standard product.

For details, refer to the Web Catalog.

Individual Parts Combinations

	Bar/IZTB		High voltage power supply module/IZTP			Controller/IZTC	
	40	42	40	41	42	40	41
IZT40	●		●			●	
IZT41	●			●			●
IZT42		●			●		●

⚠ Caution

The transistor input/output specification and the IO-Link specification cannot be installed in combination.

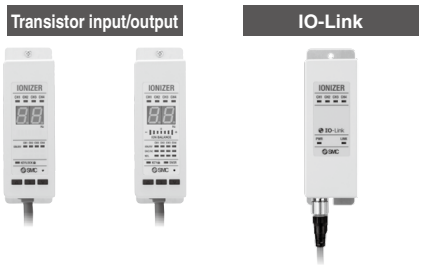
Controller

IZTC 40 – 3 – W

Transistor input/output IZTC 41 – □ 3 – W

IO-Link IZTC 41 – L J G – W

❶ ❷ ❸ ❹ ❺ ❻ ❼



Standard type

AC, Dual AC type

❶ Model

Symbol	Model
40	Standard type

❷ Model

Symbol	Model
41	AC type, Dual AC type

❸ Input/Output

Symbol	Input/Output
Nil	NPN
P	PNP

❹ Power supply cable length

Symbol	Length [m]
3	3
5	5
10	10
15	15
N	None

❺ Power supply cable entry direction/length

Symbol	Entry direction	Length [m]
N	None	
J	Straight	3
K		5
M		10
S	Angled	3
T		5
Z		10

❻ Communication cable entry direction/length

Symbol	Entry direction	Length [m]
N	None	
E	Straight	0.5
G		1
H		2
J		3
K		5
M		10
P	Angled	0.5
Q		1
R		2
S		3
T		5
Z		10

❼ DIN rail mounting bracket

⇨ Refer to page 285-8.

Symbol	Type
Nil	None
W	Included

High voltage power supply module

Transistor input/output IZTP 41 – Y

IO-Link IZTP 41 – L – Y

❶ ❷ ❸



Standard, AC type

Dual AC type

❶ Model

Symbol	Model
40	Standard type (For Bar)
41	AC type (For Bar)
42	Dual AC type (For Bar)
43	AC type (For Nozzle)

❷ Model

Symbol	Model
41	AC type (For Bar)
42	Dual AC type (For Bar)
43	AC type (For Nozzle)

❸ DIN rail mounting bracket

⇨ Refer to page 285-8.

Symbol	Type
Nil	None
Y	Included

Accessories (for Individual Parts)

Emitter cartridge (IZT40, 41(-L), 42(-L)-X516)

IZT40 − N D

High speed static neutralization



Energy saving static neutralization



● **Emitter cartridge type/Emitter material**

Symbol	Type	Material
D	High speed static neutralization cartridge	Tungsten
E		Silicon
L	Energy saving static neutralization cartridge	Tungsten
M		Silicon

Cartridge color	Emitter material
White	Tungsten
Gray	Silicon

IZS40 − N V

Energy saving high-efficiency



● **Emitter cartridge type/Emitter material**

Symbol	Type	Material
V	Energy saving high-efficiency cartridge	Tungsten
S		Silicon

Cartridge color	Emitter material
White	Tungsten
Gray	Silicon

Bar bracket (IZT40, 41(-L), 42(-L)-X516)

IZT40 − B E1

● **Bar bracket**

Symbol	Type
E1	End bracket 1
E2	End bracket 2
M1	Intermediate bracket 1
M2	Intermediate bracket 2

∗ Refer to the table below for selecting a bracket.

Bracket combinations

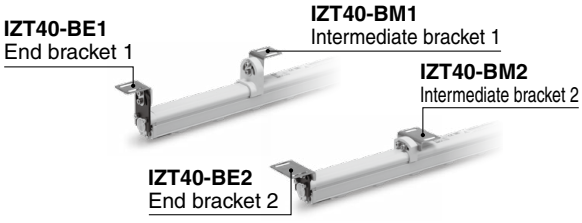
	Intermediate bracket 1	Intermediate bracket 2
End bracket 1	○ (Adjustment angle ±90°)	×
End bracket 2	×	○ (Adjustment angle ±15°)

○: Available ×: Not available

∗ The number of intermediate brackets required, as listed below, depends on the bar length. 2 end brackets are always required regardless of the bar length.

Number of brackets

Bar length	End bracket	Intermediate bracket
160 to 760	2	None
820 to 1600		1
1660 to 2380		2
2440 to 2500		3



Power supply cable (IZT40, 41, 42-X516)

IZT40 − CP 3

Cable specifications
⇨ Refer to the **Web Catalog**.



● **Power supply cable length**

Symbol	Length [m]
3	3
5	5
10	10
15	15

IO-Link power supply cable (IZT41-L, 42-L-X516)

IZT41 − CP J



● **Power supply cable entry direction/length**

Symbol	Entry direction	Length [m]
J	Straight	3
K		5
M		10
S	Angled	3
T		5
Z		10

IO-Link communication cable (IZT41-L, 42-L-X516)

IZT41 − CE G



● **Communication cable entry direction/length**

Symbol	Entry direction	Length [m]
E	Straight	0.5
G		1
H		2
J		3
K		5
M		10
P	Angled	0.5
Q		1
R		2
S		3
T		5
Z		10

DIN rail mounting bracket for controller and high voltage power supply module

IZT40 − B 1

● **DIN rail mounting bracket**

Symbol	Type
1	For Controller
2	For High voltage power supply module
3	For High voltage power supply module for IZT42

For Controller **For High voltage power supply module**

For IZTP42



IZT40-B1 **IZT40-B2** **IZT40-B3**

High voltage cable holder

IZT40 − E 1

● **High voltage cable holder**

Symbol	Type
1	Straight
2	Elbow

Straight **Elbow**



IZT40-E1 **IZT40-E2**

Accessories Sold Separately

Drop prevention cover (IZT40, 41(-L), 42(-L)-X516)

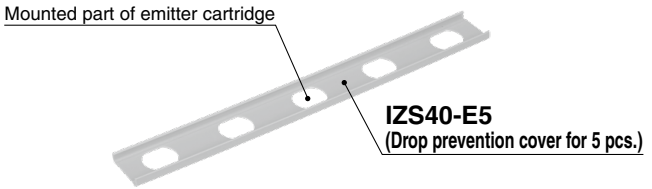
IZS40 − E 2

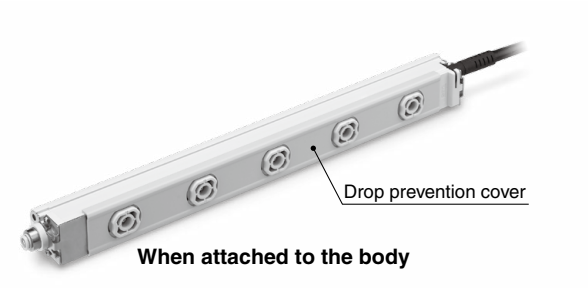
Number of fixed emitter cartridges

Symbol	Type
2	2 pcs.
3	3 pcs.
4	4 pcs.
5	5 pcs.

Standard bar length

Bar length symbol	Number of required drop prevention covers			
	IZS40-E2	**IZS40-E3**	**IZS40-E4**	**IZS40-E5**
16	1	—	—	—
22	—	1	—	—
34	—	—	—	1
40	—	2	—	—
46	—	1	1	—
58	—	—	1	1
64	—	—	—	2
82	—	1	—	2
112	—	1	—	3
130	—	2	—	3
160	—	2	—	4
190	—	2	—	5
232	—	1	—	7
250	—	2	—	7





When attached to the body

AC adapter (IZT40, 41, 42-X516)

IZT40 − CG 1

AC cord selection

Symbol	Type
1	With AC cord
2	Without AC cord

* An AC cord is only for use in Japan. (Rated voltage 125 V, Plug JIS C 8303, Inlet IEC 60320-C6) The external input/output function cannot be used when an AC adapter is being used.
* Cannot be used for the IO-Link specification



AC adapter

Separate cable (IZT40, 41, 42-X516)

IZT40 − CF 1

Cable length

Symbol	Length [m]
1	1
2	2
3	3



Cleaning kit (IZT40, 41, 42-X516)

IZS30 − M2

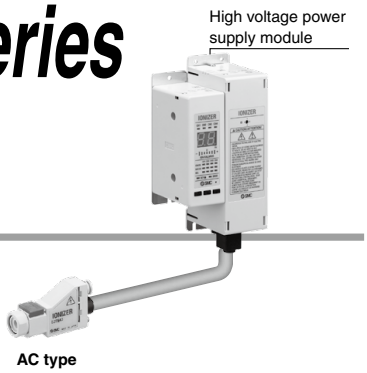


Replacement felt pad: IZS30-A0201
Replacement rubber grindstone: IZS30-A0202

Separate Controller

Nozzle Type Ionizer

IZT43(-L)-X516 Series



How to Order

Nozzle + High voltage power supply module + Controller

Transistor input/output

IZT 43 – D 1 6H ❺ – ❻ F U – X516

IO-Link

IZT 43 – D 1 6H L – T R F U – X516

❶ ❷ ❸ ❹ ❼ ❽ ❾ ❿

● Series compatible with secondary batteries

❶ Model

Symbol	Model
43	AC type

❷ Emitter cartridge type

Symbol	Type
D	High speed static neutralization cartridge
L	Energy saving static neutralization cartridge

❸ High voltage cable length

Symbol	Length [m]
1	1
2	2
3	3

∗ The number of included high voltage cable holders differs depending on the high voltage cable length. (Refer to the table below.)

Number of included high voltage cable holders

Symbol	Straight	Elbow
1	1	1
2	2	1
3	3	1

❹ One-touch fitting

Symbol	Metric size
6H	ø6 Straight

❺ Input/Output

Symbol	Input/Output
Nil	NPN
P	PNP

❻ Power supply cable length

Symbol	Length [m]
3	3
5	5
10	10
15	15
N	None

∗ To use an AC adapter, specify “N”, and select the AC adapter sold separately.

❼ Power supply cable entry direction/length

Symbol	Entry direction	Length [m]
N	None	
J	Straight	3
K		5
M		10
S	Angled	3
T		5
Z		10

❽ Communication cable entry direction/length

Symbol	Entry direction	Length [m]
N	None	
E	Straight	0.5
G		1
H		2
J		3
K		5
M		10
P	Angled	0.5
Q		1
R		2
S		3
T		5
Z		10

❾ Nozzle bracket

Symbol	Type
Nil	Without bracket
B	L-bracket
F	Angle adjustment bracket

❿ DIN rail mounting bracket for controller and high voltage power supply module

Symbol	For Controller	For High voltage power supply module
Nil	None	None
U	Included	Included
W	Included	None
Y	None	Included

∗ The piping port of this product has been changed to a One-touch fitting.
Other specifications, including the dimensions, are the same as those of the standard product.

For details, refer to the Web Catalog.

For Individual Parts

How to Order



AC type

Combinations

	Nozzle/**IZTN**	High voltage power supply module/**IZTP**	Controller/**IZTC**
	43	43	41
IZT43	●	●	●

Nozzle

IZTN 43 – D 1 6H – F
❶ ❷ ❸ ❹ ❺

❶ Model

Symbol	Model
43	AC type

❷ Emitter cartridge type

Symbol	Type
D	High speed static neutralization cartridge
L	Energy saving static neutralization cartridge

* The piping port of this product has been changed to a One-touch fitting. Other specifications, including the dimensions, are the same as those of the standard product.

For details, refer to the Web Catalog.

❸ High voltage cable length

Symbol	High voltage cable length [m]
1	1
2	2
3	3

* The number of included high voltage cable holders differs depending on the high voltage cable length. (Refer to the table below.)

Number of included high voltage cable holders

Symbol	IZT43	
	Straight	Elbow
1	1	1
2	2	1
3	3	1

❹ One-touch fitting

Symbol	Metric size
6H	ø6 Straight

❺ Nozzle bracket

Symbol	Type
Nil	Without bracket
B	L-bracket
F	Angle adjustment bracket

⚠ Caution

The transistor input/output specification and the IO-Link specification cannot be installed in combination.

Controller

Transistor input/output **IZTC 41 – ☐ 3 – W**
❷ ❸

IO-Link **IZTC 41 – L J G – W**
❶ ❹ ❺ ❻

Transistor input/output | IO-Link



AC, Dual AC type

❶ Model

Symbol	Model
41	AC type, Dual AC type

❷ Input/Output

Symbol	Input/Output
Nil	NPN
P	PNP

❸ Power supply cable length

Symbol	Length [m]
3	3
5	5
10	10
15	15
N	None

❹ Power supply cable entry direction/length

Symbol	Entry direction	Length [m]
N	None	
J	Straight	3
K		5
M		10
S	Angled	3
T		5
Z		10

❺ Communication cable entry direction/length

Symbol	Entry direction	Length [m]
N	None	
E	Straight	0.5
G		1
H		2
J		3
K		5
M		10
P	Angled	0.5
Q		1
R		2
S		3
T		5
Z		10

❻ DIN rail mounting bracket

Symbol	Type
Nil	None
W	Included

High voltage power supply module

Transistor input/output **IZTP 43 – Y**

IO-Link **IZTP 43 – L – Y**
❶ ❷


AC type

❶ Model

Symbol	Model
43	AC type (For Nozzle)

❷ DIN rail mounting bracket

Symbol	Type
Nil	None
Y	Included

Accessories (for Individual Parts)

Emitter cartridge (For IZT43(-L))

IZT43 − N D

Emitter cartridge type/ Emitter material

Symbol	Type	Material
D	High speed static neutralization cartridge	Tungsten
L	Energy saving static neutralization cartridge	Tungsten



Tungsten (Color: White)

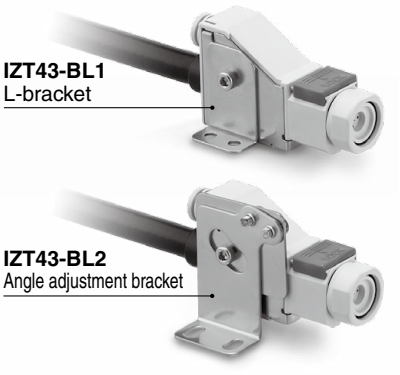
Cartridge color	Emitter material
White	Tungsten

Nozzle bracket (For IZT43(-L))

IZT43 − B L1

Nozzle bracket

Symbol	Type
L1	L-bracket
L2	Angle adjustment bracket



Power supply cable (IZT43)

IZT40 − CP 3

Cable specifications
⇨ Refer to page 108.



Power supply cable length

Symbol	Length [m]
3	3
5	5
10	10
15	15

IO-Link power supply cable (IZT43-L)

IZT41 − CP J



Power supply cable entry direction/length

Symbol	Entry direction	Length [m]
J	Straight	3
K		5
M		10
S	Angled	3
T		5
Z		10

IO-Link communication cable (IZT43-L)

IZT41 − CE G



Communication cable entry direction/length

Symbol	Entry direction	Length [m]
E	Straight	0.5
G		1
H		2
J		3
K		5
M		10
P	Angled	0.5
Q		1
R		2
S		3
T		5
Z		10

DIN rail mounting bracket for controller and high voltage power supply module

IZT40 − B 1

DIN rail mounting bracket

Symbol	Type
1	For Controller
2	For High voltage power supply module

For Controller



IZT40-B1

For High voltage power supply module



IZT40-B2

High voltage cable holder

IZT40 − E 1

High voltage cable holder

Symbol	Type
1	Straight
2	Elbow

Straight



IZT40-E1

Elbow



IZT40-E2

Accessories Sold Separately

High voltage cable assembly (For IZT43(-L))

IZT43 − A002 − 1

High voltage cable length

Symbol	Length [m]
1	1
2	2
3	3



AC adapter (IZT43)

IZT40 − CG 1

AC adapter

Symbol	Type
1	With AC cord
2	Without AC cord

* An AC cord is only for use in Japan. (Rated voltage 125 V, Plug JIS C 8303, Inlet IEC 60320-C6) The external input/output function cannot be used when an AC adapter is being used.
* Cannot be used for the IO-Link specification



AC adapter

Separate cable (IZT43)

IZT40 − CF 1

Cable length

Symbol	Length [m]
1	1
2	2
3	3



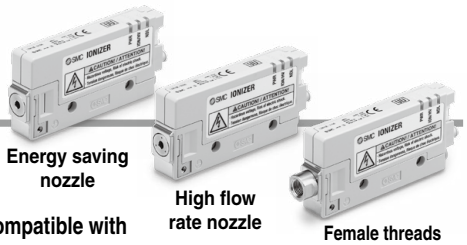
Cleaning kit (For IZT43)

IZT43 − M2



Replacement felt pad: IZT43-A003
Replacement rubber grindstone: IZT43-A004

Nozzle Type Ionizer
IZN10E-X516 Series


Energy saving nozzle

High flow rate nozzle

Female threads for piping

How to Order

IZN10E – 01 P 06 Z – B1 – X516

High frequency AC nozzle model

Nozzle type

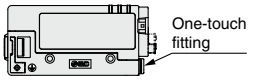
Symbol	Type
01	Energy saving nozzle
02	High flow rate nozzle
11	Female threads for piping*1

*1 Refer to the cautions listed below when using the female threads for piping.

Input/Output specifications

Symbol	Type
Nil	NPN input/output
P	PNP input/output

One-touch fitting

Symbol	Type	
06	ø6: Metric size	 One-touch fitting

* The One-touch fitting cannot be changed after the delivery of the product.

Power supply cable

Symbol	Type	Part no.
Nil	With power supply cable (3 m)	IZN10E-CP
Z	With power supply cable (10 m)	IZN10E-CPZ
N	Without power supply cable	—

* Mounting is interchangeable with the previous model (IZN10).

Series compatible with secondary batteries

Bracket

Symbol	Type	Part no.
Nil	Without bracket	—
B1	L-bracket	IZN10-B1
B2	Pivoting bracket	IZN10-B2
B3	DIN rail mounting bracket	IZN10-B3

* Refer to page 130. Brackets are the same as those for the previous model (IZN10). Mounting is interchangeable.

* The piping port of this product has been changed to a One-touch fitting. Other specifications, including the dimensions, are the same as those of the standard product.

For details, refer to the Web Catalog.

Accessories

Bracket

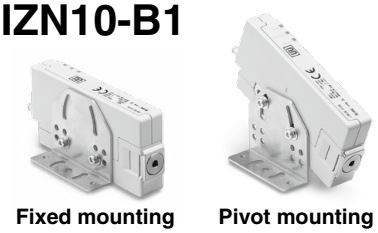
IZN10 – B1

Bracket

Symbol	Type
B1	L-bracket
B2	Pivoting bracket
B3	DIN rail mounting bracket

L-bracket

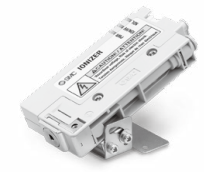
IZN10-B1


Fixed mounting

Pivot mounting

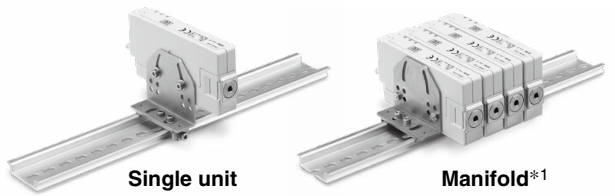
Pivoting bracket

IZN10-B2



DIN rail mounting bracket

IZN10-B3


Single unit

Manifold*1

*1 The L-bracket and the DIN rail mounting bracket can be used with the manifold.

Power supply cable

IZN10E – CP ☐

Power supply cable

Symbol	Type
Nil	3 m
Z	10 m

Power supply cable: Made to order

IZN10E – CP 01 – X13

Power supply cable length

Symbol	Type
01	1 m
⋮	⋮
20	20 m

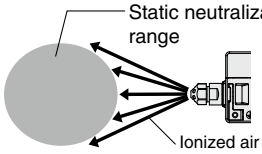
* Available in 1 m increments from 1 m to 20 m. Use standard power supply cables for 3 m and 10 m lengths.



Nozzle Variations

Circular diffusion nozzle



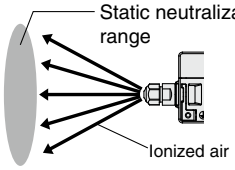


Part no.
IZN10-G-X198

Supply pressure specifications:
0.05 to 0.1 MPa

Flat diffusion nozzle

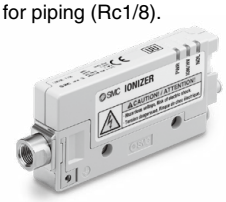




Part no.
IZN10-G-X199

Supply pressure specifications:
0.05 to 0.1 MPa

For the ionizer, please select the female threads for piping (Rc1/8).



IZN10E-11□□-X516

Fan Type Ionizer

IZF21/31-X516 Series



How to Order

IZF 21 – □ – □ B □ □ – X516

Series compatible with secondary batteries

Model

Symbol	Max. air flow
21	1.8 m³/min
31	4.4 m³/min

Air suction side filter

Nil	None
U	With filter*1

*1 Filter + Filter holder

Input/Output

Nil	NPN input/output
P	PNP input/output

Automatic cleaning unit, Louver

Nil	None
S	With automatic cleaning unit
W	With adjustable louver
Y	With automatic cleaning unit + adjustable louver

Power supply cable, AC adapter

Nil	With power supply cable (3 m)
Z	With power supply cable (10 m)
Q	With AC adapter (With AC cord)
R	With AC adapter (Without AC cord)
N	None

Bracket

B	With bracket

* This product has a modified body mounting bolt. Therefore, the dimensions when mounting with a bracket will be different. Other specifications, including the dimensions, are the same as those of the standard product.

For details, refer to the Web Catalog.

Accessories (for Individual Parts)

Emitter cartridge

IZF 21 – NT

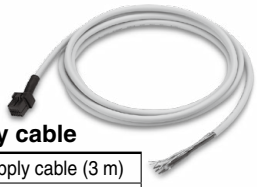


Model

21	For IZF21
31	For IZF31

Power supply cable

IZS41 – CP □



Power supply cable

Nil	Power supply cable (3 m)
Z	Power supply cable (10 m)

IZS41 – CP 02 – X13

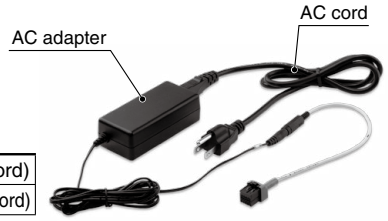
Power supply cable length

01	Total length: 1 m
02	Total length: 2 m
⋮	⋮
19	Total length: 19 m
20	Total length: 20 m

∗ Available in 1 m increments from 1 m to 20 m
Use standard power supply cables for 3 m and 10 m lengths.

AC adapter

IZF21 – C G1



AC adapter

G1	AC adapter (With AC cord)
G2	AC adapter (Without AC cord)

∗ When "G1" is selected, an AC cord with a rated voltage of 125 V is included.
If using an input voltage exceeding 125 VAC, select "G2" (Without AC cord) and prepare a suitable AC cord separately.
The external input/output function of the ionizer cannot be used when an AC adapter is being used.

Adjustable louver

IZF 21 – HW



Model

21	For IZF21
31	For IZF31

Bracket

IZF 21 – B1 – X516



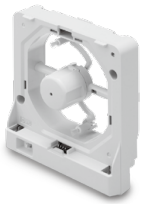
Model

21	For IZF21
31	For IZF31

∗ 4 retaining bolts are included.

Automatic cleaning unit

IZF 21 – HS

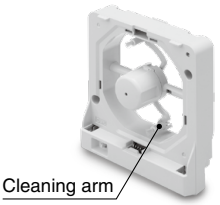


Model

21	For IZF21
31	For IZF31

Cleaning arm (for the automatic cleaning unit)

IZF 21 – M3



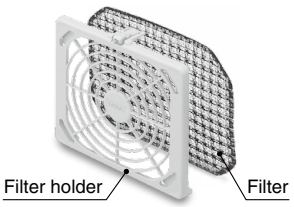
Model

21	For IZF21
31	For IZF31

∗ Removable

Air suction side filter

IZF 21 – F L



Model

21	For IZF21
31	For IZF31

Air suction side filter

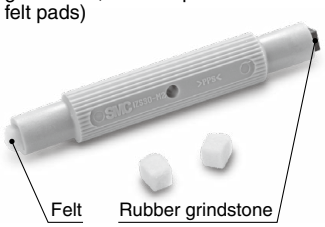
L	Filter
U	Filter + Filter holder

Accessories Sold Separately

Cleaning kit

IZS30 – M2

(With 1 felt pad, 1 rubber grindstone, and 2 replacement felt pads)



IZS30 – A0201

(10 replacement felt pads)



IZS30 – A0202

(1 replacement rubber grindstone)



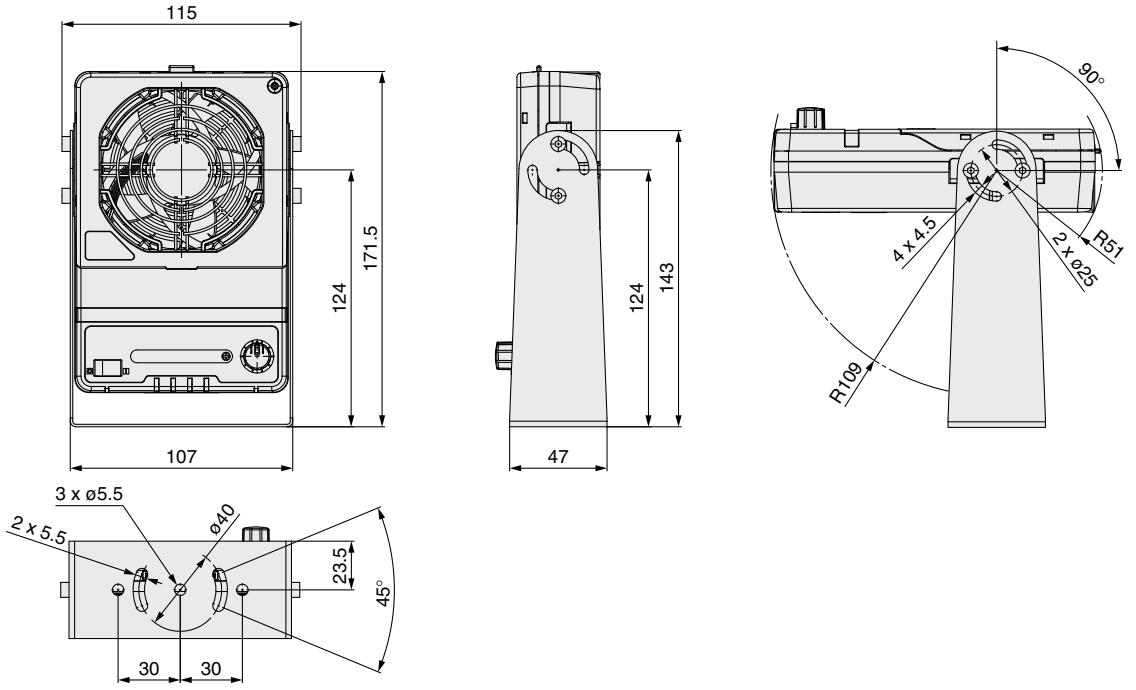
Adjustment screwdriver

IZS30 – M1

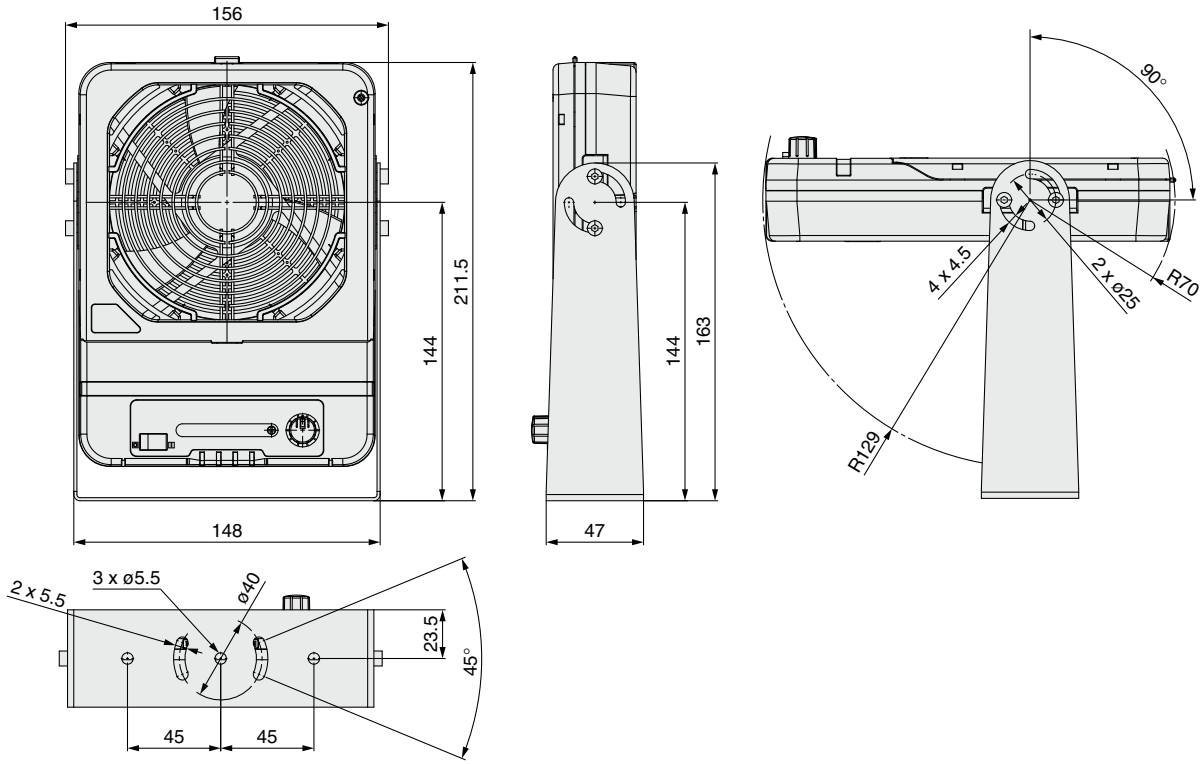


Dimensions

Bracket
IZF21-□-□B□□-X516



Bracket
IZF31-□-□B□□-X516



IZF 10
IZF 10R

Fan Type Ionizer
IZF10/IZF10R-X516 Series



With flow rate adjustment function

How to Order

Without Flow Rate Adjustment Function

IZF10 – □ □ – □ B – X516

- **Compact fan type**
- **Air flow**

Nil	0.66 m³/min
L	0.46 m³/min

- **Series compatible with secondary batteries**

With Flow Rate Adjustment Function

IZF10R – □ – □ B – X516

- **Compact fan type**
- **With flow rate adjustment function** (0.19 to 0.80 m³/min)
- **Bracket**

B	With bracket

- **Output**

Nil	NPN output
P	PNP output

- **Power supply cable, AC adapter**

Nil	With power supply cable (3 m)
Z	With power supply cable (10 m)
H∗1	e-con connector
Q	With AC adapter (With AC cord)
R	With AC adapter (Without AC cord)
N	None

∗1 A power supply connector for customers supplying their own cable
Can only be used if the IZF10 is selected

∗ This product has a modified body mounting bolt.
Therefore, the dimensions when mounting with a bracket will be different.
Other specifications, including the dimensions, are the same as those of the standard product.

For details, refer to the Web Catalog.

Accessories (for Individual Parts)

Power supply cable

IZF10 □ – C P IZF 10 IZF 10R

Power supply cable

P	Power supply cable (3 m)
PZ	Power supply cable (10 m)

Flow rate adjustment function

Nil	Without flow rate adjustment function (For the IZF10)
R	With flow rate adjustment function (For the IZF10R)



Without flow rate adjustment function
Power supply cable for the IZF10



With flow rate adjustment function
Power supply cable for the IZF10R

AC adapter

IZF10 □ – C G1 IZF 10 IZF 10R

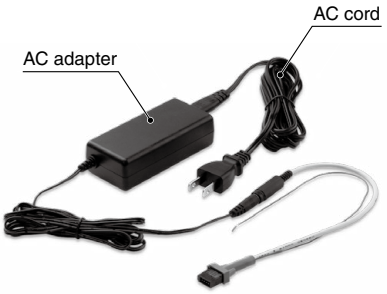
AC adapter

G1	AC adapter (With AC cord)
G2	AC adapter (Without AC cord)

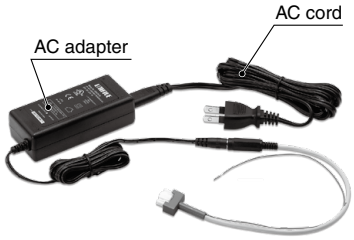
* The AC cord has a rated voltage of 125 V. If using an input voltage exceeding 125 VAC, select "G2" (Without AC cord) and prepare a suitable AC cord separately.

Flow rate adjustment function

Nil	Without flow rate adjustment function
R	With flow rate adjustment function



Without flow rate adjustment function



With flow rate adjustment function

e-con connector

ZS – 28 – C IZF 10



* Applicable wire size: AWG26 to 24, Conductor cross sectional area: 0.14 to 0.2 mm², Finished outside diameter: ø0.8 to ø1.0 mm

Cartridge case

IZF 10 – A1 IZF 10 IZF 10R

Flow rate adjustment function

10	Without flow rate adjustment function
10R	With flow rate adjustment function

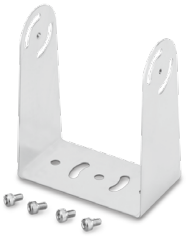


For with flow rate adjustment function

Bracket

IZF10 – B1 – X516 IZF 10 IZF 10R

* 4 retaining bolts are included.

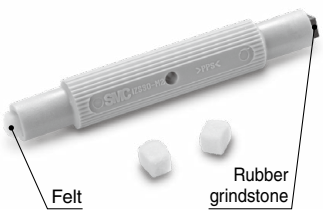


Accessories Sold Separately IZF 10 IZF 10R

Cleaning kit

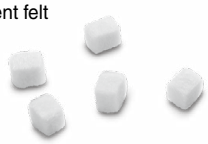
IZS30 – M2

(With 1 felt pad, 1 rubber grindstone, and 2 replacement felt pads)



IZS30 – A0201

(10 replacement felt pads)



IZS30 – A0202

(1 replacement rubber grindstone)



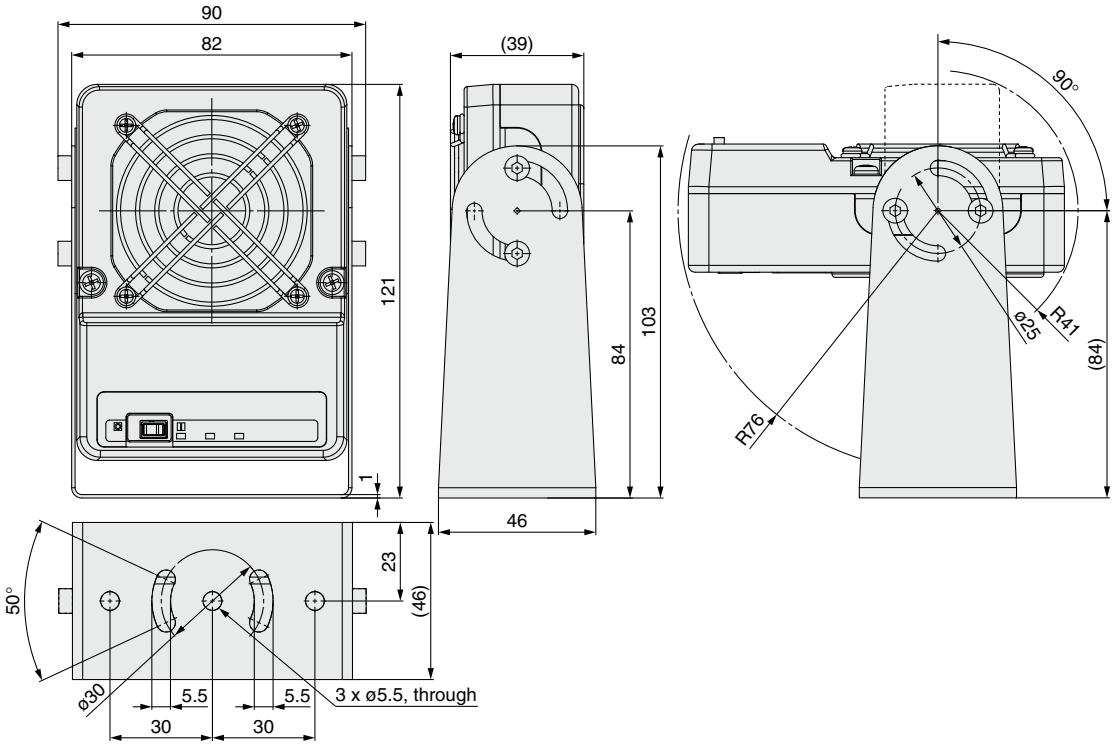
Adjustment screwdriver

IZS30 – M1

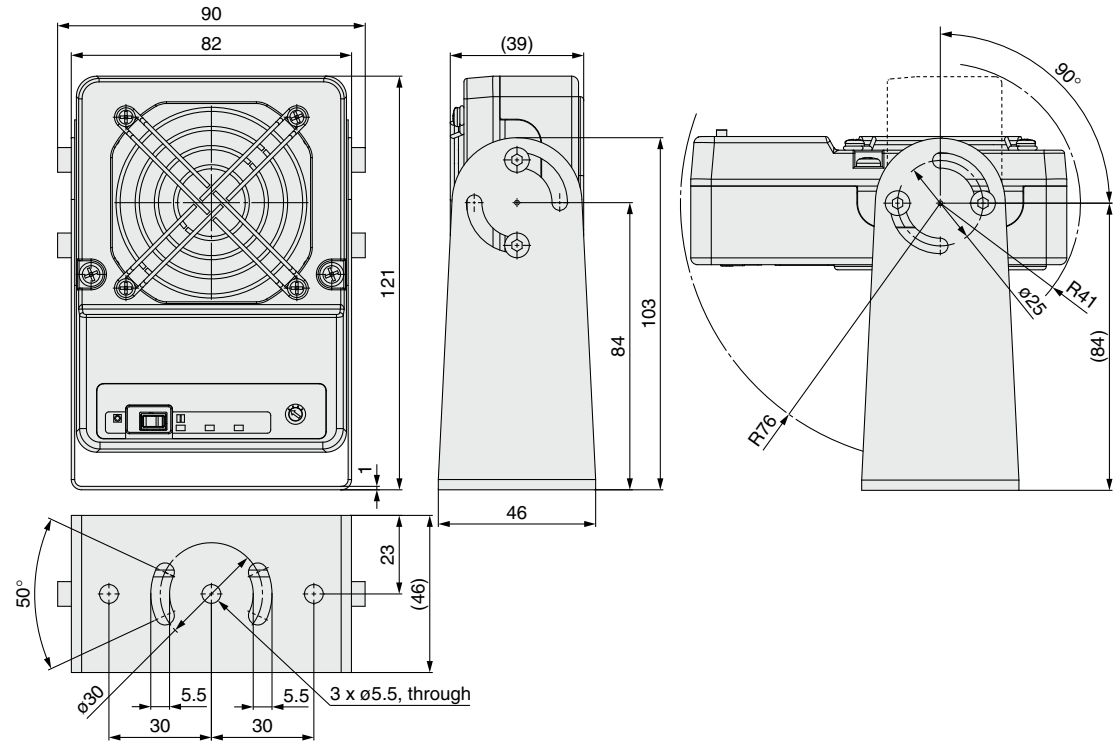


Dimensions

Bracket
IZF10-□□-□B-X516



Bracket
IZF10R-□□-□B-X516



Ionizer Gun
IZG10-X516 Series

RoHS

＊ The piping port of this product has been changed to a One-touch fitting. Other specifications, including the dimensions, are the same as those of the standard product.

For details, refer to the Web Catalog.



How to Order

IZG10－08 01 －01 －X516

One-touch fitting

Symbol	Port size
08	ø8 (Metric)

AC adapter*1, Power supply cable

Symbol	Type
01	AC adapter (With AC cord*2)
02	AC adapter (Without AC cord)
03	Power supply cable (For 24 VDC wiring)
N	None

Nozzle type

Symbol	Type
01	Standard nozzle
02	Bypass nozzle*3

Series compatible with secondary batteries

⚠Caution

The nozzle is specific for this product. Do not use any other nozzle. Doing so will adversely affect static neutralization performance.

＊1 The AC adapter body and the power supply cable (For AC adapter) come as a set. Refer to the AC adapter image below under “Accessories.”

＊2 The AC cord has a rated voltage of 125 V. If using an input voltage exceeding 125 VAC, select “02” (Without AC cord) and prepare a suitable AC cord separately.

＊3 This nozzle is complaint with the OSHA standard for hand and portable powered tools and equipment, general (1910.242b) requiring that “static pressure at the main orifice shall not exceed 30 psi (210 kPa). This requirement is necessary in order to prevent a back pressure buildup in case the nozzle is obstructed or dead ended.” ＊ Supply pressure: 0.5 MPa or less
OSHA: Occupational Safety and Health Administration

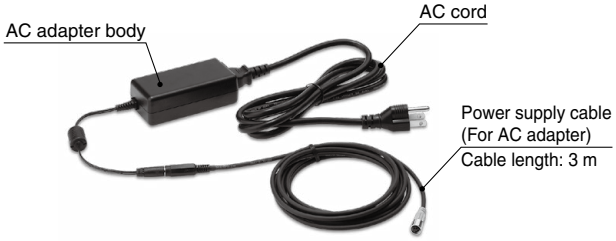
Accessories (for Individual Parts)

AC adapter

IZG10－CG 1

AC adapter*1

Symbol	Type
1	With AC cord*2
2	Without AC cord



＊1 The AC adapter body and the power supply cable (For AC adapter) come as a set.

＊2 The AC cord has a rated voltage of 125 V. If using an input voltage exceeding 125 VAC, select “02” (Without AC cord) and prepare a suitable AC cord separately.
The input (AC) side and output (DC) side of the AC adapter are not isolated. If using the AC adapter as DC power supply for a different product, this may cause an electric shock or malfunction. Do not use the AC adapter for the DC power supply of a different product.

Power supply cable (For 24 VDC wiring)

IZG10－CP



Cable length: 3 m

Nozzle assembly

IZG10－A001－01

Nozzle type

Symbol	Type
01	Standard nozzle
02	Bypass nozzle*1



Standard nozzle



Bypass nozzle

＊1 This nozzle is complaint with the OSHA standard for hand and portable powered tools and equipment, general (1910.242b) requiring that “static pressure at the main orifice shall not exceed 30 psi (210 kPa). This requirement is necessary in order to prevent a back pressure buildup in case the nozzle is obstructed or dead ended.” ＊ Supply pressure: 0.5 MPa or less
OSHA: Occupational Safety and Health Administration

Emitter assembly

IZG10－NT

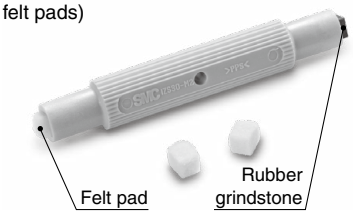


＊ A protective cap is attached to the tip of the emitter when shipped.
Please remove the cap before use.

Cleaning kit

IZS30－M2

(With 1 felt pad, 1 rubber grindstone, and 2 replacement felt pads)



IZS30－A0201

(10 replacement felt pads)



IZS30－A0202

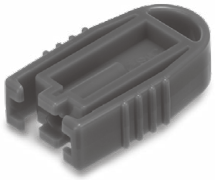
(1 replacement rubber grindstone)



Removal tool

IZG10－M1

Use this tool to remove the emitter assembly.
The removal tool is shipped together with the product.
To order it separately, use the product number above.
In addition, refer to the operation manual for replacement instructions.



SMC

For **Water** **Air** **Oil**

Direct Operated 2-Port Solenoid Valve

25A-JSX Series

Differs depending on the voltage and electrical entry. For details, refer to table ❽ below.

RoHS



How to Order

25A-JSX 2 1-S N 302 R-5 G-D-B

- 25A: Series compatible with secondary batteries
- ❶ 2 1
- ❷ S
- ❸ N
- ❹ 302
- ❺ R
- ❻ 5
- ❼ G
- ❽ D
- ❾ B
- ❿

❶ Size

Symbol	Size
1	10
2	20
3	30

❷ Valve type

Symbol	Valve type
1	N.C. 2(OUT) 1(IN)

❸ Body material

Symbol	Body material
S	Stainless steel

❹ Seal material

Symbol	Seal material
N	NBR
F	FKM
E	EPDM

❺ Orifice diameter and port size

Symbol	Orifice diameter [mmø]	Port size	Size 10	Size 20	Size 30
101	1.6	1/8	●	—	—
201	2.4	1/8	●	—	—
301	3.2	1/8	—	●	—
302		1/4	—	●	—
303		3/8	—	●	—
402	4.0	1/4	—	●	●
403		3/8	—	●	●
502	5.6	1/4	—	●	●
503		3/8	—	●	●
702	7.1	1/4	—	●	●
703		3/8	—	●	●

❻ Thread type

Symbol	Thread type
R	Rc
N	NPT
F	G

❼ Rated voltage

AC

Symbol	Rated voltage	Symbol	Rated voltage
1	100 VAC	7	240 VAC
2	200 VAC	8	48 VAC
3	120 (110) VAC	B	24 VAC
4	220 VAC	J	230 VAC

DC

Symbol	Rated voltage
5	24 VDC
6	12 VDC

❾ Oil-free option

Symbol	Option
Nil	None
D	Oil-free

❿ Option

Symbol	Option
Nil	None
B	With bracket*1 (Stainless steel)

*1 Refer to the **Web Catalog** for bracket assembly part nos.

❽ Electrical entry

Symbol	Electrical entry		Size 10	Size 20	Size 30	CE/UKCA-compliant
G	Grommet*1		●	●	●	24 VDC
						12 VDC
GS	Grommet with PCB (With surge voltage suppressor)*2		●	●	●	100 VAC
						24 VDC
						12 VDC
						48 VAC
						24 VAC
CS	Conduit (With surge voltage suppressor)		—	●	●	All voltages
DS	DIN terminal (With surge voltage suppressor)		●	●	●	All voltages
DZ	DIN terminal with light (With surge voltage suppressor)		●	●	●	All voltages
DN	DIN terminal without connector (With surge voltage suppressor)		●	●	●	All voltages
WN	M12 connector/ Without connector cable (With surge voltage suppressor)*3		●	●	●	All voltages

*1 DC voltage only

*2 Although it is possible to manufacture products of any voltage, only the voltages listed in the table are CE/UKCA compliant.

*3 The cable for the M12 connector is not included, so be sure to order it separately. In addition, note that the JSX cable part number in the "Option" section of the **Web Catalog** is not compatible with products with secondary battery specifications.

Flow Rate Characteristics

Size	Port size	Orifice diameter [mmø]	Flow rate characteristics*1 Air C [dm³/(s·bar)]	Air b	Air Cv	Water, Oil Kv	Water, Oil Conversion Cv	Max. operating pressure differential [MPa]	Model	Weight*2 [g] Stainless steel body*3
10	1/8	1.6	0.36	0.58	0.08	0.07	0.08	0.9	25A-JSX11-S□101	160
		2.4	0.62	0.45	0.15	0.13	0.15	0.4	25A-JSX11-S□201	160
20	1/8	3.2	1.35	0.48	0.35	0.30	0.35	0.7	25A-JSX21-S□301	320
	1/4	3.2	1.35	0.48	0.35	0.30	0.35	0.7	25A-JSX21-S□302	320
		4.0	2.02	0.48	0.52	0.45	0.52	0.3	25A-JSX21-S□402	320
		5.6	2.62	0.43	0.73	0.63	0.73	0.2	25A-JSX21-S□502	320
		7.1	3.15	0.44	0.88	0.76	0.88	0.1	25A-JSX21-S□702	320
	3/8	3.2	1.35	0.48	0.35	0.30	0.35	0.7	25A-JSX21-S□303	320
		4.0	2.02	0.48	0.52	0.45	0.52	0.3	25A-JSX21-S□403	320
		5.6	2.62	0.43	0.73	0.63	0.73	0.2	25A-JSX21-S□503	320
		7.1	3.15	0.44	0.88	0.76	0.88	0.1	25A-JSX21-S□703	320
30	1/4	4.0	2.02	0.48	0.52	0.45	0.52	1.0	25A-JSX31-S□402	450
		5.6	2.62	0.43	0.73	0.63	0.73	0.5	25A-JSX31-S□502	450
		7.1	3.15	0.44	0.88	0.76	0.88	0.2	25A-JSX31-S□702	450
	3/8	4.0	2.02	0.48	0.52	0.45	0.52	1.0	25A-JSX31-S□403	450
		5.6	2.62	0.43	0.73	0.63	0.73	0.5	25A-JSX31-S□503	450
		7.1	3.15	0.44	0.88	0.76	0.88	0.2	25A-JSX31-S□703	450

*1 The flow rate characteristics of this product vary.

*2 The values were calculated based on the combination of an Rc or NPT thread and a grommet. Add 20 g for the grommet type with PCB, 70 g for the conduit type, 50 g for the DIN terminal type, and 15 g for the M12 connector type.

*3 Add 30 g for the G thread (port size 3/8) type.

Applicable Fluid Checklist

Applicable fluid	Seal material NBR	FKM	EPDM
Air	●	●	●
Water	●	●	●
Oil	—	●	—

* The list shows the compatibility between general fluids and the seal materials. Consider the operating environment and application sufficiently before selecting the seal material. Fluid and component compatibility should be checked before use. If something is not clear, please contact SMC.

For **Air**

Direct Operated 2-Port Solenoid Valve

25A-JSX Series

Differs depending on the voltage and electrical entry. For details, refer to table ❽ below.

RoHS



How to Order

25A-JSX 2 1 - A N 302 R - 5 G - D - B

- 25A: Series compatible with secondary batteries
- ❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

❶ Size

Symbol	Size
2	20
3	30

❷ Valve type

Symbol	Valve type
1	N.C. 2(OUT) 1(IN)

❸ Body material

Symbol	Body material
A	Aluminum

❹ Seal material

Symbol	Seal material
N	NBR
F	FKM

❺ Orifice diameter and port size

Symbol	Orifice diameter [mmø]	Port size	Size 20 (Aluminum body)	Size 30 (Aluminum body)
301	3	1/8	●	—
302		1/4	●	—
402	4	1/4	—	●
403		3/8	—	●
501	5	1/8	●	—
502		1/4	●	—
702	7	1/4	—	●
703		3/8	—	●

❻ Thread type

Symbol	Thread type
R	Rc
N	NPT
F	G

❼ Rated voltage

AC

Symbol	Rated voltage	Symbol	Rated voltage
1	100 VAC	**7**	240 VAC
2	200 VAC	**8**	48 VAC
3	120 (110) VAC	**B**	24 VAC
4	220 VAC	**J**	230 VAC

DC

Symbol	Rated voltage
5	24 VDC
6	12 VDC

❾ Oil-free option

Symbol	Option
Nil	None
D	Oil-free

❿ Option

Symbol	Option
Nil	None
B	With bracket∗1

∗1 Bracket assembly part nos.
For size 20: 90-VX021N-12A
For size 30: 90-VX022N-12A

❽ Electrical entry

Symbol	Electrical entry		Size 20	Size 30	CE/UKCA-compliant
G	Grommet∗1		●	●	24 VDC 12 VDC
GS	Grommet with PCB (With surge voltage suppressor)∗2		●	●	100 VAC 24 VDC 12 VDC 48 VAC 24 VAC
CS	Conduit (With surge voltage suppressor)		●	●	All voltages
DS	DIN terminal (With surge voltage suppressor)		●	●	All voltages
DZ	DIN terminal with light (With surge voltage suppressor)		●	●	All voltages
DN	DIN terminal without connector (With surge voltage suppressor)		●	●	All voltages
WN	M12 connector/Without connector cable (With surge voltage suppressor)∗3		●	●	All voltages

∗1 DC voltage only
∗2 Although it is possible to manufacture products of any voltage, only the voltages listed in the table are CE/UKCA compliant.
∗3 The cable for the M12 connector is not included, so be sure to order it separately. In addition, note that the JSX cable part number in the "Option" section of the **Web Catalog** is not compatible with products with secondary battery specifications.

Flow Rate Characteristics

Aluminum Body Type

Size	Port size	Orifice diameter [mmø]	Flow rate characteristics∗1 C [dm³/(s·bar)]	b	Cv	Max. operating pressure differential [MPa]	Model	Weight∗2 [g]
20	1/8, 1/4	3	1.41	0.54	0.35	0.7	25A-JSX21-A□30□	240
		5	1.66	0.54	0.52	0.2	25A-JSX21-A□50□	240
30	1/4, 3/8	4	1.57	0.59	0.52	1.0	25A-JSX31-A□40□	400
		7	3.02	0.53	0.88	0.2	25A-JSX31-A□70□	400

∗1 The flow rate characteristics of this product vary.
∗2 Indicates case of grommet type
Add 20 g for the grommet type with PCB, 70 g for the conduit type, 50 g for the DIN terminal type, and 15 g for the M12 connector type.

For **Water** **Air** **Oil**

High Flow/ Power Saving Type

Direct Operated 2-Port Solenoid Valve

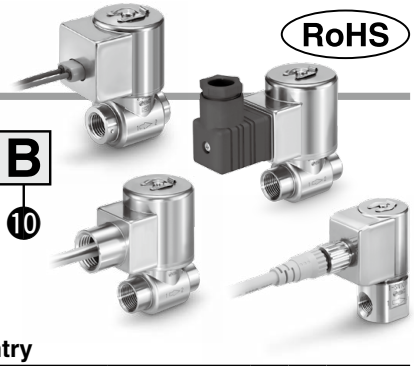
25A-JSX□□U Series

CE UKCA

Differs depending on the voltage and electrical entry. For details, refer to table ❽ below.

RoHS

The dimensions are the same as those of the standard JSX series model. Refer to the **Web Catalog** for details.



How to Order

25A – JSX [2] [1] [U] – [S] [N] [403] [R] – [5] [GS] – [D] – [B]

- 25A: Series compatible with secondary batteries
- ❶ ❷: Size
- [U]: High flow type
- ❸: Body material
- ❹: Seal material
- ❺: Orifice diameter and port size
- ❻: Thread type
- ❼: Rated voltage
- ❽: Electrical entry
- ❾: Oil-free option
- ❿: Option

❶ Size

Symbol	Size
1	10
2	20
3	30

❷ Valve type

Symbol	Valve type
1	N.C. 2(OUT) 1(IN)

❸ Body material

Symbol	Body material
S	Stainless steel

❹ Seal material

Symbol	Seal material
N	NBR
F	FKM
E	EPDM

❺ Orifice diameter and port size

Symbol	Orifice diameter [mmø]	Port size	Size 10	Size 20	Size 30
201	2.4	1/8	●	—	—
402	4.0	1/4	—	●	—
403		3/8	—	●	—
702	7.1	1/4	—	●	●
703		3/8	—	●	●

❻ Thread type

Symbol	Thread type
R	Rc
N	NPT
F	G

❼ Rated voltage

Symbol	Rated voltage
5	24 VDC
6	12 VDC

❾ Oil-free option

Symbol	Option
Nil	None
D	Oil-free

❿ Option

Symbol	Option
Nil	None
B	With bracket*1 (Stainless steel)

*1 Refer to the **Web Catalog** for bracket assembly part nos.

❽ Electrical entry

Symbol	Electrical entry		Size 10	Size 20	Size 30	CE/UKCA-compliant
GS	Grommet with PCB (With surge voltage suppressor)		●	●	●	24 VDC 12 VDC
CS	Conduit (With surge voltage suppressor)		—	●	●	
DS	DIN terminal (With surge voltage suppressor)		●	●	●	
DZ	DIN terminal with light (With surge voltage suppressor)		●	●	●	
DN	DIN terminal without connector (With surge voltage suppressor)		●	●	●	
WN	M12 connector/Without connector cable*1 (With surge voltage suppressor)		●	●	●	

*1 The cable for the M12 connector is not included, so be sure to order it separately. In addition, note that the JSX cable part number in the "Option" section of the **Web Catalog** is not compatible with products with secondary battery specifications.

* A grommet type is not available.

Flow Rate Characteristics

Size	Port size	Orifice diameter [mmø]	Flow rate characteristics*1 Air C	Air b	Air Cv	Water, Oil Kv	Water, Oil Conversion Cv	Max. operating pressure differential [MPa]	Model	Weight*2 [g] Stainless steel body*3
10	1/8	2.4	0.62	0.45	0.15	0.13	0.15	0.9	25A-JSX11U-S□201	180
20	1/4	4.0	2.02	0.48	0.52	0.45	0.52	1.0	25A-JSX21U-S□402	340
		7.1	3.15	0.44	0.88	0.76	0.88	0.4	25A-JSX21U-S□702	340
	3/8	4.0	2.02	0.48	0.52	0.45	0.52	1.0	25A-JSX21U-S□403	340
		7.1	3.15	0.44	0.88	0.76	0.88	0.4	25A-JSX21U-S□703	340
30	1/4	7.1	3.15	0.44	0.88	0.76	0.88	0.8	25A-JSX31U-S□702	470
	3/8	7.1	3.15	0.44	0.88	0.76	0.88	0.8	25A-JSX31U-S□703	470

*1 The flow rate characteristics of this product vary.

*2 The values were calculated based on the combination of an Rc or NPT thread and a grommet with PCB. Add 50 g for the conduit type, 30 g for the DIN terminal type, and –5 g for the M12 connector type.

*3 Add 30 g for the G thread (port size 3/8) type.

Applicable Fluid Checklist

Applicable fluid	Seal material NBR	FKM	EPDM
Air	●	●	●
Water	●	●	●
Oil	—	●	—

* The list shows the compatibility between general fluids and the seal materials. Consider the operating environment and application sufficiently before selecting the seal material. Fluid and component compatibility should be checked before use. If something is not clear, please contact SMC.

Direct Operated 2-Port Solenoid Valve

25A-VX21/22/23 Series

For Air Single Unit

CE UK CA RoHS

How to Order (Single Unit)

25A – VX2 [1] [0] [A] [A]

- **Series compatible with secondary batteries**
- **Fluid**

0	For air

- **Size/Valve type**

Symbol	Size	Valve type
1	Size 1	Single unit N.C.
2	Size 2	Single unit N.C.
3	Size 3	Single unit N.C.

- **Body material/Port size/Orifice diameter**

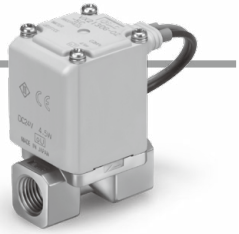
Symbol	Body material	Port size	Orifice diameter
A	Aluminum	1/8	2
B			3
C			5
D		1/4	2
E			3
F			5
H	Resin	ø6 One-touch fitting	2
J			3
K			5
L		ø8 One-touch fitting	2
M			3
N			5
A	Aluminum	1/4	4
B			7
D		3/8	4
E			7
H	Resin	ø8 One-touch fitting	4
J			7
L		ø10 One-touch fitting	4
M			7
A	Aluminum	1/4	5
B			8
C			10
D		3/8	5
E			8
F			10
G		1/2	10
H	Resin	ø10 One-touch fitting	5
J			8
K			10
L		ø12 One-touch fitting	5
M			8
N			10

For other special options, refer to the standard products.

Special voltage	24 VAC
	48 VAC
	220 VAC
	240 VAC
	12 VDC
DIN terminal with light	
Conduit terminal with light	
Without DIN connector	

Low concentration ozone resistant (Seal material: FKM)
Seal material: EPDM
Oil-free
G thread
NPT thread
With bracket (Aluminum body only)
Mounting holes on the bottom side of the body (Aluminum body only)
Special electrical entry direction

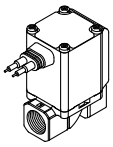
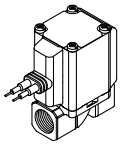
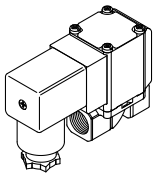
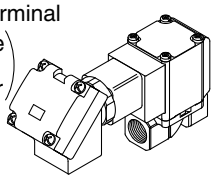
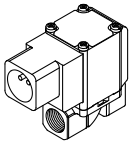
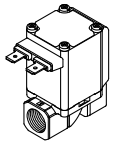
* Using the oil-free specification in a low dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.



Common Specifications

Valve type	N.C.
Seal material	NBR
Coil insulation type	Class B
Thread type	Rc

- **Voltage/Electrical entry**

Symbol	Voltage	Electrical entry
A	24 VDC	Grommet 
B	100 VAC	Grommet (With surge voltage suppressor) 
C	110 VAC	
D	200 VAC	
E	230 VAC	
F	24 VDC	
G	24 VDC	DIN terminal (With surge voltage suppressor) 
H	100 VAC	
J	110 VAC	
K	200 VAC	
L	230 VAC	
M	24 VDC	Conduit terminal (With surge voltage suppressor) 
N	100 VAC	
P	110 VAC	
Q	200 VAC	
R	230 VAC	
S	24 VDC	Conduit (With surge voltage suppressor) 
T	100 VAC	
U	110 VAC	
V	200 VAC	
W	230 VAC	
Y	24 VDC	Flat terminal 
Z	Other voltages and electrical options	

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

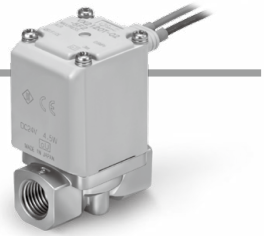
Direct Operated 2-Port Solenoid Valve

25A-VX21/22/23 Series

For Water Single Unit

For Medium Vacuum Single Unit

CE UK CA RoHS



How to Order (Single Unit)

25A – VX2 [1] [4] [H] [A]

Series compatible with secondary batteries

Fluid

2	For water
4	For medium vacuum

Size/Valve type

Symbol	Size	Valve type
1	Size 1	Single unit N.C.
2	Size 2	Single unit N.C.
3	Size 3	Single unit N.C.

Body material/Port size/Orifice diameter

Symbol	Body material	Port size	Orifice diameter
H	Stainless steel	1/8	2
J			3
K			5
L		1/4	2
M			3
N			5
H	Stainless steel	1/4	4
J			7
L		3/8	4
M			7
H	Stainless steel	1/4	5
J			8
K			10
L		3/8	5
M			8
N			10
P		1/2	10

For other special options, refer to the standard products.

Special voltage	24 VAC
	48 VAC
	220 VAC
	240 VAC
	12 VDC
DIN terminal with light	
Conduit terminal with light	
Without DIN connector	

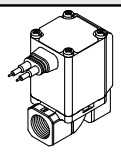
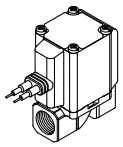
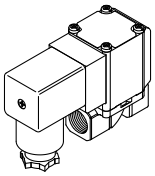
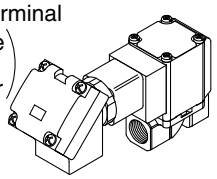
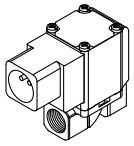
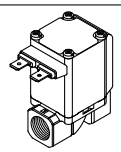
Applicable to deionized water (Seal material: FKM)
Seal material: EPDM
Oil-free
G thread
NPT thread
With bracket
Mounting holes on the bottom side of the body
Special electrical entry direction

∗ Using the oil-free specification in a low dew point environment may result in the reduced service life of the product.
Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.

Common Specifications

Valve type	N.C.
Seal material	NBR (For water)
	FKM (For medium vacuum)
Coil insulation type	Class B
Thread type	Rc

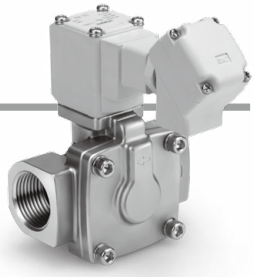
Voltage/Electrical entry

Symbol	Voltage	Electrical entry
A	24 VDC	Grommet 
B	100 VAC	Grommet (With surge voltage suppressor) 
C	110 VAC	
D	200 VAC	
E	230 VAC	
F	24 VDC	
G	24 VDC	DIN terminal (With surge voltage suppressor) 
H	100 VAC	
J	110 VAC	
K	200 VAC	
L	230 VAC	
M	24 VDC	Conduit terminal (With surge voltage suppressor) 
N	100 VAC	
P	110 VAC	
Q	200 VAC	
R	230 VAC	
S	24 VDC	Conduit (With surge voltage suppressor) 
T	100 VAC	
U	110 VAC	
V	200 VAC	
W	230 VAC	
Y	24 VDC	Flat terminal 
Z	Other voltages and electrical options	

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Pilot Operated 2-Port Solenoid Valve
For Air
25A-VXD Series



How to Order

25A – VXD2 [3] [0] [A] [A]

Series compatible with secondary batteries

Fluid

0	For Air

Size—Valve type

Symbol	Size	Valve type
3	8A	N.C.
A	10A 15A	N.O.
4	10A	N.C.
B	15A	N.O.
5	20A	N.C.
C		N.O.
6	25A	N.C.
D		N.O.

Body material/Port size/Orifice diameter

Symbol	Body material	Port size	Orifice diameter
A	Aluminum	1/4	10
B		3/8	
C		1/2	
J	Stainless steel	3/8	15
K		1/2	
M	Stainless steel	3/4	20
P	Stainless steel	1	25

Voltage/Electrical entry

Symbol	Voltage	Electrical entry
A	24 VDC	Grommet
B	100 VAC	Grommet (With surge voltage suppressor)
C	110 VAC	
D	200 VAC	
E	230 VAC	
F	24 VDC	
G	24 VDC	DIN terminal (With surge voltage suppressor)
H	100 VAC	
J	110 VAC	
K	200 VAC	
L	230 VAC	
M	24 VDC	Conduit terminal (With surge voltage suppressor)
N	100 VAC	
P	110 VAC	
Q	200 VAC	
R	230 VAC	
S	24 VDC	Conduit (With surge voltage suppressor)
T	100 VAC	
U	110 VAC	
V	200 VAC	
W	230 VAC	
Y	24 VDC	Flat terminal
Z	Other special options	

All other special options are the same as those of the standard model.

Special voltage	24 VAC
	48 VAC
	220 VAC
	240 VAC
	12 VDC
DIN terminal with light	
Conduit terminal with light	
Without DIN connector	
Low concentration ozone resistant (Seal material: FKM)	
Seal material: EPDM	
Oil-free	
G thread	
NPT thread	
With bracket	
Special electrical entry direction	

* Using the oil-free specification in a low dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.

Common Specifications

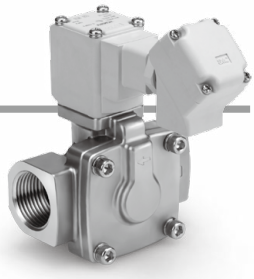
Seal material	NBR
Coil insulation type	Class B
Thread type	Rc

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Pilot Operated 2-Port Solenoid Valve For Water

25A-VXD Series



How to Order

25A – VXD2 [3] [2] [D] [A]

Series compatible with secondary batteries

Fluid

2	For Water

Size—Valve type

Symbol	Size	Valve type
3	8A 10A 15A	N.C.
A		N.O.
4	10A 15A	N.C.
B		N.O.
5	20A	N.C.
C		N.O.
6	25A	N.C.
D		N.O.

Body material/Port size/Orifice diameter

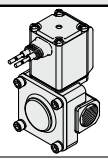
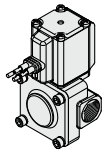
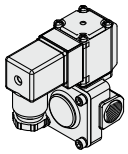
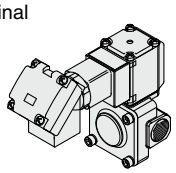
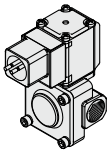
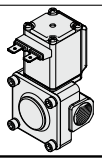
Symbol	Body material	Port size	Orifice diameter
D	Stainless steel	1/4	10
E		3/8	
F		1/2	
J	Stainless steel	3/8	15
K		1/2	
M	Stainless steel	3/4	20
P	Stainless steel	1	25

All other special options are the same as those of the standard model.

Special voltage	24 VAC
	48 VAC
	220 VAC
	240 VAC
	12 VDC
DIN terminal with light	
Conduit terminal with light	
Without DIN connector	
Applicable to deionized water (Seal material: FKM)	
Seal material: EPDM	
Oil-free	
G thread	
NPT thread	
With bracket	
Special electrical entry direction	

* Using the oil-free specification in a low dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.

Voltage/Electrical entry

Symbol	Voltage	Electrical entry
A	24 VDC	Grommet 
B	100 VAC	Grommet (With surge voltage suppressor) 
C	110 VAC	
D	200 VAC	
E	230 VAC	
F	24 VDC	
G	24 VDC	DIN terminal (With surge voltage suppressor) 
H	100 VAC	
J	110 VAC	
K	200 VAC	
L	230 VAC	
M	24 VDC	Conduit terminal (With surge voltage suppressor) 
N	100 VAC	
P	110 VAC	
Q	200 VAC	
R	230 VAC	
S	24 VDC	Conduit (With surge voltage suppressor) 
T	100 VAC	
U	110 VAC	
V	200 VAC	
W	230 VAC	
Y	24 VDC	Flat terminal 
Z	Other voltages and electrical option	

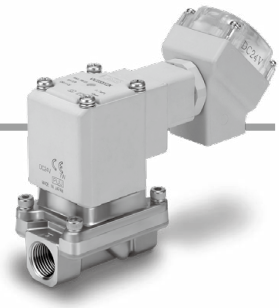
Common Specifications

Seal material	NBR
Coil insulation type	Class B
Thread type	Rc

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Zero Differential Pressure Type
Pilot Operated 2-Port Solenoid Valve/For Air
25A-VXZ Series



How to Order (Single Unit)

25A – VXZ2 [3] [0] [A] [A]

Series compatible with secondary batteries

Fluid

0	For Air

Common Specifications

Seal material	NBR
Coil insulation type	Class B
Thread type	Rc

Size/Valve type

Symbol	Body size	Valve type
3	10A	N.C.
A		N.O.
4	15A	N.C.
B		N.O.
5	20A	N.C.
C		N.O.
6	25A	N.C.
D		N.O.

Body material/Port size/Orifice diameter

Symbol	Body material	Port size	Orifice diameter
A	Aluminum	1/4	10
B		3/8	
G	Stainless steel	1/2	15
J	Stainless steel	3/4	20
L	Stainless steel	1	25

Voltage/Electrical entry

Symbol	Voltage	Electrical entry
A	24 VDC	Grommet
B	100 VAC	Grommet (With surge voltage suppressor)
C	110 VAC	
D	200 VAC	
E	230 VAC	
F	24 VDC	
G	24 VDC	DIN terminal (With surge voltage suppressor)
H	100 VAC	
J	110 VAC	
K	200 VAC	
L	230 VAC	
M	24 VDC	Conduit terminal (With surge voltage suppressor)
N	100 VAC	
P	110 VAC	
Q	200 VAC	
R	230 VAC	
S	24 VDC	Conduit (With surge voltage suppressor)
T	100 VAC	
U	110 VAC	
V	200 VAC	
W	230 VAC	
Y	24 VDC	Flat terminal
Z	Other voltages	

All other special options are the same as those of the standard model.

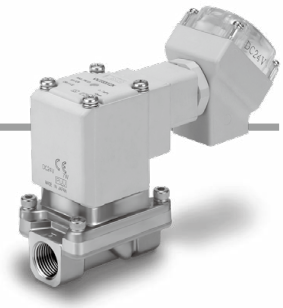
Special voltage	24 VAC
	48 VAC
	220 VAC
	240 VAC
	12 VDC
DIN terminal with light	
Conduit terminal with light	
Without DIN connector	
Low concentration ozone resistant (Seal material: FKM)	
Seal material: EPDM	
Oil-free	
G thread	
NPT thread	
With bracket (Standard for resin body)	
Special electrical entry direction	

* Using the oil-free specification in a low dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Zero Differential Pressure Type
Pilot Operated 2-Port Solenoid Valve/For Water
25A-VXZ Series



How to Order (Single Unit)

25A – VXZ2 [3] [2] [C] [A]

Series compatible with secondary batteries

Fluid

2	For Water

Common Specifications

Seal material	NBR
Coil insulation type	Class B
Thread type	Rc

Size/Valve type

Symbol	Body size	Valve type
3	10A	N.C.
A		N.O.
4	15A	N.C.
B		N.O.
5	20A	N.C.
C		N.O.
6	25A	N.C.
D		N.O.

Body material/Port size/Orifice diameter

Symbol	Body material	Port size	Orifice diameter
C	Stainless steel	1/4	10
D		3/8	
G	Stainless steel	1/2	15
J	Stainless steel	3/4	20
L	Stainless steel	1	25

Voltage/Electrical entry

Symbol	Voltage	Electrical entry
A	24 VDC	Grommet
B	100 VAC	Grommet (With surge voltage suppressor)
C	110 VAC	
D	200 VAC	
E	230 VAC	
F	24 VDC	
G	24 VDC	DIN terminal (With surge voltage suppressor)
H	100 VAC	
J	110 VAC	
K	200 VAC	
L	230 VAC	
M	24 VDC	Conduit terminal (With surge voltage suppressor)
N	100 VAC	
P	110 VAC	
Q	200 VAC	
R	230 VAC	
S	24 VDC	Conduit (With surge voltage suppressor)
T	100 VAC	
U	110 VAC	
V	200 VAC	
W	230 VAC	
Y	24 VDC	Flat terminal
Z	Other voltages	

All other special options are the same as those of the standard model.

Special voltage	24 VAC
	48 VAC
	220 VAC
	240 VAC
	12 VDC
DIN terminal with light	
Conduit terminal with light	
Without DIN connector	
Applicable to deionized water (Seal material: FKM)	
Seal material: EPDM	
Oil-free	
G thread	
NPT thread	
With bracket	
Special electrical entry direction	

* Using the oil-free specification in a low dew point environment may result in the reduced service life of the product. Please monitor the actual device in a low dew point environment in order to determine the actual service life of the product.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Diaphragm Valve for Ultra High Purity Air Operated Type

RoHS

AZ3542 & 4542□25A Series

- Suitable for UHP gas supply line
- Body material: 316L SS
- Pneumatically actuated normally closed



How to Order

AZ [3] 542 [S] [2P] [MV4] [MV4] 25A

(Inlet) (Outlet)

Size

Code	Cv
3	0.29
4	0.5

Model

Code	Status	Maximum operating pressure
542	Normally closed (N.C.)	125 psig (0.9 MPa)

Material

Code	Body material
S	316L SS

Ports

Code	Ports	Connection
2P	2 ports	Machined
2PW		Welded

Series compatible with secondary batteries

Connections

Code	Connections	Size	AZ3		AZ4	
		Port	2P	2PW	2P	2PW
MV4	1/4 inch face seal (Male) *1)		●	●	●	●
FV4	1/4 inch face seal (Female)			●		●
TW4	1/4 inch tube weld		●	●		
MV6	3/8 inch face seal (Male) *1)				●	●
FV6	3/8 inch face seal (Female)					●
TW6	3/8 inch tube weld				●	●
TW8	1/2 inch tube weld				●	

●: Only available with the same type fittings inlet and outlet.

∗ 1) Fixed fitting (no rotating nut)

Specifications

Operating Parameters	AZ3542□25A	AZ4542□25A
Weight	0.26 kg *1)	

∗1) Weight for AZ3542S2PMV4MV4 including individual boxed weight. It may vary depending on connections or options.

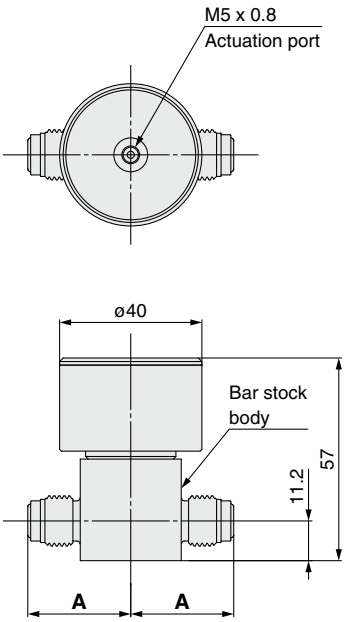
∗ Some parts have sizes and shapes that are different from the standard products.

For details, refer to the Web Catalog.

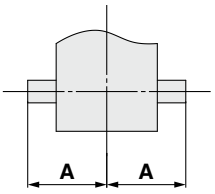
Dimensions

AZ3542 & 4542

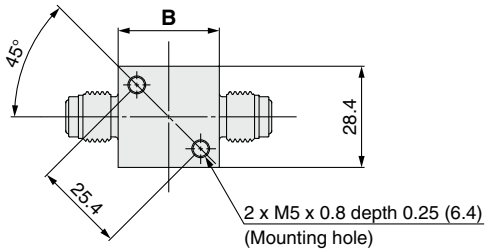
Ports: 2P (Machined)



Connections: MV□

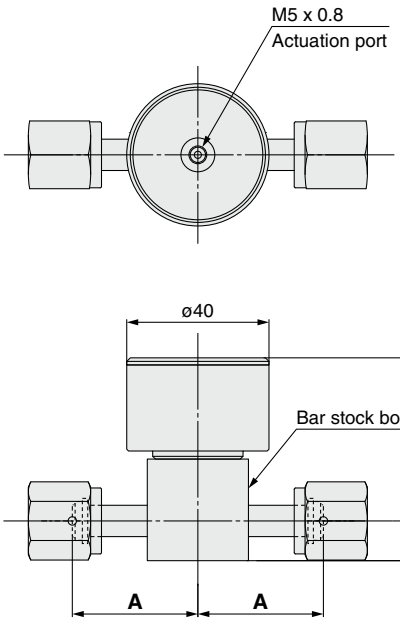


Connections: TW□

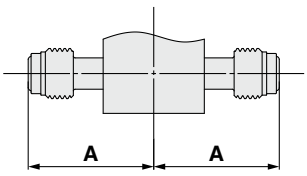


Ports	Connections	A	B
2P (Machined)	MV4	1.14 (29.0)	1.12 sq. (28.4)
	TW4	0.875 (22.2)	
	MV6	1.5 (38.1)	1.48 sq. (37.6)
	TW6	0.875 (22.2)	1.12 sq. (28.4)
	TW8	1.125 (28.6)	

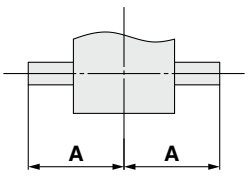
Ports: 2PW (Welded)



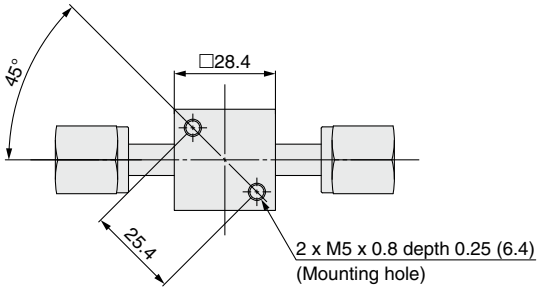
Connections: FV□



Connections: MV□



Connections: TW□



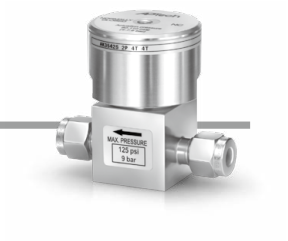
Ports	Connections	A
2PW (Welded)	MV4	1.39 (35.3)
	FV4	
	TW4	1.06 (26.9)
	MV6	1.93 (49.0)
	FV6	
	TW6	1.325 (33.7)

Diaphragm Valves for General Applications
Air Operated Type

RoHS

AK3542 & 4542□25A Series

- Body material: 316 SS
- Normally closed



How to Order

AK [3] 542 S 2P [4T (Inlet)] [4T (Outlet)] 25A

- Size
- Model
- Material
- Ports
- Connections
- Series compatible with secondary batteries

Size

Code	Cv
3	0.29
4	0.5

Model

Code	Status	Maximum operating pressure
542	Normally closed (N.C.)	125 psig (0.9 MPa)

Material

Code	Body material
S	316 SS

Ports

Code	Ports
2P	2 ports

Connections

Code	Connections	AK3	AK4
4T	1/4 inch compression	●	—
4BR	Rc 1/4		
4BRN	R 1/4		
4	NPT 1/4 female		
4N	NPT 1/4 male		
6T	3/8 inch compression	—	●
6BR	Rc 3/8		
6BRN	R 3/8		
6	NPT 3/8 female		
6N	NPT 3/8 male		

Note) Only available with same type fittings inlet and outlet.

∗ Specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Battery-less Absolute (Step Motor 24 VDC)

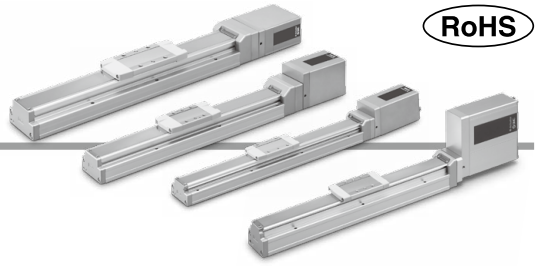
e-Actuator Easy to Operate Secondary Battery Compatible

Integrated Controller / Slider Type

25A-EQFS□H Series 25A-EQFS16, 25, 32, 40

CE UK CA RoHS

Refer to the Web Catalog for model selection.



How to Order

25A-EQFS 32 R H A -300 □ -B 5

(1) (2) (3) (4) (5) (6) (7) (8)

Series compatible with secondary batteries

❶ Size

16
25
32
40

❷ Motor mounting position/ Motor cover direction

Motor mounting position: In-line

Symbol	Motor cover direction*1	Size
Nil	—	25/32/40
D1	Left side	16
D2	Right side	
D3	Top side	
D4	Bottom side	

*1 This is the direction seen from the connector side.

Motor mounting position: Parallel

Symbol	Direction	Size
R	Right side	16/25/32/40
L	Left side	

❸ Motor type

H	Battery-less absolute (Step motor 24 VDC)

❹ Lead [mm]

Symbol	25A-EQFS16	25A-EQFS25	25A-EQFS32	25A-EQFS40
H	—	20	24	30
A	10	12	16	20
B	5	6	8	10
C	2.5	3	4	5

❺ Stroke

50	50
to	to
1200	1200

* For details, refer to the applicable stroke table below.

❻ Motor option

Nil	Without option
B	With lock

❼ Controller position

B	Integrated controller

❽ Parallel input

5	NPN
6	PNP

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Applicable Stroke Table

Size	Stroke																					
	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1100	1200
16	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—	—	—	—	—
25	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—
32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—
40	—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw Rail guide Dust seal band (Back side only)	GR-D-005 (5 g) GR-D-010 (10 g)

* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Battery-less Absolute (Step Motor 24 VDC)

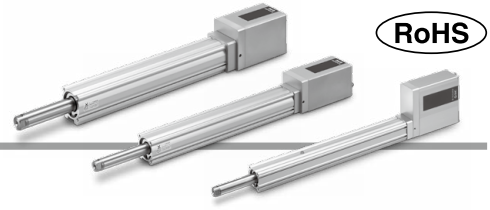
e-Actuator Easy to Operate Secondary Battery Compatible

Integrated Controller / Rod Type

25A-EQY□H Series 25A-EQY16, 25, 32

Refer to the Web Catalog for model selection.

RoHS



How to Order

25A-EQY 25 D H B-50 □ □ □-B 5

(1) (2) (3) (4) (5) (6) (7) (8) (9) (10)

Series compatible with secondary batteries

(1) Size

16
25
32

(2) Motor mounting position/Motor cover direction

Motor mounting position: In-line

Symbol	Motor cover direction*1	Size
D	—	25/32
D1	Left side	16
D2	Right side	
D3	Top side	
D4	Bottom side	

*1 This is the direction seen from the connector side.

Motor mounting position: Parallel

Symbol	Direction	Size
Nil	Top side	16/25/32
R	Right side	
L	Left side	

(3) Motor type

H	Battery-less absolute (Step motor 24 VDC)

(4) Lead [mm]

Symbol	EQY16	EQY25	EQY32
H	—	20	24
A	10	12	16
B	5	6	8
C	2.5	3	4

(5) Stroke

Size	Stroke [mm]											
	30	50	100	150	200	250	300	350	400	450	500	Manufacturable stroke range
16	●	●	●	●	●	●	●	—	—	—	—	10 to 300
25	●	●	●	●	●	●	●	●	●	—	—	15 to 400
32	●	●	●	●	●	●	●	●	●	●	●	20 to 500

(6) Motor option

Nil	Without option
B	With lock

(7) Rod end thread

Nil	Rod end female thread
M	Rod end male thread (1 rod end nut is included.)

(8) Mounting*2

Symbol	Type	Motor mounting position					
		Parallel			In-line		
		16	25	32	16	25	32
Nil	Ends tapped*3 Body bottom tapped	●	●	●	●	●	●
L	Foot bracket	●	●	●	—	—	—
F	Rod flange*3 *6	●	●	●	●	●	●
G	Head flange*5	●	●	—	—	—	—
D	Double clevis*4	●	●	●	—	—	—

(9) Controller position

B	Integrated controller

(10) Parallel input

5	NPN
6	PNP

*1 Motor mounting position: For the parallel mounting type, the motor units with the following sizes and strokes protrude from the body end. Check for interference with workpieces before selecting a model.
- 25A-EQY16, 25, 32 Without lock: 30 mm stroke, With lock: 30, 50 mm strokes

*2 The mounting bracket is shipped together with the product but does not come assembled.

*3 For the horizontal cantilever mounting of the rod flange or ends tapped types, use the actuator within the following stroke range.
- 25A-EQY25: 200 or less
- 25A-EQY32: 100 or less

*4 For the mounting of the double clevis type, use the actuator within the following stroke range.
- 25A-EQY16: 100 or less
- 25A-EQY25: 200 or less
- 25A-EQY32: 200 or less

*5 The head flange type is not available for the EQY32.

*6 The rod flange type cannot accommodate the following sizes and strokes.
- 25A-EQY16 Without lock: 30 mm stroke, With lock: 30, 50, 100 mm strokes
- 25A-EQY25, 32 Without lock: 30 mm stroke, With lock: 30, 50 mm strokes

Mounting Bracket Part Nos. for the 25A- Series

Applicable size	Foot*1	Flange	Double clevis
16	25-LEY-L016	25-LEY-F016	25-LEY-D016
25	25-EQY-L025	25-EQY-F025	25-LEY-D025
32	25-EQY-L032	25-LEY-F032	25-EQY-D032

*1 When ordering foot brackets, order 2 pieces per actuator.

* Parts included with each type of bracket are as follows.
Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

Replacement Parts/Grease Pack

Applied portion	Order no.
Piston rod	GR-D-005 (5 g) GR-D-010 (10 g)

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

* Copper and zinc materials are used for the motors, cables, controllers/drivers.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Options

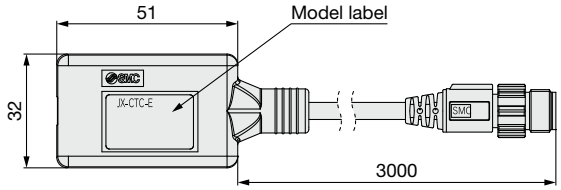
■ Communication cable for controller setting

Controller setting kit JX-CT-E

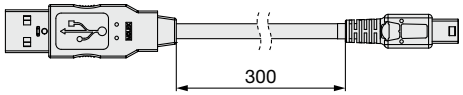
A set which includes a communication cable (JX-CTC-E) and a USB cable (LEC-W2-U)

* It is possible to individually purchase the communication cable and USB cable.
* The communication and USB cables are not compatible with the 25A-series specifications.

Communication cable JX-CTC-E



USB cable LEC-W2-U



<Controller setting software/USB driver>

· Controller setting software
· USB driver (For JXC-CT□-E)

Download from SMC's website:
https://www.smcworld.com

Hardware Requirements

OS	Windows®10 (64 bit), Windows®11 (64 bit)
Communication interface	USB 2.0 port
Display	1366 x 768 or more

* Windows®10 and Windows®11 are registered trademarks of Microsoft Corporation in the United States.

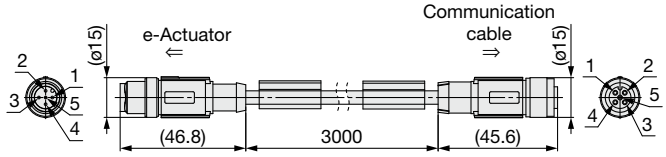
■ Communication conversion cable

25A – JX – CTE – E – 3 – S

Weight [g]
159

Cable length

3	3 m



* To connect the 25A-EQ series product and the communication cable for controller setting (JX-CTC-E), a communication conversion cable is required.
* Only the connector on the e-Actuator side of this cable is compatible with the 25A- series specifications.

■ Parallel I/O cable

25A – JX – CI S – E – 1 – S

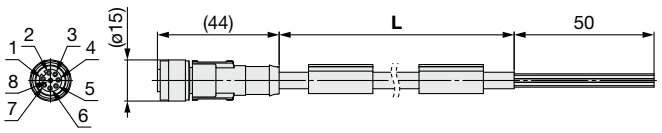
Connector type

Symbol	Specifications
S	Straight
A	Right angled

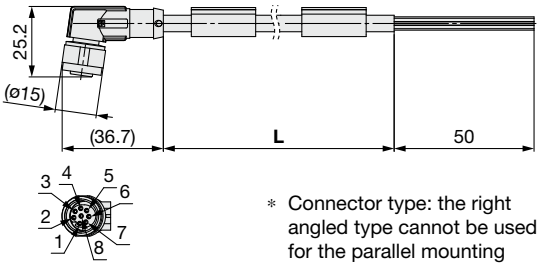
Cable length

1	1.5 m
3	3 m
5	5 m
10	10 m

● Connector type: Straight



● Connector type: Right angled



* Connector type: the right angled type cannot be used for the parallel mounting type.

Pin no.	Wire color	Signal
1	White	IN0
2	Brown	IN1
3	Green	RESET
4	Yellow	—
5	Gray	OUT0
6	Pink	OUT1
7	Blue	OUT2
8	Red	ALARM

* Conductor size: AWG24

Part no.	Weight [g]
25A-JX-CIS-E-1-S	79
25A-JX-CIS-E-3-S	148
25A-JX-CIS-E-5-S	240
25A-JX-CIS-E-10-S	470
25A-JX-CIA-E-1-S	80
25A-JX-CIA-E-3-S	149
25A-JX-CIA-E-5-S	241
25A-JX-CIA-E-10-S	471

■ Power supply cable

25A – JX – CD S – E – 1 – S

Connector type

Symbol	Specifications
S	Straight
A	Right angled

Cable length

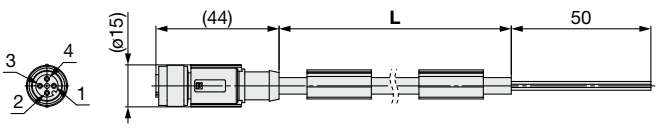
1	1.5 m
3	3 m
5	5 m
10	10 m

Pin no.	Wire color	Signal
1	Brown	C24V
2	White	M24V
3	Blue	0V
4	Black	LK RLS

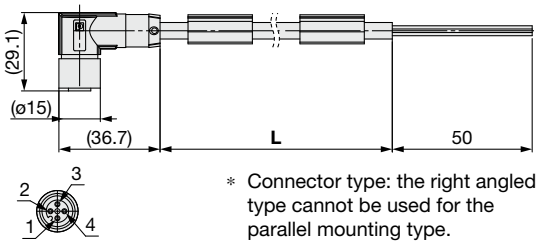
* Conductor size: AWG22

Part no.	Weight [g]
25A-JX-CDS-E-1-S	75
25A-JX-CDS-E-3-S	129
25A-JX-CDS-E-5-S	201
25A-JX-CDS-E-10-S	381
25A-JX-CDA-E-1-S	73
25A-JX-CDA-E-3-S	127
25A-JX-CDA-E-5-S	199
25A-JX-CDA-E-10-S	379

● Connector type: Straight



● Connector type: Right angled



* Connector type: the right angled type cannot be used for the parallel mounting type.

Environment Secondary Battery Compatible

● Copper (Cu) and zinc (Zn) free*1

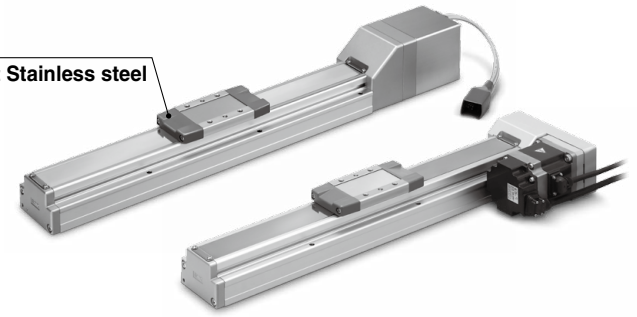
*1 Excludes motors, cables, controllers/drivers

● Compatible with dew points as low as –80°C

Uses grease compatible with low dew points

High Rigidity and High Precision Slider Type 25A-LEKFS

Battery-less Absolute (Step Motor 24 VDC) p. 298-3



AC Servo Motor p. 298-7, 298-8

Motorless Type p. 298-9

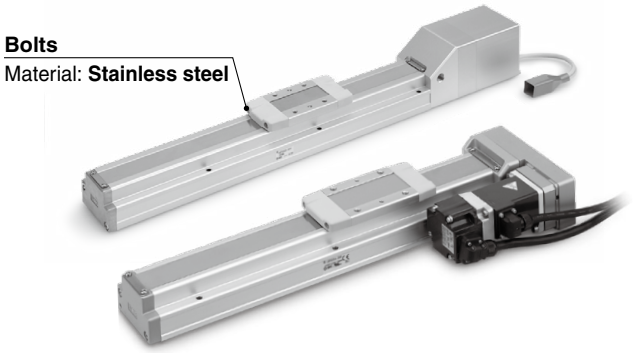
	Size				High performance
	16	25	32	40	
Battery-less absolute (Step motor 24 VDC)	●	●	●	●	●
AC servo motor		●	●	●	
Motorless		●	●	●	

* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.

Slider Type Ball Screw Drive/25A-LEFS

Battery-less Absolute (Step Motor 24 VDC) p. 298-10

Incremental (Step Motor 24 VDC) Incremental (Servo Motor 24 VDC) p. 299



AC Servo Motor p. 303, 304

Motorless Type p. 304-1

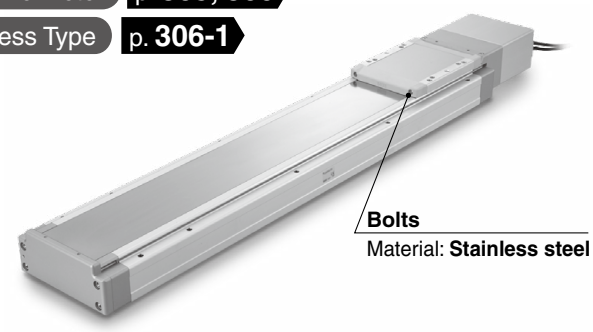
	Size				High performance
	16	25	32	40	
Battery-less absolute (Step motor 24 VDC)	●	●	●	●	●
Incremental (Step motor 24 VDC)	●	●	●	●	●
Incremental (Servo motor 24 VDC)	●	●			
AC servo motor		●	●	●	
Motorless		●	●	●	

* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.

High Rigidity Slider Type Ball Screw Drive/25A-LEJS

AC Servo Motor p. 305, 306

Motorless Type p. 306-1



	Size	
	40	63
AC servo motor	●	●
Motorless	●	●

* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.

Environment Secondary Battery Compatible

Rod Type/25A-LEY

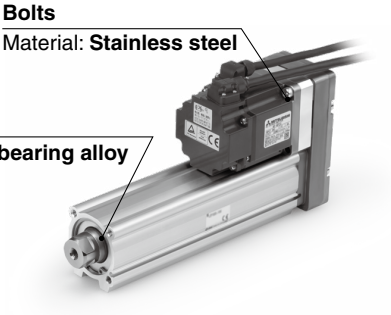
Battery-less Absolute (Step Motor 24 VDC) p. 306-2

Incremental (Step Motor 24 VDC) p. 307

Incremental (Servo Motor 24 VDC)



AC Servo Motor p. 311, 313



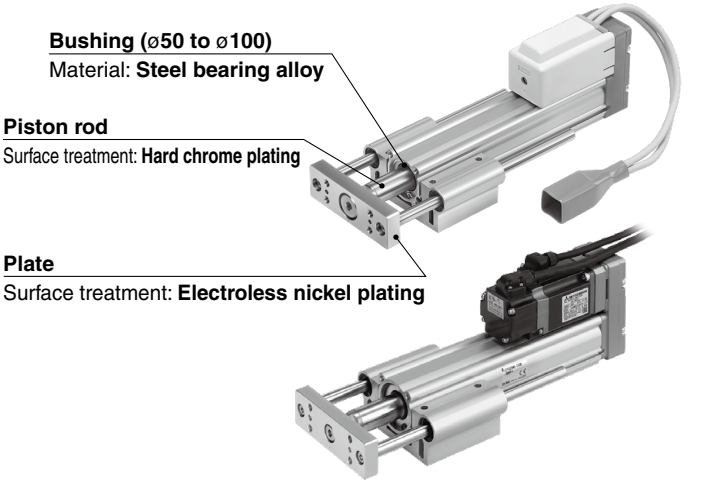
	Size				
	16	25	32	40	High performance
Battery-less absolute (Step motor 24 VDC)	●	●	●	●	●
Incremental (Step motor 24 VDC)	●	●	●	●	●
Incremental (Servo motor 24 VDC)	●	●			
AC servo motor		●	●		
Motorless		●	●		

* Copper and zinc materials are used for the motors, cables, controllers/drivers.

Guide Rod Type/25A-LEYG

Battery-less Absolute (Step Motor 24 VDC) p. 314-4

Incremental (Step Motor 24 VDC) Incremental (Servo Motor 24 VDC) p. 314-2



AC Servo Motor p. 314-6, 314-8

Motorless Type p. 314-10

	Size			
	16	25	32	40
Battery-less absolute (Step motor 24 VDC)	●	●	●	●
Incremental (Step motor 24 VDC)	●	●	●	●
Incremental (Servo motor 24 VDC)	●	●		
AC servo motor		●	●	
Motorless		●	●	

* Copper and zinc materials are used for the motors, cables, controllers/drivers.

Battery-less Absolute (Step Motor 24 VDC)

High Rigidity and High Precision

Slider Type Secondary Battery Compatible

25A-LEKFS Series 25A-LEKFS16, 25, 32, 40

CE UK CA RoHS

For details, refer to the Web Catalog.



How to Order

25A-LEKFS 32 ❶ E ❷ A ❸ - 300 ❹ ❺ - R1 ❻ CD17T ❼ ❽

Series compatible with secondary batteries

❶ Size

16
25
32
40

❷ Motor mounting position

Nil	In-line
R	Right side parallel
L	Left side parallel

❸ Motor type

E	Battery-less absolute (Step motor 24 VDC)

❹ Lead [mm]

Symbol	25A-LEKFS16	25A-LEKFS25	25A-LEKFS32	25A-LEKFS40
H	—	20	24	30
A	10	12	16	20
B	5	6	8	10

❺ Stroke*1

Size	Stroke																
	50	100	150	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200
16	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—
25	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—
32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—
40	—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

❻ Motor option

Nil	Without option
B	With lock

❼ Actuator cable type/length

Robotic cable [m]

Nil	None	R8	8*2
R1	1.5	RA	10*2
R3	3	RB	15*2
R5	5	RC	20*2

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw Rail guide Dust seal band (Back side only)	GR-D-005 (5 g) GR-D-010 (10 g)

* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

⑧ Controller

Nil	Without controller
C□1□□	With controller

C D 1 7 T

Interface (Communication protocol/Input/Output)

Symbol	Type	Number of axes, Special specification: Standard	Number of axes, Special specification: With STO sub-function
5	Parallel input (NPN)	●	
6	Parallel input (PNP)	●	
E	EtherCAT	●	●
9	EtherNet/IP™	●	●
P	PROFINET	●	●
D	DeviceNet®	●	
L	IO-Link	●	●
M	CC-Link	●	

Mounting

7	Screw mounting
8∗3	DIN rail

Number of axes, Special specification

Symbol	Number of axes	Specification
1	Single axis	Standard
F	Single axis	With STO sub-function

Communication plug connector, I/O cable∗4

Symbol	Type	Applicable interface
Nil	Without accessory	—
S	Straight type communication plug connector	DeviceNet® CC-Link Ver. 1.10
T	T-branch type communication plug connector	
1	I/O cable (1.5 m)	Parallel input (NPN) Parallel input (PNP)
3	I/O cable (3 m)	
5	I/O cable (5 m)	

∗1 Please contact SMC for non-standard strokes as they are produced as special orders.
∗2 Produced upon receipt of order
∗3 The DIN rail is not included. It must be ordered separately.
∗4 Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel input.
Select "Nil," "S," or "T" for DeviceNet® or CC-Link.
Select "Nil," "1," "3," or "5" for parallel input.

⚠Caution

[CE/UKCA-compliant products]
EMC compliance was tested by combining the electric actuator LEKFS series and the controller JXC series.
The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

[Precautions relating to differences in controller versions]
When the JXC series is to be used in combination with the battery-less absolute encoder, use a controller that is version V3.4 or S3.4 or higher. For details, refer to the **Web Catalog**.

[UL-certified products]
The JXC series controllers used in combination with electric actuators are UL certified.

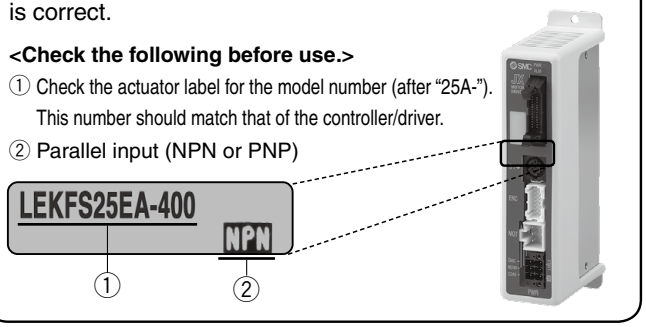
The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

<Check the following before use.>

① Check the actuator label for the model number (after "25A-").
This number should match that of the controller/driver.

② Parallel input (NPN or PNP)



∗ Refer to the Operation Manual for using the products.
Please download it via our website: https://www.smcworld.com

■Trademark

EtherNet/IP® is a registered trademark of ODVA, Inc.
DeviceNet® is a registered trademark of ODVA, Inc.
EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

Type	Step data input type	EtherCAT direct input type	EtherCAT direct input type with STO sub-function	EtherNet/IP™ direct input type	EtherNet/IP™ direct input type with STO sub-function	PROFINET direct input type	PROFINET direct input type with STO sub-function	DeviceNet® direct input type	IO-Link direct input type	IO-Link direct input type with STO sub-function	CC-Link direct input type
											
Series	**JXC51 JXC61**	**JXCE1**	**JXCEF**	**JXC91**	**JXC9F**	**JXCP1**	**JXCPF**	**JXCD1**	**JXCL1**	**JXCLF**	**JXCM1**
Features	Parallel I/O	EtherCAT direct input	EtherCAT direct input with STO sub-function	EtherNet/IP™ direct input	EtherNet/IP™ direct input with STO sub-function	PROFINET direct input	PROFINET direct input with STO sub-function	DeviceNet® direct input	IO-Link direct input	IO-Link direct input with STO sub-function	CC-Link direct input
Compatible motor	Battery-less absolute (Step motor 24 VDC)										
Max. number of step data	64 points										
Power supply voltage	24 VDC										

Battery-less Absolute (Step Motor 24 VDC)

High Performance

CE UKCA RoHS

* For details, refer to the **Web Catalog**.

High Rigidity and High Precision Slider Type

Secondary Battery Compatible

25A-LEKFS□G Series

25A-LEKFS25, 32, 40



How to Order

25A – LEKFS **25** **□** **G** **B** – **200** **□** – **R1** **C5H73**

25A: Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

❽ For details on controllers, refer to the next page.

❶ Size

25
32
40

❷ Motor mounting position

Nil	In-line
R	Right side parallel
L	Left side parallel

❸ Motor type

Symbol	Type	Applicable size			Compatible controllers
		25A-LEKFS25	25A-LEKFS32	25A-LEKFS40	
G	High performance (Battery-less absolute)	●	●	●	JXC5H JXC6H JXCEH JXC9H JXCPH

❹ Lead [mm]

Symbol	25A-LEKFS25	25A-LEKFS32	25A-LEKFS40
H	20	24	30
A	12	16	20
B	6	8	10

❺ Stroke*1 [mm]

Stroke	Note	
	Size	Applicable stroke
50 to 800	25	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800
50 to 1000	32	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000
150 to 1200	40	150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200

❻ Motor option

Nil	Without option
B	With lock

❼ Actuator cable type/length

Robotic cable [m]

Nil	None	R8	8*2
R1	1.5	RA	10*2
R3	3	RB	15*2
R5	5	RC	20*2

Applicable Stroke Table

Size	Stroke																
	50	100	150	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200
25	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—
32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—
40	—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw Rail guide Dust seal band (Back side only)	GR-D-005 (5 g) GR-D-010 (10 g)

* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

⑧ Controller

Nil	Without controller
C□H□□	With controller

C 5 H 7 3

Controller type

5	Parallel I/O (NPN) type
6	Parallel I/O (PNP) type
E	EtherCAT
9	EtherNet/IP™
P	PROFINET

Mounting

7	Screw mounting
8∗3	DIN rail

Number of axes/Special specification

H	1 axis/High performance type

I/O cable length

Nil	Without cable
1	1.5 m
3	3 m
5	5 m

∗1 Please contact SMC for non-standard strokes as they are produced as special orders.
∗2 Produced upon receipt of order
∗3 The DIN rail is not included. It must be ordered separately.

⚠Caution

[CE/UKCA-compliant products]
EMC compliance was tested by combining the electric actuator LEF series and the controller JXC series.
The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

■Trademark

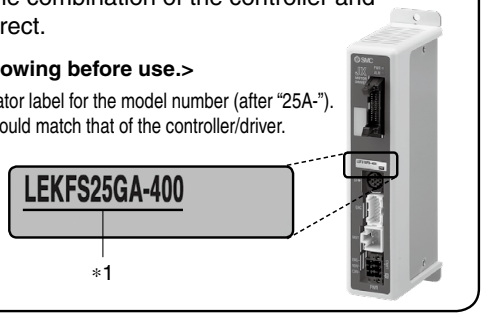
EtherNet/IP® is a registered trademark of ODVA, Inc.
EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

<Check the following before use.>

∗1 Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.



∗ Refer to the Operation Manual for using the products.
Please download it via our website: https://www.smcworld.com

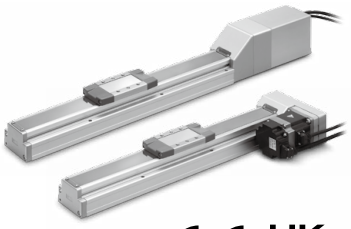
Type	Step data input type	EtherCAT direct input type	EtherNet/IP™ direct input type	PROFINET direct input type
				
Series	**JXC5H JXC6H**	**JXCEH**	**JXC9H**	**JXCPH**
Features	Parallel I/O	EtherCAT direct input	EtherNet/IP™ direct input	PROFINET direct input
Compatible motor	Step motor 24 VDC			
Max. number of step data	64 points			
Power supply voltage	24 VDC			

AC Servo Motor ***LECS□ Series***

High Rigidity and High Precision Slider Type

Ball Screw Drive Secondary Battery Compatible

25A-LEKFS Series 25A-LEKFS25, 32, 40



For details, refer to the **Web Catalog**.

LECY□ Series ▶ p. 298-6

RoHS

How to Order

25A – LEKFS 32 R S3 B – 200 □ – S 2 A2 □

(1) (2) (3) (4) (5) (6) (7) (8) (9) (10)

Series compatible with secondary batteries

(1) Size

25
32
40

(2) Motor mounting position

Nil	In-line
R	Right side parallel
L	Left side parallel

(3) Motor type

Symbol	Type	Output [W]	(1) Size	(9) Driver type	Compatible drivers
S2*1	AC servo motor (Incremental encoder)	100	25	A1/A2	LECSA□-S1
S3		200	32	A1/A2	LECSA□-S3
S4		400	40	A2	LECSA2-S4
T6*2	AC servo motor (Absolute encoder)	100	25	B2	LECSB2-T5
				C2	LECSC2-T5
				S2	LECSS2-T5
T7		200	32	B2	LECSB2-T7
				C2	LECSC2-T7
				S2	LECSS2-T7
T8		400	40	B2	LECSB2-T8
				C2	LECSC2-T8
				S2	LECSS2-T8

*1 For motor type S2, the compatible driver part number suffix is S1.
*2 For motor type T6, the compatible driver part number is LECS□2-T5.

(4) Lead [mm]

Symbol	25A-LEKFS25	25A-LEKFS32	25A-LEKFS40
H	20	24	30
A	12	16	20
B	6	8	10

(5) Stroke [mm]

50	50
to	to
1200	1200

* For details, refer to the applicable stroke table below.

(6) Motor option

Nil	Without option
B	With lock

(7) Cable type*1 *2

Nil	Without cable
S	Standard cable
R	Robotic cable (Flexible cable)

*1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
*2 Standard cable entry direction is "(B) Counter axis side." For the right/left side parallel motor types of the ball screw drive, the cable entry direction is "(A) Axis side." (For details, refer to the **Web Catalog**.)

(8) Cable length*1 [m]

Nil	Without cable
2	2
5	5
A	10

*1 The length of the encoder, motor and lock cables are the same.

(9) Driver type

	Compatible drivers	Power supply voltage [V]	Size 25	32	40
Nil	Without driver	—	●	●	●
A1	LECSA1-S□	100 to 120	●	●	—
A2	LECSA2-S□	200 to 230	●	●	●
B2	LECSB2-T□	200 to 240	●	●	●
C2	LECSC2-T□	200 to 230	●	●	●
S2	LECSS2-T□	200 to 240	●	●	●

* When a driver type is selected, a cable is included. Select the cable type and cable length.
Example) S2S2: Standard cable (2 m) + Driver (LECSS2)
S2: Standard cable (2 m)
Nil: Without cable and driver

(10) I/O cable length [m]*1

Nil	Without cable
H	Without cable (Connector only)
1	1.5

*1 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. Refer to the **Web Catalog**. if an I/O cable is required.

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900,
D-M9BW(V)-900

Applicable Stroke Table

●: Standard

Size	Stroke 50	100	150	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200
25	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—
32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—
40	—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

* Please contact SMC for non-standard strokes as they are produced as special orders.

Compatible Drivers

Driver type	Pulse input type/ Positioning type	Pulse input type	CC-Link direct input type	SSCNETⅢ/H type
Series	LECSA	LECSB-T	LECSC-T	LECSS-T
Number of point tables	Up to 7	Up to 255	Up to 255 (2 stations occupied)	—
Pulse input	○	○	—	—
Applicable network	—	—	CC-Link	SSCNETⅢ/H
Control encoder	Incremental 17-bit encoder	Absolute 22-bit encoder	Absolute 18-bit encoder	Absolute 22-bit encoder
Communication function	USB communication	USB communication, RS422 communication		USB communication
Power supply voltage [V]	100 to 120 VAC (50/60 Hz), 200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)	200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)

Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw Rail guide Dust seal band (Back side only)	GR-D-005 (5 g) GR-D-010 (10 g)

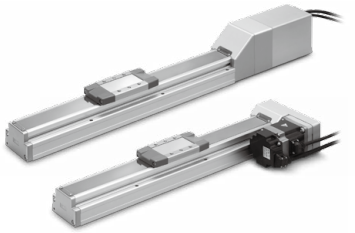
* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

SMC

AC Servo Motor ***LECY□ Series***

High Rigidity and High Precision Slider Type
Ball Screw Drive Secondary Battery Compatible
25A-LEKFS Series 25A-LEKFS25, 32, 40



CE UKCA RoHS

For details, refer to the **Web Catalog**.

LECS□ Series ▶ p. **298-5**

How to Order

25A – LEKFS 32 R V7 B – 200 B – S 3 M2 □

25A: Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

❶ Size

25
32
40

❷ Motor mounting position

Nil	In-line
R	Right side parallel
L	Left side parallel

❸ Motor type

Symbol	Type	Output [W]	❶ Size	❾ Driver type	Compatible drivers
V6∗1	AC servo motor (Absolute encoder)	100	25	M2	LECYM2-V5
				U2	LECYU2-V5
V7		200	32	M2	LECYM2-V7
				U2	LECYU2-V7
V8		400	40	M2	LECYM2-V8
				U2	LECYU2-V8

∗1 For motor type V6, the compatible driver part number suffix is V5.

❹ Lead [mm]

Symbol	25A-LEKFS25	25A-LEKFS32	25A-LEKFS40
H	20	24	30
A	12	16	20
B	6	8	10

❺ Stroke [mm]

50	50
to	to
1200	1200

❻ Motor option

Nil	Without option
B	With lock

❼ Cable type

Nil	Without cable
S	Standard cable
R	Robotic cable (Flexible cable)

❽ Actuator cable length [m]

Nil	Without cable
3	3
5	5
A	10
C	20

❾ Driver type

	Compatible drivers	Power supply voltage [V]
Nil	Without driver	—
M2	LECYM2-V□	200 to 230
U2	LECYU2-V□	200 to 230

∗ When a driver type is selected, a cable is included. Select the cable type and cable length.

❿ I/O cable length [m]∗1

Nil	Without cable
H	Without cable (Connector only)
1	1.5

∗1 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. Refer to the **Web Catalog**. if an I/O cable is required.

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900, D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Applicable Stroke Table

●: Standard

Size	Stroke																
	50	**100**	**150**	**200**	**250**	**300**	**350**	**400**	**450**	**500**	**600**	**700**	**800**	**900**	**1000**	**1100**	**1200**
25	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—
32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—
40	—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

∗ Please contact SMC for non-standard strokes as they are produced as special orders.

Compatible Drivers

Driver type	MECHATROLINK-Ⅱ type 	MECHATROLINK-Ⅲ type 
Series	**LECYM**	**LECYU**
Applicable network	MECHATROLINK-Ⅱ	MECHATROLINK-Ⅲ
Control encoder	Absolute 20-bit encoder	
Communication device	USB communication, RS-422 communication	
Power supply voltage [V]	200 to 230 VAC (50/60 Hz)	

Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw Rail guide Dust seal band (Back side only)	GR-D-005 (5 g) GR-D-010 (10 g)

∗ Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.
∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

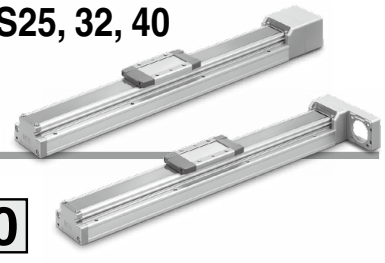
Motorless Type

Electric Actuator/ High Rigidity and High Precision Slider Type Ball Screw Drive

Secondary Battery Compatible

RoHS

25A-LEKFS Series 25A-LEKFS25, 32, 40



How to Order

25A – LEKFS 32 ❶ ❷ NZ ❸ A ❹ – 300 ❺

25A: Series compatible with secondary batteries

❶ Size

25
32
40

❷ Motor mounting position

Nil	In-line
R	Right side parallel
L	Left side parallel

❸ Mounting type

NZ
NY
NX
NW
NV
NU
NT
NM1
NM2
NM3

❹ Lead [mm]

Symbol	25A-LEKFS25	25A-LEKFS32	25A-LEKFS40
H	20	24	30
A	12	16	20
B	6	8	10

❺ Stroke [mm]

50	50
to	to
1200	1200

∗ Refer to the applicable stroke table.

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw Rail guide Dust seal band (Back side only)	GR-D-005 (5 g) GR-D-010 (10 g)

Applicable Stroke Table

●: Standard

Size	Stroke																
	50	100	150	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200
25	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—
32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—
40	—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Compatible Motors and Mounting Types∗5

Applicable motor model		Size/Mounting type														
Manufacturer	Series	25						32/40								
		NZ	NY	NX	NM1	NM2	NM3	NZ	NY	NX	NW	NV	NU	NT	NM1	NM2
Mitsubishi Electric Corporation	MELSERVO JN/J4/J5	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
YASKAWA Electric Corporation	Σ-V/7/X	●∗4	—	—	—	—	—	●	—	—	—	—	—	—	—	—
SANYO DENKI CO., LTD.	SANMOTION R	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
OMRON Corporation	OMNUC G5/1S	●	—	—	—	—	—	—	●	—	—	—	—	—	—	—
Panasonic Corporation	MINAS A5/A6	● (MHMF only)	●	—	—	—	—	—	●	—	—	—	—	—	—	—
FANUC CORPORATION	βis (-B)	●	—	—	—	—	—	● (β1 only)	—	—	●	—	—	—	—	—
NIDEC INSTRUMENTS CORPORATION	S-FLAG	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
KEYENCE CORPORATION	SV/SV2	●∗4	—	—	—	—	—	●	—	—	—	—	—	—	—	—
FUJI ELECTRIC CO., LTD.	ALPHA7	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
MinebeaMitsumi Inc.	Hybrid stepping motors	—	—	—	●∗1	—	●∗3	—	—	—	—	—	—	—	●∗2	—
Shinano Kenshi Co., Ltd.	CSB-BZ	—	—	—	●∗1	—	●∗3	—	—	—	—	—	—	—	—	—
ORIENTAL MOTOR Co., Ltd.	α STEP AR/AZ	—	—	—	—	● (46 only)	—	—	—	—	—	—	—	—	—	●∗2
FASTECH Co., Ltd.	Ezi-SERVO	—	—	—	●	—	—	—	—	—	—	—	—	—	●∗2	—
Rockwell Automation, Inc. (Allen-Bradley)	Kinetix MP/VP/TL	● (TL only)	—	—	—	—	—	—	—	●∗1 (MP/VP only)	—	—	—	● (TL only)	—	—
Beckhoff Automation GmbH	AM 30/31/80/81	●	—	—	—	—	—	—	—	●∗1 (80/81 only)	—	●∗1 (30 only)	●∗2 (31 only)	—	—	—
Siemens AG	SIMOTICS S-1FK7	—	—	●	—	—	—	—	—	●∗1	—	—	—	—	—	—
Delta Electronics, Inc.	ASDA-A2	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
ANCA Motion	AMD2000	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—

∗1 Motor mounting position: In-line only ∗2 Only size 32 is available when the motor mounting position is right (or left) side parallel. ∗3 Motor mounting position: Right (or left) side parallel only
∗4 For some motors, the connector may protrude from the motor body. Be sure to check for interference with the mounting surface before selecting a motor.
∗5 The compatible motors and mounting types are typical examples. Select the mounting type after referring to the "Motor Mounting, Applicable Motor Dimensions" tables on the "Dimensions" pages.

∗ The auto switch magnet contains copper and/or zinc.
∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Battery-less Absolute (Step Motor 24 VDC)

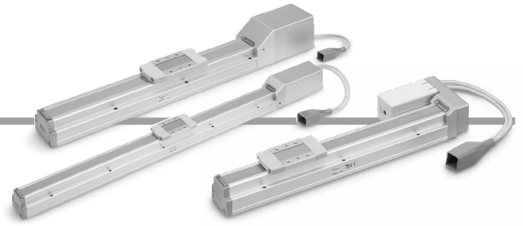
Slider Type Ball Screw Drive

Secondary Battery Compatible

25A-LEFS Series 25A-LEFS16, 25, 32, 40

CE UKCA RoHS

* For details, refer to the Web Catalog.



How to Order

25A-LEFS H 25 R E B - 200 [ ] K - R1 CD17T

- 25A: Series compatible with secondary batteries
- ❶ H
- ❷ 25
- ❸ R
- ❹ E
- ❺ B
- ❻ 200
- ❼ [ ]
- ❽ K
- ❾ R1
- ❿ CD17T

For details on controllers, refer to the next page.

❶ Accuracy

Nil	Basic type
H	High-precision type

❷ Size

16
25
32
40

❸ Motor mounting position

Nil	In-line
R	Right side parallel
L	Left side parallel

❹ Motor type

E	Battery-less absolute (Step motor 24 VDC)

❺ Lead [mm]

Symbol	25A-LEFS16	25A-LEFS25	25A-LEFS32	25A-LEFS40
H	—	20	24	30
A	10	12	16	20
B	5	6	8	10

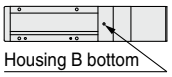
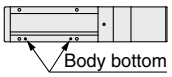
❻ Stroke*1 [mm]

Stroke	Note	
	Size	Applicable stroke
50 to 500	**16**	50, 100, 150, 200, 250, 300, 350, 400, 450, 500
50 to 800	**25**	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800
50 to 1000	**32**	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000
150 to 1200	**40**	150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200

❼ Motor option

Nil	Without option
B	With lock

❽ Positioning pin hole

Nil	Housing B bottom*2	 Housing B bottom
K	Body bottom 2 locations	 Body bottom

❾ Actuator cable type/length

Robotic cable [m]

Nil	None	**R8**	8*3
R1	1.5	**RA**	10*3
R3	3	**RB**	15*3
R5	5	**RC**	20*3

Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw	GR-D-005 (5 g)
Rail guide	GR-D-010 (10 g)

* Copper and zinc materials are used for the motors, cables, controllers/drivers.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

⑩ Controller

Nil	Without controller
C□1□□	With controller

C D 1 7 T

Interface (Communication protocol/Input/Output)

Symbol	Type	Number of axes, Special specification: Standard	Number of axes, Special specification: With STO sub-function
5	Parallel input (NPN)	●	
6	Parallel input (PNP)	●	
E	EtherCAT	●	●
9	EtherNet/IP™	●	●
P	PROFINET	●	●
D	DeviceNet®	●	
L	IO-Link	●	●
M	CC-Link	●	

Mounting

7	Screw mounting
8∗4	DIN rail

Number of axes, Special specification

Symbol	Number of axes	Specification
1	Single axis	Standard
F	Single axis	With STO sub-function

Communication plug connector, I/O cable∗5

Symbol	Type	Applicable interface
Nil	Without accessory	—
S	Straight type communication plug connector	DeviceNet® CC-Link Ver. 1.10
T	T-branch type communication plug connector	
1	I/O cable (1.5 m)	Parallel input (NPN) Parallel input (PNP)
3	I/O cable (3 m)	
5	I/O cable (5 m)	

∗1 Please contact SMC for non-standard strokes as they are produced as special orders.
∗2 Refer to the body mounting example on the **Web Catalog** for the mounting method.
∗3 Produced upon receipt of order
∗4 The DIN rail is not included. It must be ordered separately.
∗5 Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel input.
Select "Nil," "S," or "T" for DeviceNet® or CC-Link.
Select "Nil," "1," "3," or "5" for parallel input.

⚠Caution

[CE/UKCA-compliant products]
EMC compliance was tested by combining the electric actuator LEF series and the controller JXC series.
The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

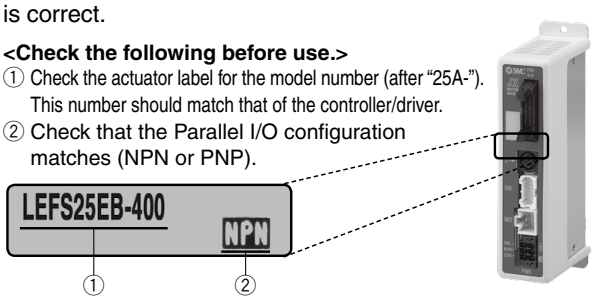
[Precautions relating to differences in controller versions]
When the JXC series is to be used in combination with the battery-less absolute encoder, use a controller that is version V3.4 or S3.4 or higher. For details, refer to the **Web Catalog**.

[UL certification]
The JXC series controllers used in combination with electric actuators are UL certified.

The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

<Check the following before use.>
① Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.
② Check that the Parallel I/O configuration matches (NPN or PNP).



∗ Refer to the Operation Manual for using the products.
Please download it via our website: https://www.smcworld.com

Type	Step data input type	EtherCAT direct input type	EtherCAT direct input type with STO sub-function	EtherNet/IP™ direct input type	EtherNet/IP™ direct input type with STO sub-function	PROFINET direct input type	PROFINET direct input type with STO sub-function	DeviceNet® direct input type	IO-Link direct input type	IO-Link direct input type with STO sub-function	CC-Link direct input type
											
Series	**JXC51 JXC61**	**JXCE1**	**JXCEF**	**JXC91**	**JXC9F**	**JXCP1**	**JXCPF**	**JXCD1**	**JXCL1**	**JXCLF**	**JXCM1**
Features	Parallel I/O	EtherCAT direct input	EtherCAT direct input with STO sub-function	EtherNet/IP™ direct input	EtherNet/IP™ direct input with STO sub-function	PROFINET direct input	PROFINET direct input with STO sub-function	DeviceNet® direct input	IO-Link direct input	IO-Link direct input with STO sub-function	CC-Link direct input
Compatible motor	Battery-less absolute (Step motor 24 VDC)										
Max. number of step data	64 points										
Power supply voltage	24 VDC										

Incremental (Step Motor 24 VDC) Incremental (Servo Motor 24 VDC)

Slider Type

Ball Screw Drive Secondary Battery Compatible

Refer to the "CE/UKCA/UL-compliance List" in the **Web Catalog**.

25A-LEFS Series 25A-LEFS16, 25, 32, 40

RoHS

Refer to the Web Catalog for model selection.



How to Order

25A – LEFS H 25 R □ B – 200 □ K – S1

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾

JXC□ Series

CD17T

LEC□ Series

AN 1 □

❿ ⓫ ⓬

For details on controllers, refer to page 300.

❶ Accuracy

Nil	Basic type
H	High-precision type

❷ Size

16
25
32
40

❸ Motor mounting position

Nil	In-line
R	Right side parallel
L	Left side parallel

❹ Motor type

Symbol	Type	Applicable size				Compatible controllers/drivers
		25A-LEFS16	25A-LEFS25	25A-LEFS32	25A-LEFS40	
Nil	Step motor (Servo/24 VDC)	●	●	●	●	JXC51 JXCEF JXC61 JXC9F JXCE1 JXCPF JXC91 JXCLF JXCP1 JXCD1 LECP1 JXCL1 LECPA JXCM1
A	Servo motor (24 VDC)	●	●	—	—	LECA6

❺ Lead [mm]

Symbol	25A-LEFS16	25A-LEFS25	25A-LEFS32	25A-LEFS40
H	—	20	24	30
A	10	12	16	20
B	5	6	8	10

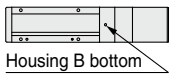
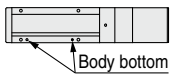
❻ Stroke*1 [mm]

Stroke	Note	
	Size	Applicable stroke
50 to 500	**16**	50, 100, 150, 200, 250, 300, 350, 400, 450, 500
50 to 800	**25**	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800
50 to 1000	**32**	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000
150 to 1200	**40**	150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200

❼ Motor option

Nil	Without option
B	With lock

❽ Positioning pin hole

Nil	Housing B bottom*2	
K	Body bottom 2 locations	

❾ Actuator cable type/length*4

Standard cable [m]

Nil	None
S1	1.5*6
S3	3*6
S5	5*6

Robotic cable [m]

R1	1.5	**RA**	10*3
R3	3	**RB**	15*3
R5	5	**RC**	20*3
R8	8*3		

Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw	GR-D-005 (5 g)
Rail guide	GR-D-010 (10 g)

* Copper and zinc materials are used for the motors, cables, controllers/drivers.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

JXC□ Series (For details, refer to page 301.)



⑩ Controller

Nil	Without controller
C□1□□	With controller

C D 1 7 T

Interface (Communication protocol/Input/Output)

Symbol	Type	Number of axes, Special specification: Standard	Number of axes, Special specification: With STO sub-function
5	Parallel input (NPN)	●	
6	Parallel input (PNP)	●	
E	EtherCAT	●	●
9	EtherNet/IP™	●	●
P	PROFINET	●	●
D	DeviceNet®	●	
L	IO-Link	●	●
M	CC-Link	●	

Mounting

7	Screw mounting
8∗10	DIN rail

Number of axes, Special specification

Symbol	Number of axes	Specification
1	Single axis	Standard
F	Single axis	With STO sub-function

Communication plug connector, I/O cable∗11

Symbol	Type	Applicable interface
Nil	Without accessory	—
S	Straight type communication plug connector	DeviceNet® CC-Link Ver. 1.10
T	T-branch type communication plug connector	
1	I/O cable (1.5 m)	Parallel input (NPN) Parallel input (PNP)
3	I/O cable (3 m)	
5	I/O cable (5 m)	

LEC□ Series (For details, refer to page 301.)



AN 1 □

⑩ ⑪ ⑫

⑩ Controller/Driver type∗5

Nil	Without controller/driver	
6N	**LECA6** (Step data input type)	NPN
6P		PNP
1N	**LECP1**∗6 (Programless type)	NPN
1P		PNP
AN	**LECPA**∗6 ∗7 (Pulse input type)	NPN
AP		PNP

⑪ I/O cable length∗8

Nil	Without cable (Without communication plug connector)
1	1.5 m
3	3 m∗9
5	5 m∗9

⑫ Controller/Driver mounting

Nil	Screw mounting
D	DIN rail∗10

∗1 Please contact SMC for non-standard strokes as they are produced as special orders.
∗2 Refer to the body mounting example in the **Web Catalog** for the mounting method.
∗3 Produced upon receipt of order (Robotic cable only)
∗4 The standard cable should only be used on fixed parts.
For use on moving parts, select the robotic cable.
Refer to the **Web Catalog** if only the actuator cable is required.
∗5 For details on controllers/drivers and compatible motors, refer to the compatible controllers/drivers on the next page.
∗6 Only available for the motor type "Step motor"
∗7 When pulse signals are open collector, order the current limiting resistor (LEC-PA-R-□) separately. (Refer to the **Web Catalog**.)
∗8 When "Without controller/driver" is selected for controller/driver types, I/O cable cannot be selected. If an I/O cable is required, order the cable separately for each series. (For details, refer to the **Web Catalog**.)
∗9 When "Pulse input type" is selected for controller/driver types, pulse input usable only with differential. Only 1.5 m cables usable with open collector
∗10 The DIN rail is not included. It must be ordered separately.
∗11 Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel input.
Select "Nil," "S," or "T" for DeviceNet® or CC-Link.
Select "Nil," "1," "3," or "5" for parallel input.

⚠Caution

[CE/UKCA-compliant products]

① EMC compliance was tested by combining the electric actuator LEF series and the controller LEC/JXC series.
The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.
② For the incremental (servo motor 24 VDC) specification, EMC compliance was tested by installing a noise filter set (LEC-NFA). Refer to the **Web Catalog** for the noise filter set. Refer to the LECA series Operation Manual for installation.

[UL-compliant products (For the LEC series)]

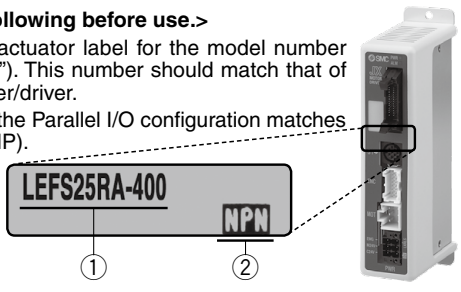
When compliance with UL is required, the electric actuator and controller/driver should be used with a UL1310 Class 2 power supply.

The actuator and controller/driver are sold as a package.

Confirm that the combination of the controller/driver and actuator is correct.

<Check the following before use.>

① Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.
② Check that the Parallel I/O configuration matches (NPN or PNP).



∗ Refer to the Operation Manual for using the products. Please download it via our website: https://www.smcworld.com

Compatible Controllers/Drivers

Type	Step data input type	Step data input type	Programless type	Pulse input type
				
Series	**JXC51 JXC61**	**LECA6**	**LECP1**	**LECPA**
Features	Parallel I/O	Parallel I/O	Capable of setting up operation (step data) without using a PC or teaching box	Operation by pulse signals
Compatible motor	Step motor (Servo/24 VDC)	Servo motor (24 VDC)	Step motor (Servo/24 VDC)	
Max. number of step data	64 points		14 points	—
Power supply voltage	24 VDC			

Type	EtherCAT direct input type	EtherCAT direct input type with STO sub-function	EtherNet/IP™ direct input type	EtherNet/IP™ direct input type with STO sub-function	PROFINET direct input type	PROFINET direct input type with STO sub-function	DeviceNet® direct input type	IO-Link direct input type	IO-Link direct input type with STO sub-function	CC-Link direct input type
										
Series	**JXCE1**	**JXCEF**	**JXC91**	**JXC9F**	**JXCP1**	**JXCPF**	**JXCD1**	**JXCL1**	**JXCLF**	**JXCM1**
Features	EtherCAT direct input	EtherCAT direct input with STO sub-function	EtherNet/IP™ direct input	EtherNet/IP™ direct input with STO sub-function	PROFINET direct input	PROFINET direct input with STO sub-function	DeviceNet® direct input	IO-Link direct input	IO-Link direct input with STO sub-function	CC-Link direct input
Compatible motor	Step motor (Servo/24 VDC)									
Max. number of step data	64 points									
Power supply voltage	24 VDC									

Battery-less Absolute (Step Motor 24 VDC)

High Performance Slider Type Ball Screw Drive

Secondary Battery Compatible

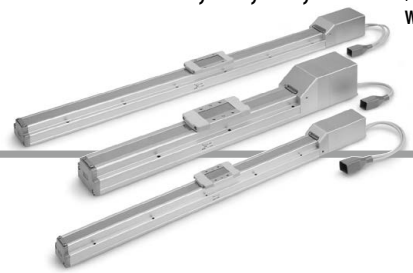
25A-LEFS□G Series

25A-LEFS16, 25, 32, 40

CE UK CA

* For details, refer to the Web Catalog.

RoHS



How to Order

25A – LEFS H 25 □ G B – 200 □ K – R1 C5H73

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

Series compatible with secondary batteries

For details on controllers, refer to the next page.

❶ Accuracy

Nil	Basic type
H	High-precision type

❷ Size

16
25
32
40

❸ Motor mounting position

Nil	In-line
R	Right side parallel
L	Left side parallel

❹ Motor type

Symbol	Type	Applicable size				Compatible controllers
		25A-LEFS16	25A-LEFS25	25A-LEFS32	25A-LEFS40	
G	High performance (Battery-less absolute)	●	●	●	●	JXC5H JXC6H JXCEH JXC9H JXCPH

❺ Lead [mm]

Symbol	25A-LEFS16	25A-LEFS25	25A-LEFS32	25A-LEFS40
H	—	20	24	30
A	10	12	16	20
B	5	6	8	10

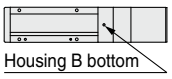
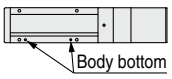
❻ Stroke*1 [mm]

Stroke	Note	
	Size	Applicable stroke
50 to 500	**16**	50, 100, 150, 200, 250, 300, 350, 400, 450, 500
50 to 800	**25**	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800
50 to 1000	**32**	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000
150 to 1200	**40**	150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200

❼ Motor option

Nil	Without option
B	With lock

❽ Positioning pin hole

Nil	Housing B bottom*2	 Housing B bottom
K	Body bottom 2 locations	 Body bottom

❾ Actuator cable type/length

Robotic cable [m]

Nil	None	**R8**	8*3
R1	1.5	**RA**	10*3
R3	3	**RB**	15*3
R5	5	**RC**	20*3

Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw	GR-D-005 (5 g)
Rail guide	GR-D-010 (10 g)

* Copper and zinc materials are used for the motors, cables, controllers/drivers.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

⑩ Controller

Nil	Without controller
C□H□□	With controller

C 5 H 7 3

Controller type

5	Parallel I/O (NPN) type
6	Parallel I/O (PNP) type
E	EtherCAT
9	EtherNet/IP™
P	PROFINET

Mounting

7	Screw mounting
8∗4	DIN rail

Number of axes/Special specification

H	1 axis/High performance type

I/O cable length

Nil	Without cable
1	1.5 m
3	3 m
5	5 m

∗1 Please contact SMC for non-standard strokes as they are produced as special orders.
∗2 For details on the mounting method, refer to page 280.
∗3 Produced upon receipt of order
∗4 The DIN rail is not included. It must be ordered separately.

⚠Caution

[CE/UKCA-compliant products]
EMC compliance was tested by combining the electric actuator LEF series and the controller JXC series.
The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

■Trademark

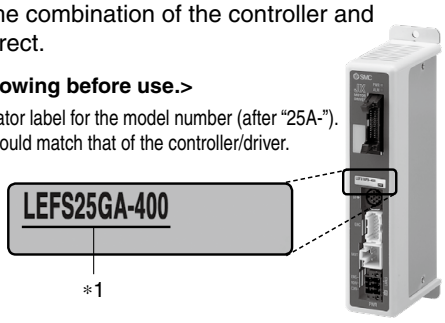
EtherNet/IP® is a registered trademark of ODVA, Inc.
EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

<Check the following before use.>

∗1 Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.



∗ Refer to the Operation Manual for using the products.
Please download it via our website: https://www.smcworld.com

Type	Step data input type	EtherCAT direct input type	EtherNet/IP™ direct input type	PROFINET direct input type
				
Series	**JXC5H JXC6H**	**JXCEH**	**JXC9H**	**JXCPH**
Features	Parallel I/O	EtherCAT direct input	EtherNet/IP™ direct input	PROFINET direct input
Compatible motor	Step motor 24 VDC			
Max. number of step data	64 points			
Power supply voltage	24 VDC			

Incremental (Step Motor 24 VDC)

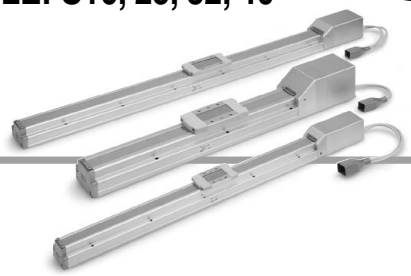
High Performance Slider Type

Ball Screw Drive Secondary Battery Compatible

25A-LEFS□F Series 25A-LEFS16, 25, 32, 40

For details, refer to the **Web Catalog**.

RoHS



How to Order

25A – LEFS H 25 □ F B – 200 □ K – S1 C5H73

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

Series compatible with secondary batteries

For details on controllers, refer to the next page.

❶ Accuracy

Nil	Basic type
H	High-precision type

❷ Size

16
25
32
40

❸ Motor mounting position

Nil	In-line

❹ Motor type

Symbol	Type	Applicable size				Compatible controllers
		25A-LEFS16	25A-LEFS25	25A-LEFS32	25A-LEFS40	
F	High performance (Step motor 24 VDC)	●	●	●	●	JXC5H JXC6H JXCEH JXC9H JXCPH

❺ Lead [mm]

Symbol	25A-LEFS16	25A-LEFS25	25A-LEFS32	25A-LEFS40
H	—	20	24	30
A	10	12	16	20
B	5	6	8	10

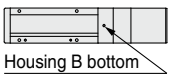
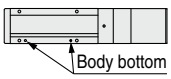
❻ Stroke*1 [mm]

Stroke	Note	
	Size	Applicable stroke
50 to 500	**16**	50, 100, 150, 200, 250, 300, 350, 400, 450, 500
50 to 800	**25**	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800
50 to 1000	**32**	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000
150 to 1200	**40**	150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200

❼ Motor option

Nil	Without option
B	With lock

❽ Positioning pin hole

Nil	Housing B bottom*2	 Housing B bottom
K	Body bottom 2 locations	 Body bottom

❾ Actuator cable type/length*4

Standard cable [m]		Robotic cable [m]			
Nil	None	**R1**	1.5	**RA**	10*3
S1	1.5	**R3**	3	**RB**	15*3
S3	3	**R5**	5	**RC**	20*3
S5	5	**R8**	8*3		

Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw Rail guide	GR-D-005 (5 g) GR-D-010 (10 g)

* Copper and zinc materials are used for the motors, cables, controllers/drivers.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

⑩ Controller

Nil	Without controller
C□H□□	With controller

C 5 H 7 3

Interface (Communication protocol/Input/Output)

5	Parallel I/O (NPN)
6	Parallel I/O (PNP)
E	EtherCAT
9	EtherNet/IP™
P	PROFINET

Mounting

7	Screw mounting
8∗5	DIN rail

Number of axes/Special specification

H	1 axis/High performance type

Communication plug connector, I/O cable∗6

Symbol	Type	Applicable interface
Nil	Without accessory	—
1	I/O cable (1.5 m)	Parallel input (NPN) Parallel input (PNP)
3	I/O cable (3 m)	
5	I/O cable (5 m)	

∗1 Please contact SMC for non-standard strokes as they are produced as special orders.
∗2 For details on the mounting method, refer to page 280.
∗3 Produced upon receipt of order (Robotic cable only)
∗4 The standard cable should only be used on fixed parts. For use on moving parts, select the robotic cable.
∗5 The DIN rail is not included. It must be ordered separately.
∗6 Select "Nil" for anything other than parallel input. Select "Nil," "1," "3," or "5" for parallel input.

⚠Caution

[CE/UKCA-compliant products]

EMC compliance was tested by combining the electric actuator LEF series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

■Trademark

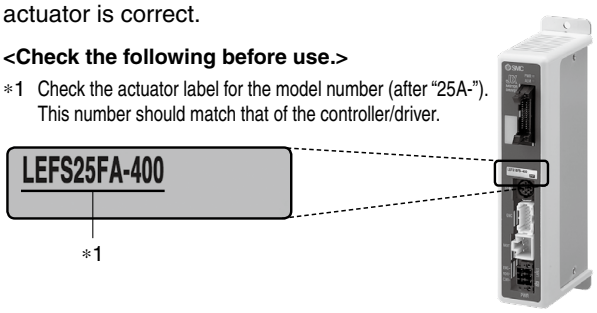
EtherNet/IP® is a registered trademark of ODVA, Inc.
EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

<Check the following before use.>

∗1 Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.



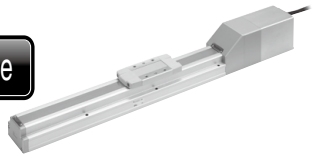
∗ Refer to the Operation Manual for using the products. Please download it via our website: https://www.smcworld.com

Compatible Controllers

Type	Step data input type	EtherCAT direct input type	EtherNet/IP™ direct input type	PROFINET direct input type
				
Series	**JXC5H JXC6H**	**JXCEH**	**JXC9H**	**JXCPH**
Features	Parallel I/O	EtherCAT direct input	EtherNet/IP™ direct input	PROFINET direct input
Compatible motor	Step motor 24 VDC	Step motor (Servo/24 VDC)		
Max. number of step data	64 points	64 points		
Power supply voltage	24 VDC	24 VDC		

Slider Type
Ball Screw Drive

Secondary Battery Compatible



25A-LEFS Series 25A-LEFS25, 32, 40

Refer to the **Web Catalog** for model selection.

LECY□ Series ▶ p. 304

Refer to the "CE/UKCA/UL-compliance List" in the **Web Catalog**.

RoHS

How to Order

25A-LEFS **H** **32** **R** **S3** **B** – **200** **□** **K** – **S** **2** **A2** **□**

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫ ⓬

Series compatible with secondary batteries

❶ Accuracy

Nil	Basic type
H	High-precision type

❷ Size

25
32
40

❸ Motor mounting position

Nil	In-line
R	Right side parallel
L	Left side parallel

❺ Lead [mm]

Symbol	25A-LEFS25	25A-LEFS32	25A-LEFS40
H	20	24	30
A	12	16	20
B	6	8	10

❻ Stroke [mm]

50	50
to	to
1200	1200

∗ For details, refer to the applicable stroke table below.

❼ Motor option

Nil	Without option
B	With lock

❹ Motor type

Symbol	Type	Output [W]	❷ Size	⓫ Driver type	Compatible drivers
S2∗1	AC servo motor (Incremental encoder)	100	25	A1/A2	LECSA□-S1
S3		200	32	A1/A2	LECSA□-S3
S4		400	40	A2	LECSA2-S4
T6∗2	AC servo motor (Absolute encoder)	100	25	B2	LECSB2-T5
				C2	LECSC2-T5
				S2	LECSS2-T5
T7		200	32	B2	LECSB2-T7
				C2	LECSC2-T7
				S2	LECSS2-T7
T8		400	40	B2	LECSB2-T8
				C2	LECSC2-T8
				S2	LECSS2-T8

∗1 For motor type S2, the compatible driver part number suffix is S1.
∗2 For motor type T6, the compatible driver part number is LECS□2-T5.

❽ Positioning pin hole

Nil	Housing B bottom∗1	Housing B bottom
K	Body bottom 2 locations	Body bottom

∗1 Refer to the body mounting example for the mounting method. (Refer to the **Web Catalog**.)

❿ Cable length∗1 [m]

Nil	Without cable
2	2
5	5
A	10

∗1 The length of the encoder, motor, and lock cables are the same.

❾ Cable type∗1 ∗2

Nil	Without cable
S	Standard cable
R	Robotic cable

∗1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
∗2 Standard cable entry direction is
· Parallel: (A) Axis side
· In-line: (B) Counter axis side

⓫ Driver type

	Compatible drivers	Power supply voltage [V]	Size 25	32	40
Nil	Without driver	—	●	●	●
A1	LECSA1-S□	100 to 120	●	●	—
A2	LECSA2-S□	200 to 230	●	●	●
B2	LECSB2-T□	200 to 240	●	●	●
C2	LECSC2-T□	200 to 230	●	●	●
S2	LECSS2-T□	200 to 240	●	●	●

∗ When a driver type is selected, a cable is included. Select the cable type and cable length.
Example) S2S2: Standard cable (2 m) + Driver (LECSS2)
S2: Standard cable (2 m)
Nil: Without cable and driver

⓬ I/O cable length [m]∗3

Nil	Without cable
H	Without cable (Connector only)
1	1.5

∗3 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected.
If an I/O cable is required, refer to the "Options" page in the **Web Catalog**.

Applicable Stroke Table

●: Standard

Model \ Stroke [mm]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1100	1200
25A-LEFS25	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—
25A-LEFS32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—
25A-LEFS40	—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

∗ Please contact SMC for non-standard strokes as they are produced as special orders.

Compatible Drivers∗1

∗ The 25A- series specifications and dimensions are the same as those of the standard model. **For details, refer to the Web Catalog.**

Driver type	Pulse input type/ Positioning type	Pulse input type	CC-Link direct input type	SSCNETⅢ/H type
				
Series	**LECSA**	**LECSB-T**	**LECSC-T**	**LECSS-T**
Number of point tables	Up to 7	Up to 255	Up to 255 (2 stations occupied)	—
Pulse input	○	○	—	—
Applicable network	—	—	CC-Link	SSCNETⅢ/H
Control encoder	Incremental 17-bit encoder	Absolute 22-bit encoder	Absolute 18-bit encoder	Absolute 22-bit encoder
Communication function	USB communication	USB communication, RS422 communication	USB communication, RS422 communication	USB communication
Power supply voltage [V]	100 to 120 VAC (50/60 Hz) 200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)	200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)

∗1 Copper and zinc materials are used for the motors, cables, controllers/drivers.

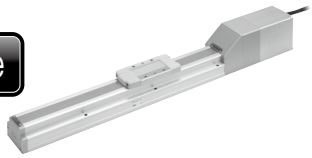
Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw	GR-D-005 (5 g)
Rail guide	GR-D-010 (10 g)

SMC

Slider Type
Ball Screw Drive

Secondary Battery Compatible



25A-LEFS Series 25A-LEFS25, 32, 40

Refer to the **Web Catalog** for model selection.

LECS□ Series ▶ p. 303

CE UKCA RoHS

Refer to the "CE/UKCA/UL-compliance List" in the **Web Catalog**.

How to Order

25A-LEFS **H** **32** **R** **V7** **B** – **200** □ **K** – **S** **2** **M2** □

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫ ⓬

❶ Accuracy

Nil	Basic type
H	High-precision type

❷ Size

25
32
40

❸ Motor mounting position

Nil	In-line
R	Right side parallel
L	Left side parallel

❺ Lead [mm]

Symbol	25A-LEFS25	25A-LEFS32	25A-LEFS40
H	20	24	30
A	12	16	20
B	6	8	10

❻ Stroke [mm]

50	50
to	to
1200	1200

∗ For details, refer to the applicable stroke table below.

❼ Motor option

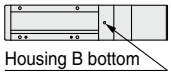
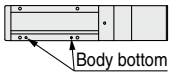
Nil	Without option
B	With lock

❹ Motor type

Symbol	Type	Output [W]	❷ Size	⓫ Driver type	Compatible drivers
V6∗1	AC servo motor (Absolute encoder)	100	25	M2	LECYM2-V5
				U2	LECYU2-V5
V7		200	32	M2	LECYM2-V7
				U2	LECYU2-V7
V8		400	40	M2	LECYM2-V8
				U2	LECYU2-V8

∗1 For motor type V6, the compatible driver part number suffix is V5.

❽ Positioning pin hole

Nil	Housing B bottom∗1	 Housing B bottom
K	Body bottom 2 locations	 Body bottom

∗1 Refer to the body mounting example in the **Web Catalog** for the mounting method.

❾ Cable type∗1 ∗2

Nil	Without cable
S	Standard cable
R	Robotic cable

∗1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)

∗2 Standard cable entry direction is "(A) Axis side".

❿ Cable length∗1 [m]

Nil	Without cable
3	3
5	5
A	10
C	20

∗1 The length of the encoder, motor, and lock cables are the same.

⓫ Driver type

	Compatible drivers	Power supply voltage [V]
Nil	Without driver	—
M2	LECYM2-V□	200 to 230
U2	LECYU2-V□	200 to 230

⓬ I/O cable length [m]∗3

Nil	Without cable
H	Without cable (Connector only)
1	1.5

∗3 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected.
Refer to the **Web Catalog** if an I/O cable is required.

Applicable Stroke Table

●: Standard

Model \ Stroke [mm]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1100	1200
25A-LEFS25	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—
25A-LEFS32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—
25A-LEFS40	—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

∗ Please contact SMC for non-standard strokes as they are produced as special orders.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Compatible Drivers

Driver type	MECHATROLINK-Ⅱ type 	MECHATROLINK-Ⅲ type 
Series	**LECYM**	**LECYU**
Applicable network	MECHATROLINK-Ⅱ	MECHATROLINK-Ⅲ
Control encoder	Absolute 20-bit encoder	
Communication device	USB communication, RS-422 communication	
Power supply voltage [V]	200 to 230 VAC (50/60 Hz)	

∗ Copper and zinc materials are used for the motors, cables, controllers/drivers.

Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw	GR-D-005 (5 g)
Rail guide	GR-D-010 (10 g)

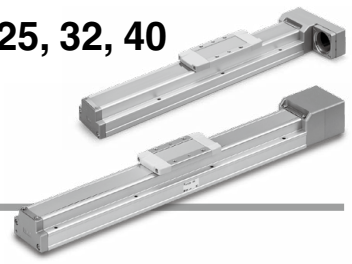
Motorless Type

Electric Actuator/Slider Type
Ball Screw Drive

Secondary Battery Compatible

RoHS

25A-LEFS Series 25A-LEFS25, 32, 40



How to Order

25A-LEFS **H** **25** **R** **NZ** **A** **-** **100** **K**

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼

❶ Accuracy

Nil	Basic type
H	High-precision type

❷ Size

25
32
40

❸ Motor mounting position

Nil	In-line
R	Right side parallel
L	Left side parallel

❹ Mounting type

NZ	**NV**	**NM2**
NY	**NU**	**NM3**
NX	**NT**	
NW	**NM1**	

❺ Lead [mm]

Symbol	25A-LEFS25	25A-LEFS32	25A-LEFS40
H	20	24	30
A	12	16	20
B	6	8	10

❻ Stroke [mm]

50	50
to	to
1200	1200

∗ Refer to the applicable stroke table.

❼ Positioning pin hole

Nil	Housing B bottom∗1	Housing B bottom
K	Body bottom 2 locations	Body bottom

∗1 Refer to the body mounting example on the **Web Catalog** for the mounting method.

Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw Rail guide	GR-D-005 (5 g) GR-D-010 (10 g)

Applicable Stroke Table

●: Standard

Model \ Stroke [mm]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1100	1200
25A-LEFS25	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—
25A-LEFS32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—
25A-LEFS40	—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

∗ Please contact SMC for non-standard strokes as they are produced as special orders.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

Compatible Motors and Mounting Types∗5

For details, refer to the Web Catalog.

Applicable motor model		Size/Mounting type														
Manufacturer	Series	25						32/40								
		NZ	NY	NX	NM1	NM2	NM3	NZ	NY	NX	NW	NV	NU	NT	NM1	NM2
Mitsubishi Electric Corporation	MELSERVO JN/J4/J5	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
YASKAWA Electric Corporation	Σ-V/7/X	●∗4	—	—	—	—	—	●	—	—	—	—	—	—	—	—
SANYO DENKI CO., LTD.	SANMOTION R	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
OMRON Corporation	OMNUC G5/1S	●	—	—	—	—	—	—	●	—	—	—	—	—	—	—
Panasonic Corporation	MINAS A5/A6	● (MHMF only)	●	—	—	—	—	—	●	—	—	—	—	—	—	—
FANUC CORPORATION	βis (-B)	●	—	—	—	—	—	● (β1 only)	—	—	●	—	—	—	—	—
NIDEC INSTRUMENTS CORPORATION	S-FLAG	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
KEYENCE CORPORATION	SV/SV2	●∗4	—	—	—	—	—	●	—	—	—	—	—	—	—	—
FUJI ELECTRIC CO., LTD.	ALPHA7	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
MinebeaMitsumi Inc.	Hybrid stepping motors	—	—	—	●∗1	—	●∗3	—	—	—	—	—	—	—	●∗2	—
Shinano Kenshi Co., Ltd.	CSB-BZ	—	—	—	●∗1	—	●∗3	—	—	—	—	—	—	—	—	—
ORIENTAL MOTOR Co., Ltd.	α STEP AR/AZ	—	—	—	—	● (46 only)	—	—	—	—	—	—	—	—	—	●∗2
FASTECH Co., Ltd.	Ezi-SERVO	—	—	—	●	—	—	—	—	—	—	—	—	—	●∗2	—
Rockwell Automation, Inc. (Allen-Bradley)	Kinetix MP/VP/TL	● (TL only)	—	—	—	—	—	—	—	●∗1 (MP/VP only)	—	—	—	● (TL only)	—	—
Beckhoff Automation GmbH	AM 30/31/80/81	●	—	—	—	—	—	—	—	●∗1 (80/81 only)	—	●∗1 (30 only)	●∗2 (31 only)	—	—	—
Siemens AG	SIMOTICS S-1FK7	—	—	●	—	—	—	—	—	●∗1	—	—	—	—	—	—
Delta Electronics, Inc.	ASDA-A2	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
ANCA Motion	AMD2000	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—

∗1 Motor mounting position: In-line only ∗2 Only size 32 is available when the motor mounting position is right (or left) side parallel. ∗3 Motor mounting position: Right (or left) side parallel only
∗4 For some motors, the connector may protrude from the motor body. Be sure to check for interference with the mounting surface before selecting a motor.
∗5 The compatible motors and mounting types are typical examples. Select the mounting type after referring to the "Motor Mounting, Applicable Motor Dimensions" tables on the "Dimensions" pages.

AC Servo Motor *LECS□ Series*

High Rigidity Slider Type
Ball Screw Drive

Secondary Battery Compatible



25A-LEJS Series LEJS40, 63

Refer to the **Web Catalog** for model selection.

LECY□ Series ▶ p. 306

Refer to the "CE/UKCA/UL-compliance List" in the **Web Catalog**.

RoHS

How to Order

25A-LEJS **H** **40** **S2** **A** – **500** □ – □ □ □ □

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

❶ Accuracy

Nil	Basic type
H	High-precision type

❷ Size

40
63

❸ Motor type

Symbol	Type	Output [W]	❷ Size	❾ Driver type	Compatible drivers
S2∗1	AC servo motor (Incremental encoder)	100	40	A1/A2	LECSA□-S1
S3		200	63	A1/A2	LECSA□-S3
T6∗2	AC servo motor (Absolute encoder)	100	40	B2	LECSB2-T5
				C2	LECSC2-T5
				S2	LECSS2-T5
T7		200	63	B2	LECSB2-T7
				C2	LECSC2-T7
				S2	LECSS2-T7

∗1 For motor type S2, the compatible driver part number suffix is S1.
∗2 For motor type T6, the compatible driver part number is LECS□2-T5.

❹ Lead [mm]

Symbol	25A-LEJS40	25A-LEJS63
H	24	30
A	16	20
B	8	10

❺ Stroke [mm]∗3

200
to
1500

∗3 Refer to the applicable stroke table for details.

❻ Motor option

Nil	Without option
B	With lock

❼ Cable type∗5, ∗6, ∗7

Nil	Without cable
S	Standard cable
R	Robotic cable

∗6 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
∗7 Standard cable entry direction is "(A) Axis side."

❽ Cable length [m]∗5, ∗8

Nil	Without cable
2	2
5	5
A	10

∗8 The length of the motor, encoder, and lock cables are the same.

❾ Driver type∗5

	Compatible drivers	Power supply voltage [V]
Nil	Without driver	—
A1	LECSA1-S□	100 to 120
A2	LECSA2-S□	200 to 230
B2	LECSB2-T□	200 to 240
C2	LECSC2-T□	200 to 230
S2	LECSS2-T□	200 to 240

∗5 When a driver type is selected, a cable is included. Select the cable type and cable length.
Example)
S2S2: Standard cable (2 m) + Driver (LECSS2)
S2: Standard cable (2 m)
Nil: Without cable and driver

❿ I/O cable length [m]∗9

Nil	Without cable
H	Without cable (Connector only)
1	1.5

∗9 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. Refer to the **Web Catalog** if an I/O cable is required.

Applicable Stroke Table∗4

●: Standard

Model \ Stroke [mm]	200	300	400	500	600	700	800	900	1000	1200	1500
25A-LEJS40	●	●	●	●	●	●	●	●	●	●	—
25A-LEJS63	—	●	●	●	●	●	●	●	●	●	●

∗4 Please contact SMC for non-standard strokes as they are produced as special orders.

∗ The 25A- series specifications and dimensions are the same as those of the standard model.
For details, refer to the Web Catalog.

Compatible Drivers

Driver type	Pulse input type/ Positioning type	Pulse input type	CC-Link direct input type	SSCNETⅢ/H type
				
Series	**LECSA**	**LECSB-T**	**LECSC-T**	**LECSS-T**
Number of point tables	Up to 7	Up to 255	Up to 255 (2 stations occupied)	—
Pulse input	○	○	—	—
Applicable network	—	—	CC-Link	SSCNET Ⅲ/H
Control encoder	Incremental 17-bit encoder	Absolute 22-bit encoder	Absolute 18-bit encoder	Absolute 22-bit encoder
Communication function	USB communication	USB communication, RS422 communication	USB communication, RS422 communication	USB communication
Power supply voltage [V]	100 to 120 VAC (50/60 Hz) 200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)	200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)

∗ Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900,
D-M9BW(V)-900

Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw Linear guide Dust seal band (Back side only)	GR-D-005 (5 g) GR-D-010 (10 g)

High Rigidity Slider Type
Ball Screw Drive

Secondary Battery Compatible

25A-LEJS Series LEJS40, 63



Refer to the **Web Catalog** for model selection.

LECS□ Series ▶ p. 305

CE UKCA RoHS

Refer to the "CE/UKCA/UL-compliance List" in the **Web Catalog**.

How to Order

25A-LEJS **H** **40** **V6** **A** – **500** □ – □ □ □ □

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

❶ Accuracy

Nil	Basic type
H	High-precision type

❷ Size

40
63

❸ Motor type *1

Symbol	Type	Output [W]	❷ Size	❾ Driver type	Compatible drivers*2
V6	AC servo motor (Absolute encoder)	100	40	M2	LECYM2-V5
				U2	LECYU2-V5
V7		200	63	M2	LECYM2-V7
				U2	LECYU2-V7

*1 For motor type V6, the compatible driver part number suffix is V5.
*2 For details on the driver, refer to the **Web Catalog**.

❹ Lead [mm]

Symbol	25A-LEJS40	25A-LEJS63
H	24	30
A	16	20
B	8	10

❺ Stroke [mm]*3

200
to
1500

*3 Refer to the applicable stroke table for details.

❻ Motor option

Nil	Without option
B	With lock

❼ Cable type*5, *6, *7

Nil	Without cable
S	Standard cable
R	Robotic cable

*6 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
*7 Standard cable entry direction is "(A) Axis side."

❽ Cable length [m] *5, *8

Nil	Without cable
3	3
5	5
A	10
C	20

*8 The length of the motor, encoder, and lock cables are the same.

❾ Driver type *5

	Compatible drivers	Power supply voltage [V]
Nil	Without driver	—
M2	LECYM2-V□	200 to 230
U2	LECYU2-V□	200 to 230

*5 When a driver type is selected, a cable is included. Select the cable type and cable length.
Example)
S2S2: Standard cable (2 m) + Driver (LECSS2)
S2: Standard cable (2 m)
Nil: Without cable and driver

❿ I/O cable length [m]*9

Nil	Without cable
H	Without cable (Connector only)
1	1.5

*9 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. Refer to the **Web Catalog** if an I/O cable is required.

Applicable Stroke Table*4

●: Standard

Model \ Stroke [mm]	200	300	400	500	600	700	800	900	1000	1200	1500
25A-LEJS40	●	●	●	●	●	●	●	●	●	●	—
25A-LEJS63	—	●	●	●	●	●	●	●	●	●	●

*4 Please contact SMC for non-standard strokes as they are produced as special orders.

Solid state auto switches should be ordered separately.
Click here for details on applicable auto switch models.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

* The 25A- series specifications and dimensions are the same as those of the standard model.
For details, refer to the Web Catalog.

Compatible Drivers

Driver type	MECHATROLINK-Ⅱ type	MECHATROLINK-Ⅲ type
		
Series	**LECYM**	**LECYU**
Applicable network	MECHATROLINK-Ⅱ	MECHATROLINK-Ⅲ
Control encoder	Absolute 20-bit encoder	
Communication device	USB communication, RS-422 communication	
Power supply voltage [V]	200 to 230 VAC (50/60 Hz)	

* Copper and zinc materials are used for the motors, cables, controllers/drivers, and auto switch magnets.

Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw Linear guide Dust seal band (Back side only)	GR-D-005 (5 g) GR-D-010 (10 g)

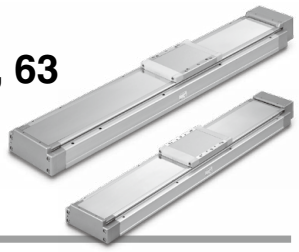
Motorless Type

Electric Actuator/High Rigidity Slider Type Ball Screw Drive

Secondary Battery Compatible

RoHS

25A-LEJS Series 25A-LEJS40, 63



How to Order

25A – LEJS H 40 NZ A – 500

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺

❶ Accuracy

Nil	Basic type
H	High-precision type

❷ Size

40
63

❸ Mounting type

NZ
NY
NX
NW*1
NV*1
NU*1
NT*1

*1 Size 63 only

❹ Lead [mm]

Symbol	25A-LEJS40	25A-LEJS63
H	24	30
A	16	20
B	8	10

❺ Stroke [mm]

200
to
1500

* For details, refer to the table below.

Applicable Stroke Table

●: Standard

Model \ Stroke [mm]	200	300	400	500	600	700	800	900	1000	1200	1500
25A-LEJS40	●	●	●	●	●	●	●	●	●	●	—
25A-LEJS63	—	●	●	●	●	●	●	●	●	●	●

* Please contact SMC for non-standard strokes as they are produced as special orders.

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Compatible Motors and Mounting Types*2

Applicable motor model		Size/Mounting type									
Manufacturer	Series	40			63						
		NZ	NY	NX	NZ	NY	NX	NW	NV	NU	NT
Mitsubishi Electric Corporation	MELSERVO JN/J4/J5	●	—	—	●	—	—	—	—	—	—
YASKAWA Electric Corporation	Σ-V/7/X	●*1	—	—	●	—	—	—	—	—	—
SANYO DENKI CO., LTD.	SANMOTION R	●	—	—	●	—	—	—	—	—	—
OMRON Corporation	OMNUC G5/1S	●	—	—	—	●	—	—	—	—	—
Panasonic Corporation	MINAS A5/A6	● (MHMF only)	●	—	—	●	—	—	—	—	—
FANUC CORPORATION	βis (-B)	●	—	—	● (β1 only)	—	—	●	—	—	—
NIDEC INSTRUMENTS CORPORATION	S-FLAG	●	—	—	●	—	—	—	—	—	—
KEYENCE CORPORATION	SV/SV2	●*1	—	—	●	—	—	—	—	—	—
FUJI ELECTRIC CO., LTD.	ALPHA7	●	—	—	●	—	—	—	—	—	—
Rockwell Automation, Inc. (Allen-Bradley)	Kinetix MP/VP/TL	● (TL only)	—	—	—	—	● (MP/VP only)	—	—	—	● (TL only)
Beckhoff Automation GmbH	AM 30/31/80/81	●	—	—	—	—	● (80/81 only)	—	● (30 only)	● (31 only)	—
Siemens AG	SIMOTICS S-1FK7	—	—	●	—	—	●	—	—	—	—
Delta Electronics, Inc.	ASDA-A2	●	—	—	●	—	—	—	—	—	—
ANCA Motion	AMD2000	●	—	—	●	—	—	—	—	—	—

*1 For some motors, the connector may protrude from the motor body. Be sure to check for interference with the mounting surface before selecting a motor.
*2 The compatible motors and mounting types are typical examples. Select the mounting type after referring to the "Motor Mounting, Applicable Motor Dimensions" tables on the "Dimensions" pages.

Replacement Parts/Grease Pack

Applied portion	Order no.
Ball screw Linear guide Dust seal band (Back side only)	GR-D-005 (5 g) GR-D-010 (10 g)

* The auto switch magnet contains copper and/or zinc.
* The 25A- series specifications and dimensions are the same as those of the standard model.

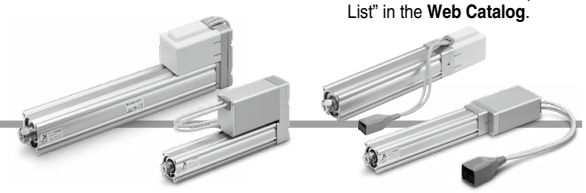
For details, refer to the Web Catalog.

Battery-less Absolute (Step Motor 24 VDC)

Rod Type Secondary Battery Compatible

25A-LEY Series 25A-LEY16, 25, 32, 40

Refer to the "CE/UKCA/UL-compliance List" in the **Web Catalog**.



Motor mounting position: Parallel

Motor mounting position: In-line

How to Order

25A-LEY 25 ❶ E ❷ B ❸ - 30 ❹ C ❺ ❻ ❼ - R1 ❽ CD17T ❾ ❿

Series compatible with secondary batteries

For details on controllers, refer to the next page.

❶ Size

16
25
32
40

❷ Motor mounting position/Motor cover direction

Symbol	Motor mounting position	Motor cover direction
Nil	Top side parallel	—
D	In-line	—*1
D1		Left*2
D2		Right*2
D3		Top*2
D4		Bottom*2

❸ Motor type

E	Battery-less absolute (Step motor 24 VDC)

❹ Lead [mm]

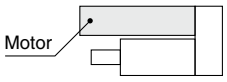
Symbol	LEY16	LEY25	LEY32/40
A	10	12	16
B	5	6	8
C	2.5	3	4

❺ Stroke*3 [mm]

Stroke	Note	
	Size	Applicable stroke
30 to 300	16	30, 50, 100, 150, 200, 250, 300
30 to 400	25	30, 50, 100, 150, 200, 250, 300, 350, 400
30 to 500	32/40	30, 50, 100, 150, 200, 250, 300, 350, 400, 450, 500

❻ Motor option*4

C	With motor cover
W	With lock/motor cover



❼ Rod end thread

Nil	Rod end female thread
M	Rod end male thread (1 rod end nut is included.)

❽ Mounting*5

Symbol	Type	Motor mounting position	
		Parallel	In-line
Nil	Ends tapped/ Body bottom tapped*6	●	●
L	Foot	●	—
F	Rod flange*6	●*8	●
G	Head flange*6	●*9	—
D	Double clevis*7	●	—

❾ Actuator cable type/length

Robotic cable [m]

Nil	None	R8	8*10
R1	1.5	RA	10*10
R3	3	RB	15*10
R5	5	RC	20*10

Mounting Bracket Part Nos. for the 25A- Series

Applicable size	Foot*1	Flange	Double clevis
16	25-LEY-L016	25-LEY-F016	25-LEY-D016
25	25-LEY-L025	25-LEY-F025	25-LEY-D025
32, 40	25-LEY-L032	25-LEY-F032	25-LEY-D032

*1 When ordering foot brackets, order 2 pieces per actuator.
*2 Parts included with each type of bracket are as follows.
Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Replacement Parts/Grease Pack

Applied portion	Order no.
Piston rod	GR-D-005 (5 g) GR-D-010 (10 g)

* Copper and zinc materials are used for the motors, cables, controllers/drivers.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

⑩ Controller

Nil	Without controller
C□1□□	With controller

C D 1 7 T

Interface (Communication protocol/Input/Output)

Symbol	Type	Number of axes, Special specification: Standard	Number of axes, Special specification: With STO sub-function
5	Parallel input (NPN)	●	
6	Parallel input (PNP)	●	
E	EtherCAT	●	●
9	EtherNet/IP™	●	●
P	PROFINET	●	●
D	DeviceNet®	●	
L	IO-Link	●	●
M	CC-Link	●	

Mounting

7	Screw mounting
8∗11	DIN rail

Number of axes, Special specification

Symbol	Number of axes	Specification
1	Single axis	Standard
F	Single axis	With STO sub-function

Communication plug connector, I/O cable∗12

Symbol	Type	Applicable interface
Nil	Without accessory	—
S	Straight type communication plug connector	DeviceNet® CC-Link Ver. 1.10
T	T-branch type communication plug connector	
1	I/O cable (1.5 m)	Parallel input (NPN) Parallel input (PNP)
3	I/O cable (3 m)	
5	I/O cable (5 m)	

∗1 Sizes 25, 32, and 40 only
∗2 Size 16 only
∗3 Please contact SMC for non-standard strokes as they are produced as special orders.
∗4 When "With lock/motor cover" is selected for the top side parallel motor type, the motor body will stick out from the end of the body for size 16 with strokes of 50 mm or less and size 40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.
∗5 The mounting bracket is shipped together with the product but does not come assembled.
∗6 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.
· 25A-LEY25: 200 or less · 25A-LEY32/40: 100 or less
∗7 For the mounting of the double clevis type, use the actuator within the following stroke range.
· 25A-LEY16: 100 or less · 25A-LEY25: 200 or less · 25A-LEY32/40: 200 or less
∗8 The rod flange type is not available for the 25A-LEY16 with strokes of 50 mm or less and 25A-LEY40 with strokes of 30 mm or less, and motor option "With lock/motor cover."
∗9 The head flange type is not available for the 25A-LEY32/40.
∗10 Produced upon receipt of order
∗11 The DIN rail is not included. It must be ordered separately.
∗12 Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel input.
Select "Nil," "S," or "T" for DeviceNet® or CC-Link.
Select "Nil," "1," "3," or "5" for parallel input.

⚠Caution

[CE/UKCA-compliant products]
EMC compliance was tested by combining the electric actuator LEY series and the controller JXC series.
The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

[Precautions relating to differences in controller versions]
When the JXC series is to be used in combination with the battery-less absolute encoder, use a controller that is version V3.4 or S3.4 or higher. For details, refer to the **Web Catalog**.

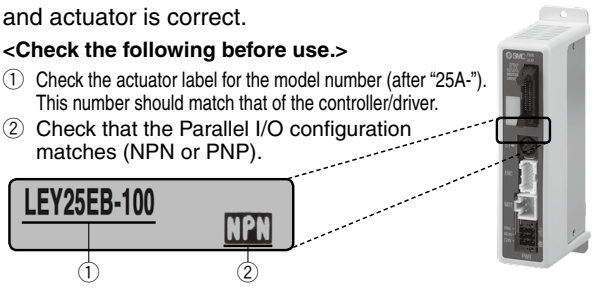
[UL certification]
The JXC series controllers used in combination with electric actuators are UL certified.

The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

<Check the following before use.>

① Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.
② Check that the Parallel I/O configuration matches (NPN or PNP).



∗ Refer to the Operation Manual for using the products.
Please download it via our website: https://www.smcworld.com

Type	Step data input type	EtherCAT direct input type	EtherCAT direct input type with STO sub-function	EtherNet/IP™ direct input type	EtherNet/IP™ direct input type with STO sub-function	PROFINET direct input type	PROFINET direct input type with STO sub-function	DeviceNet® direct input type	IO-Link direct input type	IO-Link direct input type with STO sub-function	CC-Link direct input type
											
Series	**JXC51 JXC61**	**JXCE1**	**JXCEF**	**JXC91**	**JXC9F**	**JXCP1**	**JXCPF**	**JXCD1**	**JXCL1**	**JXCLF**	**JXCM1**
Features	Parallel I/O	EtherCAT direct input	EtherCAT direct input with STO sub-function	EtherNet/IP™ direct input	EtherNet/IP™ direct input with STO sub-function	PROFINET direct input	PROFINET direct input with STO sub-function	DeviceNet® direct input	IO-Link direct input	IO-Link direct input with STO sub-function	CC-Link direct input
Compatible motor	Battery-less absolute (Step motor 24 VDC)										
Max. number of step data	64 points										
Power supply voltage	24 VDC										

Battery-less Absolute (Step Motor 24 VDC)

High Performance Rod Type

Secondary Battery Compatible

25A-LEY□G Series

25A-LEY16, 25, 40

RoHS

Refer to the "CE/UKCA/UL-compliance List" in the **Web Catalog**.



Motor mounting position: Parallel

Motor mounting position: In-line

How to Order

25A-LEY 25 □ G B - 50 C □ □ - R1 C5H73

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

For details on controllers, refer to page 306-5.

❶ Size

16
25
40

❷ Motor mounting position/ Motor cover direction

Symbol	Motor mounting position	Motor cover direction
Nil	Top side parallel	—
D	In-line	—*1
D1		Left side*2
D2		Right side*2
D3		Top side*2
D4		Bottom side*2

❸ Motor type

Symbol	Type	Compatible controllers
G	High performance Battery-less absolute (Step motor 24 VDC)	JXC5H JXCEH JXC6H JXC9H JXCPH

❹ Lead [mm]

Symbol	LEY16	LEY25	LEY40
A	10	12	16
B	5	6	8
C	2.5	3	4

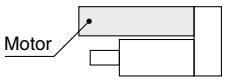
❺ Stroke*3 [mm]

30	30
to	to
500	500

* For details, refer to the applicable stroke table below.

❻ Motor option*4

C	With motor cover
W	With lock/motor cover



❼ Rod end thread

Nil	Rod end female thread
M	Rod end male thread (1 rod end nut is included.)

❽ Mounting*5

Symbol	Type	Motor mounting position	
		Parallel	In-line
Nil	Ends tapped/ Body bottom tapped*6	●	●
L	Foot bracket	●	—
F	Rod flange*6	●*8	●
G	Head flange*6	●*9	—
D	Double clevis*7	●	—

❾ Actuator cable type/length

Robotic cable [m]

Nil	None	R8	8*10
R1	1.5	RA	10*10
R3	3	RB	15*10
R5	5	RC	20*10

Mounting Bracket Part Nos. for the 25A- Series

Applicable size	Foot*1	Flange	Double clevis
16	25-LEY-L016	25-LEY-F016	25-LEY-D016
25	25-LEY-L025	25-LEY-F025	25-LEY-D025
40	25-LEY-L032	25-LEY-F032	25-LEY-D032

*1 When ordering foot brackets, order 2 pieces per actuator.
*2 Parts included with each type of bracket are as follows.
Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Applicable Stroke Table

Size	Stroke [mm]											
	30	50	100	150	200	250	300	350	400	450	500	Manufacturable stroke range
16	●	●	●	●	●	●	●	—	—	—	—	10 to 300
25	●	●	●	●	●	●	●	●	●	—	—	15 to 400
40	●	●	●	●	●	●	●	●	●	●	●	20 to 500

Replacement Parts/Grease Pack

Applied portion	Order no.
Piston rod	GR-D-005 (5 g) GR-D-010 (10 g)

* Copper and zinc materials are used for the motors, cables, controllers/drivers.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

SMC

⑩ Controller

Nil	Without controller
C□H□□	With controller

C 5 H 7 3

Interface (Communication protocol/Input/Output)

5	Parallel I/O (NPN)
6	Parallel I/O (PNP)
E	EtherCAT
9	EtherNet/IP™
P	PROFINET

Mounting

7	Screw mounting
8∗11	DIN rail

Number of axes/ Special specification

H	1 axis/High performance type

Communication plug connector, I/O cable∗12

Symbol	Type	Applicable interface
Nil	Without accessory	—
1	I/O cable (1.5 m)	Parallel input (NPN) Parallel input (PNP)
3	I/O cable (3 m)	
5	I/O cable (5 m)	

∗1 Sizes 25 and 40 only
∗2 Size 16 only
∗3 Please contact SMC for non-standard strokes as they are produced as special orders.
∗4 When "With lock/motor cover" is selected for the top side parallel motor type, the motor body will stick out from the end of the body for size 16 with strokes of 50 mm or less and size 40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.
∗5 The mounting bracket is shipped together with the product but does not come assembled.
∗6 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.
· 25A-LEY25: 200 or less · 25A-LEY40: 100 or less
∗7 For the mounting of the double clevis type, use the actuator within the following stroke range.
· 25A-LEY16: 100 or less · 25A-LEY25: 200 or less
· 25A-LEY40: 200 or less
∗8 The rod flange type is not available for the 25A-LEY16 with strokes of 50 mm or less and 25A-LEY40 with strokes of 30 mm or less, and motor option "With lock/motor cover."
∗9 The head flange type is not available for the 25A-LEY40.
∗10 Produced upon receipt of order
∗11 The DIN rail is not included. It must be ordered separately.
∗12 Select "Nil" for anything other than parallel input.
Select "Nil," "1," "3," or "5" for parallel input.

⚠Caution

[CE/UKCA-compliant products]

EMC compliance was tested by combining the electric actuator LEY series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

■Trademark

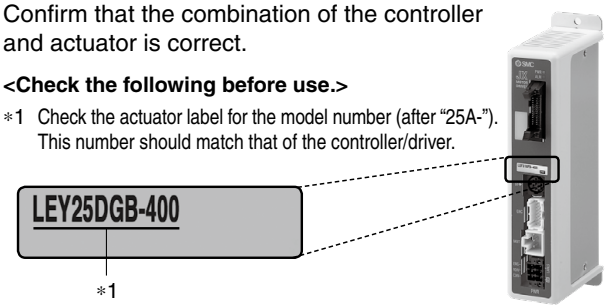
EtherNet/IP® is a registered trademark of ODVA, Inc.
EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

<Check the following before use.>

∗1 Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.



∗ Refer to the Operation Manual for using the products.
Please download it via our website: https://www.smcworld.com

Compatible Controllers

Type	Step data input type	EtherCAT direct input type	EtherNet/IP™ direct input type	PROFINET direct input type
				
Series	**JXC5H JXC6H**	**JXCEH**	**JXC9H**	**JXCPH**
Features	Parallel I/O	EtherCAT direct input	EtherNet/IP™ direct input	PROFINET direct input
Compatible motor	Battery-less absolute (Step motor 24 VDC)			
Max. number of step data	64 points			
Power supply voltage	24 VDC			

Incremental (Step Motor 24 VDC)

High Performance

Rod Type Secondary Battery Compatible

25A-LEY□F Series 25A-LEY16, 25, 40 RoHS

Refer to the "CE/UKCA/UL-compliance List" in the **Web Catalog**.



Motor mounting position: Parallel

Motor mounting position: In-line

How to Order

25A-LEY 25 □ F B - 50 C □ □ - S1 C5H73

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿

Series compatible with secondary batteries

For details on controllers, refer to page 306-7.

❶ Size

16
25
40

❷ Motor mounting position/Motor cover direction

Symbol	Motor mounting position	Motor cover direction
Nil	Top side parallel	—
R	Right side parallel	—
L	Left side parallel	—
D	In-line	—*1
D1		Left side*2
D2		Right side*2
D3		Top side*2
D4		Bottom side*2

❸ Motor type

Symbol	Type	Compatible controllers
F	High performance (Step motor 24 VDC)	JXC5H JXCEH JXC6H JXC9H JXCPH

❹ Lead [mm]

Symbol	LEY16	LEY25	LEY40
A	10	12	16
B	5	6	8
C	2.5	3	4

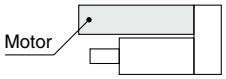
❺ Stroke*3 [mm]

30	30
to	to
500	500

* For details, refer to the applicable stroke table below.

❻ Motor option*4

C	With motor cover
W	With lock/motor cover



❼ Rod end thread

Nil	Rod end female thread
M	Rod end male thread (1 rod end nut is included.)

❽ Mounting*5

Symbol	Type	Motor mounting position	
		Parallel	In-line
Nil	Ends tapped/ Body bottom tapped*6	●	●
L	Foot bracket	●	—
F	Rod flange*6	●*8	●
G	Head flange*6	●*9	—
D	Double clevis*7	●	—

❾ Actuator cable type/length

Standard cable [m]

Nil	None
S1	1.5
S3	3
S5	5

Robotic cable [m]

R1	1.5	RA	10*10
R3	3	RB	15*10
R5	5	RC	20*10
R8	8*10		

Mounting Bracket Part Nos. for the 25A- Series

Applicable size	Foot*1	Flange	Double clevis
16	25-LEY-L016	25-LEY-F016	25-LEY-D016
25	25-LEY-L025	25-LEY-F025	25-LEY-D025
40	25-LEY-L032	25-LEY-F032	25-LEY-D032

*1 When ordering foot brackets, order 2 pieces per actuator.

* Parts included with each type of bracket are as follows.
  Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Applicable Stroke Table

Size	Stroke [mm]											
	30	50	100	150	200	250	300	350	400	450	500	Manufacturable stroke range
16	●	●	●	●	●	●	●	—	—	—	—	10 to 300
25	●	●	●	●	●	●	●	●	●	—	—	15 to 400
40	●	●	●	●	●	●	●	●	●	●	●	20 to 500

Replacement Parts/Grease Pack

Applied portion	Order no.
Piston rod	GR-D-005 (5 g) GR-D-010 (10 g)

* Copper and zinc materials are used for the motors, cables, controllers/drivers.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

⑩ Controller

Nil	Without controller
C□H□□	With controller

C 5 H 7 3

Interface (Communication protocol/Input/Output)

5	Parallel I/O (NPN)
6	Parallel I/O (PNP)
E	EtherCAT
9	EtherNet/IP™
P	PROFINET

Mounting

7	Screw mounting
8∗11	DIN rail

Number of axes/Special specification

H	1 axis/High performance type

Communication plug connector, I/O cable∗12

Symbol	Type	Applicable interface
Nil	Without accessory	—
1	I/O cable (1.5 m)	Parallel input (NPN) Parallel input (PNP)
3	I/O cable (3 m)	
5	I/O cable (5 m)	

∗1 Sizes 25 and 40 only
∗2 Size 16 only
∗3 Please contact SMC for non-standard strokes as they are produced as special orders.
∗4 When "With lock/motor cover" is selected for the top/right/left side parallel motor types, the motor body will stick out from the end of the body for size 16 with strokes of 50 mm or less and size 40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.
∗5 The mounting bracket is shipped together with the product but does not come assembled.
∗6 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.
· 25A-LEY25: 200 or less · 25A-LEY40: 100 or less
∗7 For the mounting of the double clevis type, use the actuator within the following stroke range.
· 25A-LEY16: 100 or less · 25A-LEY25: 200 or less
· 25A-LEY40: 200 or less
∗8 The rod flange type is not available for the 25A-LEY16 with strokes of 50 mm or less and 25A-LEY40 with strokes of 30 mm or less, and motor option "With lock/motor cover."
∗9 The head flange type is not available for the 25A-LEY40.
∗10 Produced upon receipt of order
∗11 The DIN rail is not included. It must be ordered separately.
∗12 Select "Nil" for anything other than parallel input.
Select "Nil," "1," "3," or "5" for parallel input.

⚠Caution

[CE/UKCA-compliant products]

EMC compliance was tested by combining the electric actuator LEY series and the controller JXC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

■Trademark

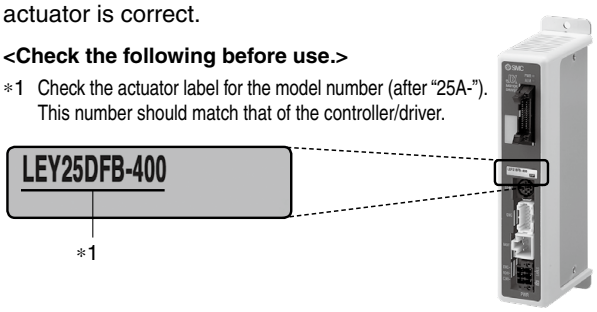
EtherNet/IP® is a registered trademark of ODVA, Inc.
EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

<Check the following before use.>

∗1 Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.



∗ Refer to the Operation Manual for using the products.
Please download it via our website: https://www.smcworld.com

Compatible Controllers

Type	Step data input type	EtherCAT direct input type	EtherNet/IP™ direct input type	PROFINET direct input type
				
Series	**JXC5H JXC6H**	**JXCEH**	**JXC9H**	**JXCPH**
Features	Parallel I/O	EtherCAT direct input	EtherNet/IP™ direct input	PROFINET direct input
Compatible motor	Step motor 24 VDC	Step motor (Servo/24 VDC)		
Max. number of step data	64 points	64 points		
Power supply voltage	24 VDC	24 VDC		

Incremental (Step Motor 24 VDC) Incremental (Servo Motor 24 VDC)

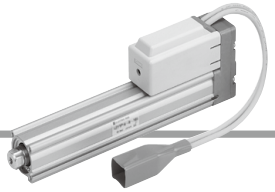
Rod Type Secondary Battery Compatible

Refer to the "CE/UKCA/UL-compliance List" in the **Web Catalog**.

RoHS

25A-LEY Series LEY16, 25, 32, 40

Refer to the Web Catalog for model selection.



Motor mounting position: Parallel



Motor mounting position: In-line

How to Order

25A-LEY **16** **□** **□** **B** – **30** **C** **□** **□** – **S1**

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾

JXC□ Series

CD17T

LEC□ Series

AN **1** **□**

❿ ⓫ ⓬

For details on controllers, refer to page 309.

❶ Size

16
25
32
40

❷ Motor mounting position

Nil	Top side parallel
R	Right side parallel
L	Left side parallel
D	In-line

❸ Motor type

Symbol	Type	Applicable size			Compatible controllers/ drivers		
		LEY16	LEY25	LEY32/40			
Nil	Step motor (Servo/24 VDC)	●	●	●	JXC51 JXC61 JXCE1 JXC91 JXCP1	JXCD1 JXCL1 JXCM1 JXCEF JXC9F	JXCPF JXCLF LECP1 LECPA
A	Servo motor (24 VDC)	●	●	—	LECA6		

❹ Lead [mm]

Symbol	LEY16	LEY25	LEY32/40
A	10	12	16
B	5	6	8
C	2.5	3	4

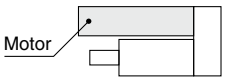
❺ Stroke [mm]

30	30
to	to
500	500

* For details, refer to the applicable stroke table below.

❻ Motor option*2

C	With motor cover
W	With lock/motor cover



❼ Rod end thread

Nil	Rod end female thread
M	Rod end male thread (1 rod end nut is included.)

❽ Mounting*5

Symbol	Type	Motor mounting position	
		Parallel	In-line
Nil	Ends tapped/Body bottom tapped*6	●	●
L	Foot	●	—
F	Rod flange*6	●*8	●
G	Head flange*6	●*9	—
D	Double clevis*7	●	—

❾ Actuator cable type/length*11

Standard cable [m]

Nil	None
S1	1.5*12
S3	3*12
S5	5*12

Robotic cable [m]

R1	1.5	RA	10*10
R3	3	RB	15*10
R5	5	RC	20*10
R8	8*10		

Mounting Bracket Part Nos. for the 25A- Series*4

Applicable size	Foot*3	Flange	Double clevis
16	25-LEY-L016	25-LEY-F016	25-LEY-D016
25	25-LEY-L025	25-LEY-F025	25-LEY-D025
32, 40	25-LEY-L032	25-LEY-F032	25-LEY-D032
Surface treatment	RAYDENT®	RAYDENT®	Coating (Size 16: Electroless nickel plating)

Solid state auto switches should be ordered separately.
Click here for details on applicable auto switch models.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Applicable Stroke Table*1

●: Standard

Model \ Stroke [mm]	30	50	100	150	200	250	300	350	400	450	500	Manufacturable stroke range
25A-LEY16	●	●	●	●	●	●	●	—	—	—	—	10 to 300
25A-LEY25	●	●	●	●	●	●	●	●	●	—	—	15 to 400
25A-LEY32/40	●	●	●	●	●	●	●	●	●	●	●	20 to 500

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

SMC

JXC□ Series (For details, refer to page 309.)



⑩ Controller

Nil	Without controller
C□1□□	With controller

C D 1 7 T

Interface (Communication protocol/Input/Output)

Symbol	Type	Number of axes, Special specification: Standard	Number of axes, Special specification: With STO sub-function
5	Parallel input (NPN)	●	
6	Parallel input (PNP)	●	
E	EtherCAT	●	●
9	EtherNet/IP™	●	●
P	PROFINET	●	●
D	DeviceNet®	●	
L	IO-Link	●	●
M	CC-Link	●	

Mounting

7	Screw mounting
8∗17	DIN rail

Number of axes, Special specification

Symbol	Number of axes	Specification
1	Single axis	Standard
F	Single axis	With STO sub-function

Communication plug connector, I/O cable∗18

Symbol	Type	Applicable interface
Nil	Without accessory	—
S	Straight type communication plug connector	DeviceNet® CC-Link Ver. 1.10
T	T-branch type communication plug connector	
1	I/O cable (1.5 m)	Parallel input (NPN) Parallel input (PNP)
3	I/O cable (3 m)	
5	I/O cable (5 m)	

LEC□ Series (For details, refer to page 309.)



AN 1 □
⑩ ⑪ ⑫

⑩ Controller/Driver type∗12

Nil	Without controller/driver	
6N	**LECA6** (Step data input type)	NPN
6P		PNP
1N	**LECP1**∗13 (Programless type)	NPN
1P		PNP
AN	**LECPA**∗13 ∗14 (Pulse input type)	NPN
AP		PNP

⑪ I/O cable length∗15

Nil	Without cable (Without communication plug connector)
1	1.5 m
3	3 m∗16
5	5 m∗16

⑫ Controller/Driver mounting

Nil	Screw mounting
D	DIN rail∗17

∗1 Please contact SMC for non-standard strokes as they are produced as special orders.
∗2 When "With lock" or "With lock/motor cover" is selected for the top/right/left side parallel motor types, the motor body will stick out from the end of the body for size 16/40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.
∗3 When ordering foot brackets, order 2 pieces per actuator.
∗4 Parts included with each type of bracket are as follows.
Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt
∗5 The mounting bracket is shipped together with the product but does not come assembled.
∗6 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.
·LEY25: 200 mm or less ·LEY32/40: 100 mm or less
∗7 For the mounting of the double clevis type, use the actuator within the following stroke range.
·LEY16: 100 mm or less ·LEY25: 200 mm or less ·LEY32/40: 200 mm or less
∗8 The rod flange type is not available for the LEY16/40 with a 30 mm stroke and motor option "With lock," "With lock/motor cover."
∗9 The head flange type is not available for the LEY32/40.
∗10 Produced upon receipt of order (Robotic cable only)
∗11 The standard cable should only be used on fixed parts.
For use on moving parts, select the robotic cable.
Refer to the **Web Catalog** if only the actuator cable is required.
∗12 For details on controllers/drivers and compatible motors, refer to the compatible controllers/drivers on the next page.
∗13 Only available for the motor type "Step motor"
∗14 When pulse signals are open collector, order the current limiting resistor (LEC-PA-R-□) separately. (Refer to the **Web Catalog**.)
∗15 When "Without controller/driver" is selected for controller/driver types, I/O cable cannot be selected. If an I/O cable is required, order the cable separately for each series. (For details, refer to the **Web Catalog**.)
∗16 When "Pulse input type" is selected for controller/driver types, pulse input usable only with differential. Only 1.5 m cables usable with open collector
∗17 The DIN rail is not included. It must be ordered separately.
∗18 Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel input.
Select "Nil," "S," or "T" for DeviceNet® or CC-Link.
Select "Nil," "1," "3," or "5" for parallel input.

⚠Caution

[CE/UKA-compliant products]

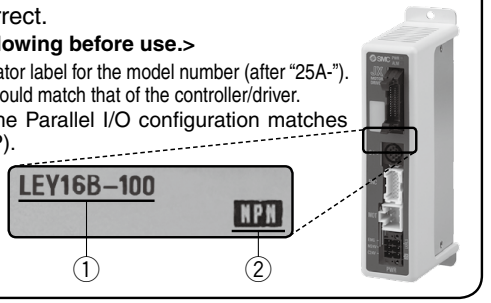
① EMC compliance was tested by combining the electric actuator LEY series and the controller LEC/JXC series.
The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.
② For the incremental (servo motor 24 VDC) specification, EMC compliance was tested by installing a noise filter set (LEC-NFA). Refer to the **Web Catalog** for the noise filter set. Refer to the LECA series Operation Manual for installation.

[UL-compliant products (For the LEC series)]
When compliance with UL is required, the electric actuator and controller/driver should be used with a UL1310 Class 2 power supply.

The actuator and controller/driver are sold as a package.
Confirm that the combination of the controller/driver and actuator is correct.

<Check the following before use.>

① Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.
② Check that the Parallel I/O configuration matches (NPN or PNP).



∗ Refer to the Operation Manual for using the products. Please download it via our website: https://www.smcworld.com

Compatible Controllers/Drivers

Type	Step data input type	Step data input type	Programless type	Pulse input type
				
Series	**JXC51 JXC61**	**LECA6**	**LECP1**	**LECPA**
Features	Parallel I/O	Parallel I/O	Capable of setting up operation (step data) without using a PC or teaching box	Operation by pulse signals
Compatible motor	Step motor (Servo/24 VDC)	Servo motor (24 VDC)	Step motor (Servo/24 VDC)	
Max. number of step data	64 points		14 points	—
Power supply voltage	24 VDC			

Type	EtherCAT direct input type	EtherCAT direct input type with STO sub-function	EtherNet/IP™ direct input type	EtherNet/IP™ direct input type with STO sub-function	PROFINET direct input type	PROFINET direct input type with STO sub-function	DeviceNet® direct input type	IO-Link direct input type	IO-Link direct input type with STO sub-function	CC-Link direct input type
										
Series	**JXCE1**	**JXCEF**	**JXC91**	**JXC9F**	**JXCP1**	**JXCPF**	**JXCD1**	**JXCL1**	**JXCLF**	**JXCM1**
Features	EtherCAT direct input	EtherCAT direct input with STO sub-function	EtherNet/IP™ direct input	EtherNet/IP™ direct input with STO sub-function	PROFINET direct input	PROFINET direct input with STO sub-function	DeviceNet® direct input	IO-Link direct input	IO-Link direct input with STO sub-function	CC-Link direct input
Compatible motor	Step motor (Servo/24 VDC)									
Max. number of step data	64 points									
Power supply voltage	24 VDC									

AC Servo Motor *LECS□ Series*

Rod Type Secondary Battery Compatible

25A-LEY Series LEY25, 32

Size 25, 32

Refer to the "CE/UKCA/UL-compliance List" in the **Web Catalog**.

RoHS

LECY□ Series ▶ p. 313

Refer to the Web Catalog for model selection.

How to Order

25A-LEY **H** **25** **□** **S2** **B** – **100** **□** **□** **□** – **S** **2** **A1** **□**

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫ ⓬ ⓭

Series compatible with secondary batteries

❶ Accuracy

Nil	Basic type
H	High-precision type

❷ Size

25
32

❸ Motor mounting position

Nil	Top side parallel
R	Right side parallel
L	Left side parallel
D	In-line

❹ Motor type

Symbol	Type	Output [W]	❷ Size	⓬ Driver type	Compatible drivers
S2∗1	AC servo motor (Incremental encoder)	100	25	A1/A2	LECSA□-S1
S3		200	32	A1/A2	LECSA□-S3
T6∗2	AC servo motor (Absolute encoder)	100	25	B2	LECSB2-T5
				C2	LECSC2-T5
				S2	LECSS2-T5
T7		200	32	B2	LECSB2-T7
				C2	LECSC2-T7
				S2	LECSS2-T7

∗1 For motor type S2, the compatible driver part number suffix is S1.
∗2 For motor type T6, the compatible driver part number is LECS□2-T5.
∗ For details on the driver, refer to the **Web Catalog**.

❺ Lead [mm]

Symbol	LEY25	LEY32∗1
A	12	16 (20)
B	6	8 (10)
C	3	4 (5)

∗1 The values shown in ( ) are the leads for the size 32 top/right/left side parallel motor types. (Equivalent leads which include the pulley ratio [1.25:1])

❻ Stroke [mm]

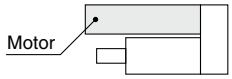
30	30
to	to
500	500

∗ For details, refer to the applicable stroke table below.

❼ Motor option

Nil	Without option
B	With lock∗1

∗1 When "With lock" is selected for the top/right/left side parallel motor types, the motor body will stick out from the end of the body for size 25 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.



❽ Rod end thread

Nil	Rod end female thread
M	Rod end male thread (1 rod end nut is included.)

❾ Mounting∗1

Symbol	Type	Motor mounting position	
		Parallel	In-line
Nil	Ends tapped/ Body bottom tapped∗2	●	●
L	Foot	●	—
F	Rod flange∗2	●∗4	●
G	Head flange∗2	●∗5	—
D	Double clevis∗3	●	—

∗1 The mounting bracket is shipped together with the product but does not come assembled.
∗2 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.
· 25A-LEY25: 200 mm or less
· 25A-LEY32: 100 mm or less
∗3 For the mounting of the double clevis type, use the actuator within the following stroke range.
· 25A-LEY25: 200 mm or less
· 25A-LEY32: 200 mm or less
∗4 The rod flange type is not available for the 25A-LEY25 with a 30 mm stroke and motor option "With lock."
∗5 The head flange type is not available for the 25A-LEY32.

Mounting Bracket Part Nos. for the 25A- Series

Applicable size	Foot∗1	Flange	Double clevis
25	25-LEY-L025	25-LEY-F025	25-LEY-D025
32	25-LEY-L032	25-LEY-F032	25-LEY-D032
Surface treatment	RAYDENT®	RAYDENT®	Coating (Size 16: Electroless nickel plating)

∗1 When ordering foot brackets, order 2 pieces per actuator.
∗ Parts included with each type of bracket are as follows.
Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

Solid state auto switches should be ordered separately.
Click here for details on applicable auto switch models.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

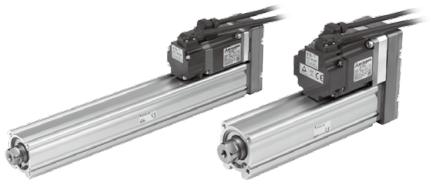
Applicable Stroke Table

●: Standard

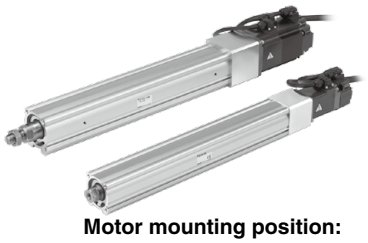
Model \ Stroke [mm]	30	50	100	150	200	250	300	350	400	450	500	Manufacturable stroke range [mm]
25A-LEY25	●	●	●	●	●	●	●	●	●	—	—	15 to 400
25A-LEY32	●	●	●	●	●	●	●	●	●	●	●	20 to 500

∗ Please contact SMC for non-standard strokes as they are produced as special orders.

SMC



Motor mounting position: Parallel



Motor mounting position: In-line

⑩ Cable type*1 *2

Nil	Without cable
S	Standard cable
R	Robotic cable

*1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
*2 Standard cable entry direction is
· Parallel: (A) Axis side
· In-line: (B) Counter axis side

⑪ Cable length*1 [m]

Nil	Without cable
2	2
5	5
A	10

*1 The length of the encoder, motor, and lock cables are the same.

⑫ Driver type*1

	Compatible drivers	Power supply voltage [V]
Nil	Without driver	—
A1	LECSA1-S□	100 to 120
A2	LECSA2-S□	200 to 230
B2	LECSB2-T□	200 to 240
C2	LECSC2-T□	200 to 230
S2	LECSS2-T□	200 to 240

*1 When a driver type is selected, a cable is included. Select the cable type and cable length.
Example)
S2S2: Standard cable (2 m) + Driver (LECSS2)
S2: Standard cable (2 m)
Nil: Without cable and driver

⑬ I/O cable length [m]*1

Nil	Without cable
H	Without cable (Connector only)
1	1.5

*1 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected.
Refer to the **Web Catalog** if an I/O cable is required.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Compatible Drivers

Driver type	**Pulse input type/ Positioning type** 	**Pulse input type** 	**CC-Link direct input type** 	SSCNETⅢ/H type 
Series	**LECSA**	**LECSB-T**	**LECSC-T**	**LECSS-T**
Number of point tables	Up to 7	Up to 255	Up to 255 (2 stations occupied)	—
Pulse input	○	○	—	—
Applicable network	—	—	CC-Link	SSCNET Ⅲ/H
Control encoder	Incremental 17-bit encoder	Absolute 22-bit encoder	Absolute 18-bit encoder	Absolute 22-bit encoder
Communication function	USB communication	USB communication, RS422 communication	USB communication, RS422 communication	USB communication
Power supply voltage [V]	100 to 120 VAC (50/60 Hz) 200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)	200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)

* Copper and zinc materials are used for the motors, cables, controllers/drivers.

AC Servo Motor *LECY□ Series*

Rod Type Secondary Battery Compatible

25A-LEY Series LEY25, 32 Size 25, 32

CE UK CA RoHS

LECS□ Series ▶ p. 311

Refer to the **Web Catalog** for model selection.

How to Order

25A-LEY H 25 □ V6 B – 100 □ □ □ – S 3 M2 □

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫ ⓬ ⓭

Series compatible with secondary batteries

❶ Accuracy

Nil	Basic type
H	High-precision type

❷ Size

25
32

❸ Motor mounting position

Nil	Top side parallel
R	Right side parallel
L	Left side parallel
D	In-line

❹ Motor type

Symbol	Type	Output [W]	❷ Size	⓬ Driver type	Compatible drivers
V6∗1	AC servo motor (Absolute encoder)	100	25	M2	LECYM2-V5
				U2	LECYU2-V5
V7		200	32	M2	LECYM2-V7
				U2	LECYU2-V7

∗1 For motor type V6, the compatible driver part number suffix is V5.

❺ Lead [mm]

Symbol	25A-LEY25	25A-LEY32∗1
A	12	16 (20)
B	6	8 (10)
C	3	4 (5)

∗1 The values shown in ( ) are the leads for the size 32 top/right/left side parallel motor types. (Equivalent leads which include the pulley ratio [1.25:1])

❻ Stroke [mm]

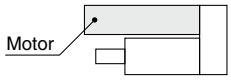
30	30
to	to
500	500

∗ For details, refer to the applicable stroke table below.

❼ Motor option

Nil	Without option
B	With lock∗1

∗1 When "With lock" is selected for the top/right/left side parallel motor types, the motor body will stick out from the end of the body for size 25 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.



❽ Rod end thread

Nil	Rod end female thread
M	Rod end male thread (1 rod end nut is included.)

❾ Mounting∗1

Symbol	Type	Motor mounting position	
		Parallel	In-line
Nil	Ends tapped/ Body bottom tapped∗2	●	●
L	Foot	●	—
F	Rod flange∗2	●∗4	●
G	Head flange∗2	●∗5	—
D	Double clevis∗3	●	—

∗1 The mounting bracket is shipped together with the product but does not come assembled.
∗2 For the horizontal cantilever mounting of the rod flange, head flange, or ends tapped types, use the actuator within the following stroke range.
· LEY25: 200 mm or less · LEY32: 100 mm or less
∗3 For the mounting of the double clevis type, use the actuator within the following stroke range.
· LEY25: 200 mm or less · LEY32: 200 mm or less
∗4 The rod flange type is not available for the LEY25 with a 30 mm stroke and motor option "With lock."
∗5 The head flange type is not available for the LEY32.

Mounting Bracket Part Nos. for the 25A- Series

Applicable size	Foot∗1	Flange	Double clevis
25	25-LEY-L025	25-LEY-F025	25-LEY-D025
32	25-LEY-L032	25-LEY-F032	25-LEY-D032
Surface treatment	RAYDENT®	RAYDENT®	Coating (Size 16: Electroless nickel plating)

∗1 When ordering foot brackets, order 2 pieces per actuator.
∗ Parts included with each type of bracket are as follows.
Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

Solid state auto switches should be ordered separately.
Click here for details on applicable auto switch models.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Applicable Stroke Table

●: Standard

Model \ Stroke [mm]	30	50	100	150	200	250	300	350	400	450	500	Manufacturable stroke range [mm]
25A-LEY25	●	●	●	●	●	●	●	●	●	—	—	15 to 400
25A-LEY32	●	●	●	●	●	●	●	●	●	●	●	20 to 500

∗ Please contact SMC for non-standard strokes as they are produced as special orders.

SMC



Motor mounting position: Parallel



Motor mounting position: In-line

⑩ Cable type*1 *2

Nil	Without cable
S	Standard cable
R	Robotic cable

*1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
*2 Standard cable entry direction is "(A) Axis side".

⑪ Cable length [m]*1

Nil	Without cable
3	3
5	5
A	10
C	20

*1 The length of the motor and encoder cables are the same. (For with lock)

⑫ Driver type*1

	Compatible drivers	Power supply voltage [V]
Nil	Without driver	—
M2	LECYM2-V□	200 to 230
U2	LECYU2-V□	200 to 230

*1 When a driver type is selected, a cable is included. Select the cable type and cable length.

⑬ I/O cable length [m]*1

Nil	Without cable
H	Without cable (Connector only)
1	1.5

*1 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected.
Refer to the **Web Catalog** if an I/O cable is required.

* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

Compatible Drivers

Driver type	MECHATROLINK-Ⅱ type 	MECHATROLINK-Ⅲ type 
Series	**LECYM**	**LECYU**
Applicable network	MECHATROLINK-Ⅱ	MECHATROLINK-Ⅲ
Control encoder	Absolute 20-bit encoder	
Communication device	USB communication, RS-422 communication	
Power supply voltage [V]	200 to 230 VAC (50/60 Hz)	

* Copper and zinc materials are used for the motors, cables, controllers/drivers.

Motorless Type

Electric Actuator
Rod Type Secondary Battery Compatible
25A-LEY Series 25A-LEY25, 32



RoHS

How to Order

25A-LEY H 25 □ NZ B-100 □ □

(1) (2) (3) (4) (5) (6) (7) (8)

Series compatible with secondary batteries

(1) Accuracy

Nil	Basic type
H	High-precision type

(2) Size

25
32

(3) Motor mounting position

Nil	Top side parallel
R	Right side parallel
L	Left side parallel
D	In-line

(4) Mounting type

NZ	NU
NY	NT
NX	NM1
NW	NM2
NV	NM3

(5) Lead [mm]

Symbol	LEY25	LEY32
A	12	16 (20)
B	6	8 (10)
C	3	4 (5)

∗ The values shown in ( ) are the leads for the top/right/left side parallel motor types. Except mounting type NM1 (Equivalent leads which include the pulley ratio [1.25:1])

(6) Stroke [mm]

30	30
to	to
500	500

∗ Refer to the applicable stroke table.

(7) Rod end thread

Nil	Rod end female thread
M	Rod end male thread (1 rod end nut is included.)

(8) Mounting∗1

Symbol	Type	Motor mounting position: Parallel	Motor mounting position: In-line
Nil	Ends tapped/Body bottom tapped∗2	●	●
L	Foot	●	—
F	Rod flange∗2	●∗4	●
G	Head flange∗2	●∗5	—
D	Double clevis∗3	●	—

∗1 The mounting bracket is shipped together with the product but does not come assembled.
∗2 For the horizontal cantilever mounting with the ends tapped, rod flange, or head flange types, use the actuator within the following stroke range.
· 25A-LEY25: 200 mm or less, 25A-LEY32: 100 mm or less
∗3 For the mounting with the double clevis type, use the actuator within the following stroke range.
· 25A-LEY25: 200 mm or less, 25A-LEY32: 200 mm or less
∗4 If the stroke of the 25A-LEY25 is 30 mm or less, the rod flange may interfere with the motor.
∗5 The head flange type is not available for the in-line type and the 25A-LEY32.

Applicable Stroke Table

●: Standard

Model \ Stroke [mm]	30	50	100	150	200	250	300	350	400	450	500	Manufacturable stroke range
LEY25	●	●	●	●	●	●	●	●	●	—	—	15 to 400
LEY32	●	●	●	●	●	●	●	●	●	●	●	20 to 500

∗ Please contact SMC for non-standard strokes as they are produced as special orders.

Mounting Bracket Part Nos. for the 25A- Series

Applicable size	Foot∗1	Flange	Double clevis
25	25-LEY-L025	25-LEY-F025	25-LEY-D025
32	25-LEY-L032	25-LEY-F032	25-LEY-D032

∗1 When ordering foot brackets, order 2 pieces per actuator.
∗ Parts included with each type of bracket are as follows.
Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

Compatible Motors and Mounting Types∗4

Manufacturer	Series	Size/Mounting type: 25 NZ	25 NY	25 NX	25 NM1	25 NM2	25 NM3	32 NZ	32 NY	32 NX	32 NW	32 NV	32 NU	32 NT	32 NM1	32 NM2
Mitsubishi Electric Corporation	MELSERVO JN/J4/J5	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
YASKAWA Electric Corporation	Σ-V/7/X	●∗3	—	—	—	—	—	●	—	—	—	—	—	—	—	—
SANYO DENKI CO., LTD.	SANMOTION R	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
OMRON Corporation	OMNUC G5/1S	●	—	—	—	—	—	—	●	—	—	—	—	—	—	—
Panasonic Corporation	MINAS A5/A6	● (MHMF only)	●	—	—	—	—	—	●	—	—	—	—	—	—	—
FANUC CORPORATION	βis (-B)	●	—	—	—	—	—	● (β1 only)	—	—	●	—	—	—	—	—
NIDEC INSTRUMENTS CORPORATION	S-FLAG	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
KEYENCE CORPORATION	SV/SV2	●∗3	—	—	—	—	—	●	—	—	—	—	—	—	—	—
FUJI ELECTRIC CO., LTD.	ALPHA7	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
MinebeaMitsumi Inc.	Hybrid stepping motors	—	—	—	●∗1	—	●∗2	—	—	—	—	—	—	—	●	—
Shinano Kenshi Co., Ltd.	CSB-BZ	—	—	—	●∗1	—	●∗2	—	—	—	—	—	—	—	—	—
ORIENTAL MOTOR Co., Ltd.	α STEP AR/AZ	—	—	—	—	● AR/AZ (46 only)	—	—	—	—	—	—	—	—	—	●
FASTECH Co., Ltd.	Ezi-SERVO	—	—	—	●	—	—	—	—	—	—	—	—	—	●	—
Rockwell Automation, Inc. (Allen-Bradley)	Kinetix MP/VP/TL	● (TL only)	—	—	—	—	—	—	—	●∗1 (MP/VP only)	—	—	—	● (TL only)	—	—
Beckhoff Automation GmbH	AM 30/31/80/81	●	—	—	—	—	—	—	—	●∗1 (AM80/AM81 only)	—	●∗1 (AM30 only)	● (AM31 only)	—	—	—
Siemens AG	SIMOTICS S-1FK7	—	—	●	—	—	—	—	—	●∗1	—	—	—	—	—	—
Delta Electronics, Inc.	ASDA-A2	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
ANCA Motion	AMD2000	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—

∗1 Motor mounting position: In-line only ∗2 Motor mounting position: Parallel only
∗3 For some motors, the connector may protrude from the motor body. Be sure to check for interference with the mounting surface before selecting a motor.
∗4 The compatible motors and mounting types are typical examples. Select the mounting type after referring to the "Motor Mounting, Applicable Motor Dimensions" tables on the "Dimensions" pages.

Replacement Parts/Grease Pack

Applied portion	Order no.
Piston rod	GR-D-005 (5 g) GR-D-010 (10 g)

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

SMC

Incremental (Step Motor 24 VDC) Incremental (Servo Motor 24 VDC)

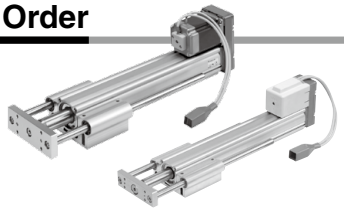
Guide Rod Type Secondary Battery Compatible

25A-LEYG Series 25A-LEYG16, 25, 32, 40

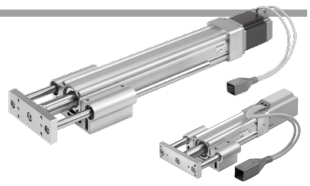
RoHS

* For details, refer to the **Web Catalog**.

How to Order



Motor mounting position: Parallel



Motor mounting position: In-line

25A-LEYG 16 M □ □ B - 50 C □ - S1

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾

Series compatible with secondary batteries

JXC□ Series
CD17T

LEC□ Series
AN **1** **□**

❿ ⓫ ⓬

For details on controllers, refer to the **Web Catalog.**

❶ Size

16
25
32
40

❷ Bearing type*1

M	Sliding bearing
L	Ball bushing bearing

❸ Motor mounting position

Nil	Top side parallel
D	In-line

❹ Motor type

Symbol	Type	Applicable size			Compatible controllers/ drivers		
		LEYG16	LEYG25	LEYG32/40			
Nil	Step motor (Servo/24 VDC)	●	●	●	JXC51 JXC61 JXCE1 JXC91 JXCP1	JXCD1 JXCL1 JXCM1 JXCEF JXC9F	JXCPF JXCLF LECP1 LECPA
A	Servo motor (24 VDC)	●	●	—	LECA6		

❺ Lead [mm]

Symbol	LEYG16	LEYG25	LEYG32/40
A	10	12	16
B	5	6	8
C	2.5	3	4

❻ Stroke*2 *3 [mm]

30	30
to	to
300	300

* For details, refer to the applicable stroke table below.

❼ Motor option*4

C	With motor cover
W	With lock/motor cover

❽ Guide option*5

Nil	Without option
F	With grease retaining function*15

*15 Only applicable for sizes 25, 32, and 40 with the sliding bearing

❾ Actuator cable type/length*7

Standard cable [m]	
Nil	None
S1	1.5*9
S3	3*9
S5	5*9

Robotic cable [m]			
R1	1.5	RA	10*6
R3	3	RB	15*6
R5	5	RC	20*6
R8	8*6		

Applicable Stroke Table*2

●: Standard

Model \ Stroke [mm]	30	50	100	150	200	250	300	Manufacturable stroke range [mm]
LEYG16	●	●	●	●	●	—	—	10 to 200
LEYG25	●	●	●	●	●	●	●	15 to 300
LEYG32/40	●	●	●	●	●	●	●	20 to 300

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Replacement Parts/Grease Pack

Applied portion	Order no.
Piston rod	GR-D-005 (5 g)
Guide rod	GR-D-010 (10 g)

* Copper and zinc materials are used for the motors, cables, controllers/drivers.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

JXC□ Series (For details, refer to page 547.)



⑩ Controller

Nil	Without controller
C□1□□	With controller

C D 1 7 T

Interface (Communication protocol/Input/Output)

Symbol	Type	Number of axes, Special specification: Standard	Number of axes, Special specification: With STO sub-function
5	Parallel input (NPN)	●	
6	Parallel input (PNP)	●	
E	EtherCAT	●	●
9	EtherNet/IP™	●	●
P	PROFINET	●	●
D	DeviceNet®	●	
L	IO-Link	●	●
M	CC-Link	●	

Mounting

7	Screw mounting
8∗13	DIN rail

Number of axes, Special specification

Symbol	Number of axes	Specification
1	Single axis	Standard
F	Single axis	With STO sub-function

Communication plug connector, I/O cable∗14

Symbol	Type	Applicable interface
Nil	Without accessory	—
S	Straight type communication plug connector	DeviceNet® CC-Link Ver. 1.10
T	T-branch type communication plug connector	
1	I/O cable (1.5 m)	Parallel input (NPN) Parallel input (PNP)
3	I/O cable (3 m)	
5	I/O cable (5 m)	

LEC□ Series (For details, refer to the **Web Catalog**.)



AN 1 □

⑩ ⑪ ⑫

⑩ Controller/Driver type∗8

Nil	Without controller/driver	
6N	**LECA6** (Step data input type)	NPN
6P		PNP
1N	**LECP1**∗9 (Programless type)	NPN
1P		PNP
AN	**LECPA**∗9 ∗10 (Pulse input type)	NPN
AP		PNP

⑪ I/O cable length∗11

Nil	Without cable (Without communication plug connector)
1	1.5 m
3	3 m∗12
5	5 m∗12

⑫ Controller/Driver mounting

Nil	Screw mounting
D	DIN rail∗13

∗1 When [M: Sliding bearing] is selected, the max. speed of lead [A] is 400 mm/s (at no-load, horizontal mounting). The speed is also restricted with a horizontal/moment load. Refer to the "Model Selection" on the **Web Catalog**.
∗2 Please contact SMC for non-standard strokes as they are produced as special orders.
∗3 There is a limit for mounting the size 32/40 top side parallel motor types and strokes of 50 mm or less. Refer to the dimensions.
∗4 When "With lock" or "With lock/motor cover" is selected for the top side parallel motor type, the motor body will stick out from the end of the body for size 16/40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.
∗5 Only available for size 25, 32, and 40 sliding bearings (Refer to the "Construction" on the **Web Catalog**.)
∗6 Produced upon receipt of order (Robotic cable only)
∗7 The standard cable should only be used on fixed parts.
For use on moving parts, select the robotic cable.
Refer to the **Web Catalog** if only the actuator cable is required.
∗8 For details on controllers/drivers and compatible motors, refer to the compatible controllers/drivers on the next page.
∗9 Only available for the motor type "Step motor"
∗10 When pulse signals are open collector, order the current limiting resistor (LEC-PA-R-□) on separately.
∗11 When "Without controller/driver" is selected for controller/driver types, I/O cable cannot be selected. Refer to the **Web Catalog** if an I/O cable is required.
∗12 When "Pulse input type" is selected for controller/driver types, pulse input usable only with differential. Only 1.5 m cables u-able with open collector
∗13 The DIN rail is not included. It must be ordered separately.
∗14 Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel input.
Select "Nil," "S," or "T" for DeviceNet® or CC-Link.
Select "Nil," "1," "3," or "5" for parallel input.

⚠Caution

[CE/UKCA-compliant products]

① EMC compliance was tested by combining the electric actuator LEY series and the controller LEC/JXC series.
The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.
② For the incremental (servo motor 24 VDC) specification, EMC compliance was tested by installing a noise filter set (LEC-NFA). Refer to the **Web Catalog** for the noise filter set. Refer to the LECA series Operation Manual for installation.

[UL-compliant products (For the LEC series)]

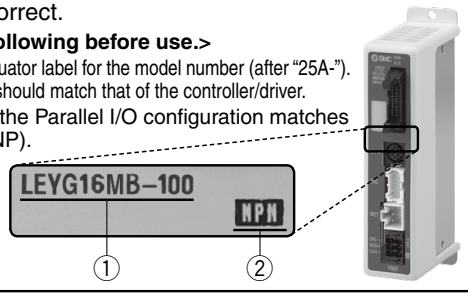
When compliance with UL is required, the electric actuator and controller/driver should be used with a UL1310 Class 2 power supply.

The actuator and controller/driver are sold as a package.

Confirm that the combination of the controller/driver and actuator is correct.

<Check the following before use.>

① Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.
② Check that the Parallel I/O configuration matches (NPN or PNP).



∗ Refer to the Operation Manual for using the products. Please download it via our website: https://www.smcworld.com

Battery-less Absolute (Step Motor 24 VDC)

Guide Rod Type

Secondary Battery Compatible

25A-LEYG Series 25A-LEYG16, 25, 32, 40

CE UKCA RoHS

* For details, refer to the **Web Catalog**.



How to Order

25A – LEYG 25 M ☐ E B – 50 C ☐ – R1 CD17T

- 25A: Series compatible with secondary batteries
- 25: ❶
- M: ❷
- ☐: ❸
- E: ❹
- B: ❺
- 50: ❻
- C: ❼
- ☐: ❽
- R1: ❾
- CD17T: ❿

For details on controllers, refer to the next page.

❶ Size

16
25
32
40

❷ Bearing type*1

M	Sliding bearing
L	Ball bushing bearing

❸ Motor mounting position/Motor cover direction

Symbol	Motor mounting position	Motor cover direction
Nil	Top side parallel	—
D	In-line	—*2
D1		Left*3
D2		Right*3
D3		Top*3
D4		Bottom*3

❹ Motor type

E	Battery-less absolute (Step motor 24 VDC)

❺ Lead [mm]

Symbol	LEYG16	LEYG25	LEYG32/40
A	10	12	16
B	5	6	8
C	2.5	3	4

❻ Stroke*4 *5 [mm]

Stroke	Note	
	Size	Applicable stroke
30 to 200	16	30, 50, 100, 150, 200
30 to 300	25/32/40	30, 50, 100, 150, 200, 250, 300

❼ Motor option*6

C	With motor cover
W	With lock/motor cover

❽ Guide option*7

Nil	Without option
F	With grease retaining function*11

*11 Only applicable for sizes 25, 32, and 40 with the sliding bearing

❾ Actuator cable type/length

Robotic cable [m]

Nil	None	R8	8*8
R1	1.5	RA	10*8
R3	3	RB	15*8
R5	5	RC	20*8

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Replacement Parts/Grease Pack

Applied portion	Order no.
Piston rod	GR-D-005 (5 g)
Guide rod	GR-D-010 (10 g)

* Copper and zinc materials are used for the motors, cables, controllers/drivers.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

⑩ Controller

Nil	Without controller
C□1□□	With controller

C D 1 7 T

Interface (Communication protocol/Input/Output)

Symbol	Type	Number of axes, Special specification: Standard	Number of axes, Special specification: With STO sub-function
5	Parallel input (NPN)	●	
6	Parallel input (PNP)	●	
E	EtherCAT	●	●
9	EtherNet/IP™	●	●
P	PROFINET	●	●
D	DeviceNet®	●	
L	IO-Link	●	●
M	CC-Link	●	

Mounting

7	Screw mounting
8∗9	DIN rail

Number of axes, Special specification

Symbol	Number of axes	Specification
1	Single axis	Standard
F	Single axis	With STO sub-function

Communication plug connector, I/O cable∗10

Symbol	Type	Applicable interface
Nil	Without accessory	—
S	Straight type communication plug connector	DeviceNet® CC-Link Ver. 1.10
T	T-branch type communication plug connector	
1	I/O cable (1.5 m)	Parallel input (NPN) Parallel input (PNP)
3	I/O cable (3 m)	
5	I/O cable (5 m)	

∗1 When [M: Sliding bearing] is selected, the maximum speed of lead [A] is 400 mm/s (at no-load, horizontal mounting). The speed is also restricted with a horizontal/moment load. Refer to the "Model Selection" on the **Web Catalog**.
∗2 Sizes 25, 32, and 40 only
∗3 Size 16 only
∗4 Please contact SMC for non-standard strokes as they are produced as special orders.
∗5 There is a limit for mounting size 16/32/40 top side parallel motor types and strokes of 50 mm or less. Refer to the dimensions.
∗6 When "With lock/motor cover" is selected for the top side parallel motor type, the motor body will stick out from the end of the body for size 16 with strokes of 50 mm or less and size 40 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.
∗7 Only available for size 25, 32, and 40 sliding bearings (Refer to the "Construction" on the **Web Catalog**.)
∗8 Produced upon receipt of order
∗9 The DIN rail is not included. It must be ordered separately.
∗10 Select "Nil" for anything other than DeviceNet®, CC-Link, or parallel input.
Select "Nil," "S," or "T" for DeviceNet® or CC-Link.
Select "Nil," "1," "3," or "5" for parallel input.

⚠Caution

[CE/UKCA-compliant products]
EMC compliance was tested by combining the electric actuator LEY series and the controller JXC series.
The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, compliance with the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify compliance with the EMC directive for the machinery and equipment as a whole.

[Precautions relating to differences in controller versions]
When the JXC series is to be used in combination with the battery-less absolute encoder, use a controller that is version V3.4 or S3.4 or higher. For details, refer to the **Web Catalog**.

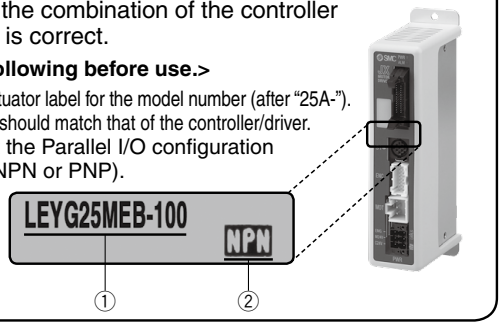
[UL certification]
The JXC series controllers used in combination with electric actuators are UL certified.

The actuator and controller are sold as a package.

Confirm that the combination of the controller and actuator is correct.

<Check the following before use.>

① Check the actuator label for the model number (after "25A-"). This number should match that of the controller/driver.
② Check that the Parallel I/O configuration matches (NPN or PNP).



∗ Refer to the Operation Manual for using the products.
Please download it via our website: https://www.smcworld.com

Type	Step data input type	EtherCAT direct input type	EtherCAT direct input type with STO sub-function	EtherNet/IP™ direct input type	EtherNet/IP™ direct input type with STO sub-function	PROFINET direct input type	PROFINET direct input type with STO sub-function	DeviceNet® direct input type	IO-Link direct input type	IO-Link direct input type with STO sub-function	CC-Link direct input type
											
Series	**JXC51 JXC61**	**JXCE1**	**JXCEF**	**JXC91**	**JXC9F**	**JXCP1**	**JXCPF**	**JXCD1**	**JXCL1**	**JXCLF**	**JXCM1**
Features	Parallel I/O	EtherCAT direct input	EtherCAT direct input with STO sub-function	EtherNet/IP™ direct input	EtherNet/IP™ direct input with STO sub-function	PROFINET direct input	PROFINET direct input with STO sub-function	DeviceNet® direct input	IO-Link direct input	IO-Link direct input with STO sub-function	CC-Link direct input
Compatible motor	Battery-less absolute (Step motor 24 VDC)										
Max. number of step data	64 points										
Power supply voltage	24 VDC										

AC Servo Motor *LECS□ Series*

Guide Rod Type Secondary Battery Compatible

25A-LEYG Series 25A-LEYG25, 32

LECY□ Series ▶ p. 314-8

CE UKCA cULus RoHS

∗ For details, refer to the **Web Catalog**.

How to Order

25A – LEY H G 25 M □ S2 B – 100 □ □ – S 2 A1 □

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫ ⓬ ⓭

❶ Accuracy

Nil	Basic type
H	High-precision type

❷ Size

25
32

❸ Bearing type

M	Sliding bearing
L	Ball bushing bearing

❹ Motor mounting position

Nil	Top side parallel
D	In-line

❺ Motor type∗1

Symbol	Type	Output [W]	❷ Size	⓬ Driver type	Compatible drivers∗3
S2∗1	AC servo motor (Incremental encoder)	100	25	A1/A2	LECSA□-S1
S3		200	32	A1/A2	LECSA□-S3
T6∗2	AC servo motor (Absolute encoder)	100	25	B2	LECSB2-T5
				C2	LECSC2-T5
				S2	LECSS2-T5
T7		200	32	B2	LECSB2-T7
				C2	LECSC2-T7
				S2	LECSS2-T7

∗1 For motor type S2, the compatible driver part number suffix is S1.
∗2 For motor type T6, the compatible driver part number is LECS□2-T5.
∗3 For details on the driver, refer to the **Web Catalog**.

❻ Lead [mm]

Symbol	LEYG25	LEYG32∗1
A	12	16 (20)
B	6	8 (10)
C	3	4 (5)

∗1 The values shown in ( ) are the leads for the size 32 top side parallel motor type. (Equivalent leads which include the pulley ratio [1.25:1])

❼ Stroke [mm]

30	30
to	to
300	300

∗ For details, refer to the applicable stroke table below.
∗ There is a limit for mounting the size 32 top side parallel motor type and strokes of 50 mm or less. Refer to the dimensions.

❽ Motor option

Nil	Without option
B	With lock

❾ Guide option

Nil	Without option
F	With grease retaining function∗1

∗1 Only available for sliding bearings

Replacement Parts/Grease Pack

Applied portion	Order no.
Piston rod	GR-D-005 (5 g)
Guide rod	GR-D-010 (10 g)

❿ Cable type∗1 ∗2

Nil	Without cable
S	Standard cable
R	Robotic cable

∗1 A motor cable and encoder cable are included with the product. (A lock cable is also included if motor option "B: With lock" is selected.)
∗2 Standard cable entry direction is
• Top side parallel: (A) Axis side
• In-line: (B) Counter axis side
(Refer to the **Web Catalog** for details.)

⓫ Cable length∗1 [m]

Nil	Without cable
2	2
5	5
A	10

∗1 The length of the motor, encoder, and lock cables are the same.

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Applicable Stroke Table

●: Standard

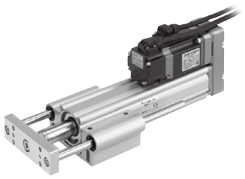
Model \ Stroke [mm]	30	50	100	150	200	250	300	Manufacturable stroke range
LEYG25	●	●	●	●	●	●	●	15 to 300
LEYG32	●	●	●	●	●	●	●	20 to 300

∗ Please contact SMC for non-standard strokes as they are produced as special orders.

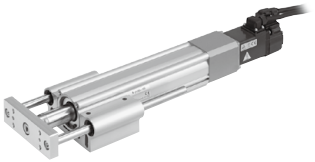
∗ Copper and zinc materials are used for the motors, cables, controllers/drivers.
∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

SMC



Motor mounting position: Parallel



Motor mounting position: In-line

⓬ Driver type*1

	Compatible drivers	Power supply voltage [V]
Nil	Without driver	—
A1	LECSA1-S□	100 to 120
A2	LECSA2-S□	200 to 230
B2	LECSB2-T□	200 to 240
C2	LECSC2-T□	200 to 230
S2	LECSS2-T□	200 to 240

*1 When a driver type is selected, a cable is included. Select the cable type and cable length.
Example)
S2S2: Standard cable (2 m) + Driver (LECSS2)
S2: Standard cable (2 m)
Nil: Without cable and driver

⓭ I/O cable length [m]*1

Nil	Without cable
H	Without cable (Connector only)
1	1.5

*1 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. Refer to the **Web Catalog** if an I/O cable is required.

Compatible Drivers

Driver type	**Pulse input type/ Positioning type** 	**Pulse input type** 	**CC-Link direct input type** 	SSCNETⅢ/H type 
Series	**LECSA**	**LECSB-T**	**LECSC-T**	**LECSS-T**
Number of point tables	Up to 7	Up to 255	Up to 255 (2 stations occupied)	—
Pulse input	○	○	—	—
Applicable network	—	—	CC-Link	SSCNETⅢ/H
Control encoder	Incremental 17-bit encoder	Absolute 22-bit encoder	Absolute 18-bit encoder	Absolute 22-bit encoder
Communication function	USB communication	USB communication, RS422 communication	USB communication, RS422 communication	USB communication
Power supply voltage [V]	100 to 120 VAC (50/60 Hz) 200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)	200 to 230 VAC (50/60 Hz)	200 to 240 VAC (50/60 Hz)

AC Servo Motor *LECY□ Series*

Guide Rod Type Secondary Battery Compatible

25A-LEYG Series 25A-LEYG25, 32

LECS□ Series ▶p. 314-6

CE UKCA

* For details, refer to the Web Catalog.

RoHS

How to Order

25A – LEY H G 25 M □ V6 B – 200 □ □ – S 3 M2 □

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫ ⓬ ⓭

❶ Accuracy

Nil	Basic type
H	High-precision type

❷ Size

25
32

❸ Bearing type

M	Sliding bearing
L	Ball bushing bearing

❹ Motor mounting position

Nil	Top side parallel
D	In-line

❺ Motor type

Symbol	Type	Output [W]	❷ Size	⓬ Driver type	Compatible drivers
V6*1	AC servo motor (Absolute encoder)	100	25	M2	LECYM2-V5
				U2	LECYU2-V5
V7		200	32	M2	LECYM2-V7
				U2	LECYU2-V7

*1 For motor type V6, the compatible driver part number suffix is V5.

❻ Lead [mm]

Symbol	LEYG25	LEYG32*1
A	12	16 (20)
B	6	8 (10)
C	3	4 (5)

*1 The values shown in ( ) are the leads for the top side parallel motor type. (Equivalent leads which include the pulley ratio [1.25:1])

❼ Stroke [mm]

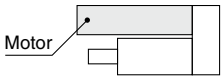
30	30
to	to
300	300

* For details, refer to the applicable stroke table below.
* There is a limit for mounting the size 32 top side parallel motor type and strokes of 50 mm or less. Refer to the dimensions.

❽ Motor option

Nil	Without option
B	With lock

* When "With lock" is selected for the top side parallel motor type, the motor body will stick out from the end of the body for size 25 with strokes of 30 mm or less. Check for interference with workpieces before selecting a model.



❾ Guide option

Nil	Without option
F	With grease retaining function

* Only available for the sliding bearing

❿ Cable type*1

Nil	Without cable
S	Standard cable
R	Robotic cable

*1 A motor cable and encoder cable are included with the product.
The motor cable for lock option is included when the motor with lock option is selected.

⓫ Cable length [m]*1

Nil	Without cable
3	3
5	5
A	10
C	20

*1 The length of the motor and encoder cables are the same. (For with lock)

Applicable Stroke Table

●: Standard

Model \ Stroke [mm]	30	50	100	150	200	250	300	Manufacturable stroke range
LEYG25	●	●	●	●	●	●	●	15 to 300
LEYG32	●	●	●	●	●	●	●	20 to 300

* Please contact SMC for non-standard strokes as they are produced as special orders.

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

Replacement Parts/Grease Pack

Applied portion	Order no.
Piston rod	GR-D-005 (5 g)
Guide rod	GR-D-010 (10 g)

* Copper and zinc materials are used for the motors, cables, controllers/drivers.
* The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.



Motor mounting position: Parallel



Motor mounting position: In-line

⑫ Driver type

	Compatible drivers	Power supply voltage [V]
Nil	Without driver	—
M2	LECYM2-V□	200 to 230
U2	LECYU2-V□	200 to 230

∗ When a driver type is selected, a cable is included. Select the cable type and cable length.

⑬ I/O cable length [m]∗1

Nil	Without cable
H	Without cable (Connector only)
1	1.5

∗1 When "Nil: Without driver" is selected for the driver type, only "Nil: Without cable" can be selected. Refer to the **Web Catalog** if an I/O cable is required.

Compatible Drivers

Driver type	MECHATROLINK-Ⅱ type 	MECHATROLINK-Ⅲ type 
Series	**LECYM**	**LECYU**
Applicable network	MECHATROLINK-Ⅱ	MECHATROLINK-Ⅲ
Control encoder	Absolute 20-bit encoder	
Communication device	USB communication, RS-422 communication	
Power supply voltage [V]	200 to 230 VAC (50/60 Hz)	

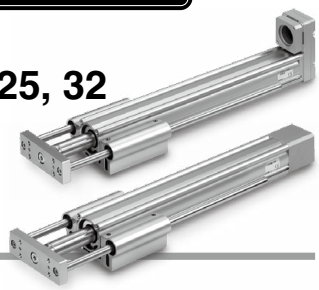
Motorless Type

Electric Actuator
Guide Rod Type

Secondary Battery Compatible

RoHS

25A-LEYG Series 25A-LEYG25, 32



How to Order

25A – LEY H G 25 M □ NZ B – 200 □

Series compatible with secondary batteries

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

❶ Accuracy

Nil	Basic type
H	High-precision type

❷ Size

25
32

❸ Bearing type

M	Sliding bearing
L	Ball bushing bearing

❹ Motor mounting position

Nil	Top side parallel
D	In-line

❺ Mounting type

NZ
NY
NX
NW
NV
NU
NT
NM1
NM2
NM3

∗ Refer to the "Compatible Motors."

❻ Lead [mm]

Symbol	LEYG25	LEYG32∗1
A	12	16 (20)
B	6	8 (10)
C	3	4 (5)

∗1 The values shown in ( ) are the leads for the size 32 top side parallel motor type. Except mounting type NM1 (Equivalent leads which include the pulley ratio [1.25:1])

❼ Stroke [mm]

30	30
to	to
300	300

∗ Refer to the applicable stroke table.

❽ Guide option

Nil	Without option
F	With grease retaining function

∗ Only available for sliding bearing

Applicable Stroke Table

●: Standard

Model \ Stroke [mm]	30	50	100	150	200	250	300	Manufacturable stroke range
LEYG25	●	●	●	●	●	●	●	15 to 300
LEYG32	●	●	●	●	●	●	●	20 to 300

∗ Please contact SMC for non-standard strokes as they are produced as special orders.

Replacement Parts/Grease Pack

Applied portion	Order no.
Piston rod	GR-D-005 (5 g)
Guide rod	GR-D-010 (10 g)

Compatible Motors and Mounting Types∗4

Applicable motor model		Size/Mounting type														
Manufacturer	Series	25						32								
		NZ	NY	NX	NM1	NM2	NM3	NZ	NY	NX	NW	NV	NU	NT	NM1	NM2
Mitsubishi Electric Corporation	MELSERVO JN/J4/J5	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
YASKAWA Electric Corporation	Σ-V/7/X	●∗3	—	—	—	—	—	●	—	—	—	—	—	—	—	—
SANYO DENKI CO., LTD.	SANMOTION R	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
OMRON Corporation	OMNUC G5/1S	●	—	—	—	—	—	—	●	—	—	—	—	—	—	—
Panasonic Corporation	MINAS A5/A6	● (MHMF only)	●	—	—	—	—	—	●	—	—	—	—	—	—	—
FANUC CORPORATION	βis (-B)	●	—	—	—	—	—	● (β1 only)	—	—	●	—	—	—	—	—
NIDEC INSTRUMENTS CORPORATION	S-FLAG	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
KEYENCE CORPORATION	SV/SV2	●∗3	—	—	—	—	—	●	—	—	—	—	—	—	—	—
FUJI ELECTRIC CO., LTD.	ALPHA7	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
MinebeaMitsumi Inc.	Hybrid stepping motors	—	—	—	●∗1	—	●∗2	—	—	—	—	—	—	—	●	—
Shinano Kenshi Co., Ltd.	CSB-BZ	—	—	—	●∗1	—	●∗2	—	—	—	—	—	—	—	—	—
ORIENTAL MOTOR Co., Ltd.	α STEP AR/AZ	—	—	—	—	● AR/AZ (46 only)	—	—	—	—	—	—	—	—	—	●
FASTECH Co., Ltd.	Ezi-SERVO	—	—	—	●	—	—	—	—	—	—	—	—	—	●	—
Rockwell Automation, Inc. (Allen-Bradley)	Kinetix MP/VP/TL	● (TL only)	—	—	—	—	—	—	—	●∗1 (MP/VP only)	—	—	—	● (TL only)	—	—
Beckhoff Automation GmbH	AM 30/31/80/81	●	—	—	—	—	—	—	—	●∗1 (AM80/AM81 only)	—	●∗1 (AM30 only)	● (AM31 only)	—	—	—
Siemens AG	SIMOTICS S-1FK7	—	—	●	—	—	—	—	—	●∗1	—	—	—	—	—	—
Delta Electronics, Inc.	ASDA-A2	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—
ANCA Motion	AMD2000	●	—	—	—	—	—	●	—	—	—	—	—	—	—	—

∗1 Motor mounting position: In-line only ∗2 Motor mounting position: Parallel only

∗3 For some motors, the connector may protrude from the motor body. Be sure to check for interference with the mounting surface before selecting a motor.

∗4 The compatible motors and mounting types are typical examples. Select the mounting type after referring to the "Motor Mounting, Applicable Motor Dimensions" tables on the "Dimensions" pages.

Solid state auto switches should be ordered separately.
Click here for auto switch details.

Applicable auto switches
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

∗ The 25A- series specifications and dimensions are the same as those of the standard model.

For details, refer to the Web Catalog.

25A- Series
Applicable Auto Switches

Applicable Cylinder Series

Auto switches											Air cylinders										
Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Electrical entry direction	Auto switch model	Lead wire length [m] 0.5 Nil	1 M	3 L	5 Z	Pre-wired connector SDPC	CDJP2 ø4 to ø16	CD(B)J2 CDJ2K ø10, ø16	CD85 ø8 to ø12	CD85 ø16 to ø25	CDM2 ø20 to ø40	CD(B)G1 ø20 to ø63	CD(B)G1 ø80, ø100	MDB ø32 to ø100	C(P)96SD ø32 to ø125	CDA2 ø40 to ø100	CDS2 ø125 to ø250
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	In-line	D-M9N-900	●	●	●	○	—	●	●	●	●	●	●	—	●	●	●	●
				3-wire (PNP)		D-M9P-900	●	●	●	○	—	●	●	●	●	●	●	—	●	●	●	●
				2-wire		D-M9B-900	●	●	●	○	—	●	●	●	●	●	●	—	●	●	●	●
				3-wire (NPN)	Perpendicular	D-M9NV-900	●	●	●	○	—	●	●	●	●	●	●	—	●	●	●	●
				3-wire (PNP)		D-M9PV-900	●	●	●	○	—	●	●	●	●	●	●	—	●	●	●	●
				2-wire		D-M9BV-900	●	●	●	○	—	●	●	●	●	●	●	—	●	●	●	●
	Diagnostic indication (2-color indicator)			3-wire (NPN)	In-line	D-M9NW-900	●	●	●	○	—	●	●	●	●	●	●	—	●	●	●	●
				3-wire (PNP)		D-M9PW-900	●	●	●	○	—	●	●	●	●	●	●	—	●	●	●	●
				2-wire		D-M9BW-900	●	●	●	○	○	●	●	●	●	●	●	—	●	●	●	●
				3-wire (NPN)	Perpendicular	D-M9NWV-900	●	●	●	○	—	●	●	●	●	●	●	—	●	●	●	●
				3-wire (PNP)		D-M9PWV-900	●	●	●	○	—	●	●	●	●	●	●	—	●	●	●	●
				2-wire		D-M9BWV-900	●	●	●	○	○	●	●	●	●	●	●	—	●	●	●	●
	—			3-wire (NPN)	In-line	D-Y59A-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				3-wire (PNP)		D-Y7P-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				2-wire		D-Y59B-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				3-wire (NPN)	Perpendicular	D-Y69A-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				3-wire (PNP)		D-Y7PV-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				2-wire		D-Y69B-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
	Diagnostic indication (2-color indicator)			3-wire (NPN)	In-line	D-Y7NW-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				3-wire (PNP)		D-Y7PW-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				2-wire		D-Y7BW-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				3-wire (NPN)	Perpendicular	D-Y7NWV-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				3-wire (PNP)		D-Y7PWV-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				2-wire		D-Y7BWV-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
	—			3-wire (NPN)	In-line	D-G59-900	●	—	●	○	—	—	—	—	—	—	—	●	—	—	—	—
				3-wire (PNP)		D-G5P-900	●	—	●	○	—	—	—	—	—	—	—	●	—	—	—	—
				2-wire		D-K59-900	●	—	●	○	—	—	—	—	—	—	—	●	—	—	—	—
	Diagnostic indication (2-color indicator)			3-wire (NPN)		D-G59W-900	●	—	●	○	—	—	—	—	—	—	—	●	—	—	—	—
				3-wire (PNP)		D-G5PW-900	●	—	●	○	—	—	—	—	—	—	—	●	—	—	—	—
				2-wire		D-K59W-900	●	—	●	○	○	—	—	—	—	—	—	●	—	—	—	—
	—			3-wire (NPN)	In-line	D-F79-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				3-wire (PNP)		D-F7P-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				2-wire		D-J79-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				3-wire (NPN)	Perpendicular	D-F7NV-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				3-wire (PNP)		D-F7PV-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				2-wire		D-F7BV-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
	Diagnostic indication (2-color indicator)			3-wire (NPN)	In-line	D-F79W-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				3-wire (PNP)		D-F7PW-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				2-wire		D-J79W-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				3-wire (NPN)	Perpendicular	D-F7NWV-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				2-wire		D-F7BWV-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
	—			3-wire (NPN)	Perpendicular	D-F8N-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				3-wire (PNP)		D-F8P-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
				2-wire		D-F8B-900	●	—	●	○	—	—	—	—	—	—	—	—	—	—	—	—
Reed auto switch	—	Grommet	Yes	2-wire	In-line	D-A93L-900	—	—	●	—	—	●*1	●	—	●	●	●	—	●	●	●	●
			No			D-A90L-900	—	—	●	—	—	●*1	●	—	●	●	●	—	●	●	●	●
						D-Z80-900	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—
	—		Yes	3-wire (NPN equiv.)	In-line	D-E76A	●	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—
				2-wire		D-E73A	●	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—
			No			D-E80A	●	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—

*1 The D-A90L-900 and D-A93L-900 cannot be mounted on ø4. * Solid state auto switches marked with a "○" are produced upon receipt of order.

Ordering the Auto Switches

Please be aware that the order part numbers for the cylinder mounted and individual auto switches are different.
(Example) Part number for ordering D-M9BWL-900:

- Cylinder mounted type: 25A-CDJ2L16-60Z-M9BWL-B
  (Omit the first "D-" and the last "-900" or "-901".)
- Individual auto switch: D-M9BWL-900
  (Place the order with the part number for auto switch shown in the table above.)

* Lead wire length symbols: 0.5 m.....Nil (Example) M9NW
1 m..... M (Example) M9NWM
3 m..... L (Example) M9NWL
5 m..... Z (Example) M9NWZ

	Compact cylinders													Rodless cylinders													
	C95SD	CDUJ	CDU	CDUK	CDQS(W)	CDQ2(W)		CDBQ2		CDLQ		MDU	CD55	MY1B			MY1M		MY1C		MY1H	MY2C	MY2H/HT	MY3	CY3R	
	ø160, ø200	ø6 to ø20	ø10 to ø32	ø16 to ø32	ø12 to ø25	ø12 to ø100	ø125 to ø200	ø20, ø25	ø32 to ø100	ø20, ø25	ø32 to ø100	ø25 to ø63	ø20 to ø100	ø16 to ø40	ø50	ø63	ø16, ø20	ø25 to ø63	ø16, ø20	ø25 to ø63	ø16 to ø40	ø16, ø25, ø40	ø16, ø25, ø40	ø16 to ø63	ø6 to ø20	ø25 to ø63
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	●	●	●	●	●	●	●	●	●	●	●	●
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	●	●	●	●	●	●	●	●	●	●	—	—
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	●	●	●	●	●	●	●	●	●	●	—	—
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	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	●	●	●	●	●	●	●	●	●	●	—	—
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	●	●	●	●	●	●	●	●	●	●	—	—
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	●	●	●	●	●	●	●	●	●	●	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	—	●	—	●	—	—	—	—	—	●
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	—	●	—	●	—	—	—	—	—	●
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	—	●	—	●	—	—	—	—	—	—
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	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	●	—	●	●	●	●	●	●	●	●	●	●	●	●	—	—	●	—	●	—	●	●	●	●	●	●
	●	—	●	●	●	●	●	●	●	●	●	●	●	●	—	—	●	—	●	—	●	●	●	●	●	●
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Applicable Cylinder Series

Auto switches											
Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Electrical entry direction	Auto switch model	Lead wire length [m]				Pre-wired connector
							0.5 Nil	1 M	3 L	5 Z	SDPC
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	In-line	**D-M9N-900**	●	●	●	○	—
				3-wire (PNP)		**D-M9P-900**	●	●	●	○	—
				2-wire		**D-M9B-900**	●	●	●	○	—
				3-wire (NPN)	Perpendicular	**D-M9NV-900**	●	●	●	○	—
				3-wire (PNP)		**D-M9PV-900**	●	●	●	○	—
				2-wire		**D-M9BV-900**	●	●	●	○	—
	Diagnostic indication (2-color indicator)			3-wire (NPN)	In-line	**D-M9NW-900**	●	●	●	○	—
				3-wire (PNP)		**D-M9PW-900**	●	●	●	○	—
				2-wire		**D-M9BW-900**	●	●	●	○	○
				3-wire (NPN)	Perpendicular	**D-M9NWV-900**	●	●	●	○	—
				3-wire (PNP)		**D-M9PWV-900**	●	●	●	○	—
				2-wire		**D-M9BWV-900**	●	●	●	○	○
	—			3-wire (NPN)	In-line	**D-Y59A-900**	●	—	●	○	—
				3-wire (PNP)		**D-Y7P-900**	●	—	●	○	—
				2-wire		**D-Y59B-900**	●	—	●	○	—
				3-wire (NPN)	Perpendicular	**D-Y69A-900**	●	—	●	○	—
				3-wire (PNP)		**D-Y7PV-900**	●	—	●	○	—
				2-wire		**D-Y69B-900**	●	—	●	○	—
	Diagnostic indication (2-color indicator)			3-wire (NPN)	In-line	**D-Y7NW-900**	●	—	●	○	—
				3-wire (PNP)		**D-Y7PW-900**	●	—	●	○	—
				2-wire		**D-Y7BW-900**	●	—	●	○	—
				3-wire (NPN)	Perpendicular	**D-Y7NWV-900**	●	—	●	○	—
				3-wire (PNP)		**D-Y7PWV-900**	●	—	●	○	—
				2-wire		**D-Y7BWV-900**	●	—	●	○	—
	—			3-wire (NPN)	In-line	**D-G59-900**	●	—	●	○	—
				3-wire (PNP)		**D-G5P-900**	●	—	●	○	—
				2-wire		**D-K59-900**	●	—	●	○	—
	Diagnostic indication (2-color indicator)			3-wire (NPN)		**D-G59W-900**	●	—	●	○	—
				3-wire (PNP)		**D-G5PW-900**	●	—	●	○	—
				2-wire		**D-K59W-900**	●	—	●	○	○
	—			3-wire (NPN)	In-line	**D-F79-900**	●	—	●	○	—
				3-wire (PNP)		**D-F7P-900**	●	—	●	○	—
				2-wire		**D-J79-900**	●	—	●	○	—
				3-wire (NPN)	Perpendicular	**D-F7NV-900**	●	—	●	○	—
				3-wire (PNP)		**D-F7PV-900**	●	—	●	○	—
				2-wire		**D-F7BV-900**	●	—	●	○	—
	Diagnostic indication (2-color indicator)			3-wire (NPN)	In-line	**D-F79W-900**	●	—	●	○	—
				3-wire (PNP)		**D-F7PW-900**	●	—	●	○	—
				2-wire		**D-J79W-900**	●	—	●	○	—
				3-wire (NPN)		**D-F7NWV-900**	●	—	●	○	—
				2-wire		**D-F7BWV-900**	●	—	●	○	—
	—			3-wire (NPN)	Perpendicular	**D-F8N-900**	●	—	●	○	—
				3-wire (PNP)		**D-F8P-900**	●	—	●	○	—
				2-wire		**D-F8B-900**	●	—	●	○	—
Reed auto switch	—	Grommet	Yes	2-wire	In-line	**D-A93L-900**	—	—	●	—	—
			No			**D-A90L-900**	—	—	●	—	—
						D-Z80-900	—	—	●	—	—
	—		Yes	3-wire (NPN equiv.)	In-line	**D-E76A**	●	—	●	—	—
				2-wire		**D-E73A**	●	—	●	—	—
			No			**D-E80A**	●	—	●	—	—

	Table cylinders							Guide cylinders									With Lock			Clamp/Stopper		
	MXH	MXS	MXQ□	MXQ	MXF	MXW	MXP	MGJ	MGP	MGPK	MGG	CXSJ	CXS	CDBXW		CDBPXW	MDWB	CDNS	C(P)96ND	MK	RSQ	RSH
	ø6 to ø20	ø6 to ø25	ø6 to ø25	ø6 to ø25	ø8 to ø20	ø8 to ø25	ø6 to ø16	ø6, ø10	ø12 to ø100	ø12 to ø50	ø20 to ø50	ø6 to ø32	ø6 to ø32	ø10	ø16 to ø32	ø10 to ø32	ø32 to ø100	ø125 to ø160	ø32 to ø100	ø12 to ø63	ø12 to ø50	ø20, ø32
	●	●	●	●	●	●	●	—	●	●	●	●	—	—	—	—	●	●	●	●	●	●
	●	●	●	●	●	●	●	—	●	●	●	●	—	—	—	—	●	●	●	●	●	●
	●	●	●	●	●	●	●	—	●	●	●	●	—	—	—	—	●	●	●	●	●	●
	●	●	●	●	●	●	●	—	●	●	—	●	—	—	—	—	●	●	●	●	●	●
	●	●	●	●	●	●	●	—	●	●	—	●	—	—	—	—	●	●	●	●	●	●
	●	●	●	●	●	●	●	—	●	●	—	●	—	—	—	—	●	●	●	●	●	●
	●	●	●	●	●	●	●	—	●	●	●	●	—	—	—	—	●	●	●	●	●	●
	●	●	●	●	●	●	●	—	●	●	●	●	—	—	—	—	●	●	●	●	●	●
	●	●	●	●	●	●	●	—	●	●	●	●	—	—	—	—	●	●	●	●	●	●
	●	●	●	●	●	●	●	—	●	●	—	●	—	—	—	—	●	●	●	●	●	●
	●	●	●	●	●	●	●	—	●	●	—	●	—	—	—	—	●	●	●	●	●	●
	●	●	●	●	●	●	●	—	●	●	—	●	—	—	—	—	●	●	●	●	●	●
	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	●
	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	●
	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	●
	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	●
	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	●
	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	●
	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	●
	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	●
	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	●
	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	●
	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	●
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	—	—	—	—	—	—
	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	●	●	●	●	●	●	●	—	●	●	●	●	—	—	—	—	●	●	●	●	●	—
	●	●	●	●	●	●	●	—	●	●	●	●	—	—	—	—	●	—	●	●	●	—
	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	●
	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—

Applicable Rotary Actuator Series

Auto switches												Rotary actuators			
Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Electrical entry direction	Auto switch model	Lead wire length [m] 0.5 Nil	1 M	3 L	5 Z	Pre-wired connector SDPC	MSQA MSQB 10 to 200	MSQ MSZ 10 to 50	MDSUB 1, 3	MDSUB 7, 20
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	In-line	D-M9N-900	●	●	●	○	—	●	●	—	—
				3-wire (PNP)		D-M9P-900	●	●	●	○	—	●	●	—	—
				2-wire		D-M9B-900	●	●	●	○	—	●	●	—	—
				3-wire (NPN)	Perpendicular	D-M9NV-900	●	●	●	○	—	●	●	—	—
				3-wire (PNP)		D-M9PV-900	●	●	●	○	—	●	●	—	—
				2-wire		D-M9BV-900	●	●	●	○	—	●	●	—	—
	Diagnostic indication (2-color indicator)			3-wire (NPN)	In-line	D-M9NW-900	●	●	●	○	—	●	●	—	—
				3-wire (PNP)		D-M9PW-900	●	●	●	○	—	●	●	—	—
				2-wire		D-M9BW-900	●	●	●	○	○	●	●	—	—
				3-wire (NPN)	Perpendicular	D-M9NWV-900	●	●	●	○	—	●	●	—	—
				3-wire (PNP)		D-M9PWV-900	●	●	●	○	—	●	●	—	—
				2-wire		D-M9BWV-900	●	●	●	○	○	●	●	—	—
	—			3-wire (NPN)	In-line	D-Y59A-900	●	—	●	○	—	—	—	—	—
				3-wire (PNP)		D-Y7P-900	●	—	●	○	—	—	—	—	—
				2-wire		D-Y59B-900	●	—	●	○	—	—	—	—	—
				3-wire (NPN)	Perpendicular	D-Y69A-900	●	—	●	○	—	—	—	—	—
				3-wire (PNP)		D-Y7PV-900	●	—	●	○	—	—	—	—	—
				2-wire		D-Y69B-900	●	—	●	○	—	—	—	—	—
	Diagnostic indication (2-color indicator)			3-wire (NPN)	In-line	D-Y7NW-900	●	—	●	○	—	—	—	—	—
				3-wire (PNP)		D-Y7PW-900	●	—	●	○	—	—	—	—	—
				2-wire		D-Y7BW-900	●	—	●	○	—	—	—	—	—
				3-wire (NPN)	Perpendicular	D-Y7NWV-900	●	—	●	○	—	—	—	—	—
				3-wire (PNP)		D-Y7PWV-900	●	—	●	○	—	—	—	—	—
				2-wire		D-Y7BWV-900	●	—	●	○	—	—	—	—	—
	—			3-wire (NPN)	In-line	D-S991-901∗1	●	—	●	○	—	—	—	●	—
						D-S992-901∗1	●	—	●	○	—	—	—	●	—
				3-wire (PNP)		D-S9P1-901∗1	●	—	●	○	—	—	—	●	—
						D-S9P2-901∗1	●	—	●	○	—	—	—	●	—
				2-wire		D-T991-901∗1	●	—	●	○	—	—	—	●	—
						D-T992-901∗1	●	—	●	○	—	—	—	●	—
				3-wire (NPN)	Perpendicular	D-S99V1-901∗1	●	—	●	○	—	—	—	●	—
						D-999V2-901∗1	●	—	●	○	—	—	—	●	—
				3-wire (PNP)		D-S9PV1-901∗1	●	—	●	○	—	—	—	●	—
						D-S9PV2-901∗1	●	—	●	○	—	—	—	●	—
				2-wire		D-T99V1-901∗1	●	—	●	○	—	—	—	●	—
						D-T99V2-901∗1	●	—	●	○	—	—	—	●	—
				3-wire (NPN)	In-line	D-S791-901∗1	●	—	●	○	—	—	—	—	●
						D-S792-901∗1	●	—	●	○	—	—	—	—	●
				3-wire (PNP)		D-S7P1-901∗1	●	—	●	○	—	—	—	—	●
						D-S7P2-901∗1	●	—	●	○	—	—	—	—	●
				2-wire		D-T791-901∗1	●	—	●	○	—	—	—	—	●
						D-T792-901∗1	●	—	●	○	—	—	—	—	●
Reed auto switch	—	Grommet	Yes	2-wire	In-line	D-A93L-900	—	—	●	—	—	●	●	—	—
			No			D-A90L-900	—	—	●	—	—	●	●	—	—

∗ Solid state auto switches marked with a "○" are produced upon receipt of order.

∗ Note that the individual auto switch with part number of "S□□" and "T□□" have the right-hand-type (□□□1) and the left-hand-type (□□□2).
When you order the actuator with two auto switches at the part number of the actuator, one each of the right-hand-type and the left-hand-type are shipped together with the actuator.

∗ When the MHZ2-10, MHZL2-10, MHL2-10 to 40, or MHS3-32 air gripper is ordered with auto switch, mounting brackets are supplied with the air gripper. When the auto switch is used at the square groove on the side with other cylinder bore sizes, or ordering only auto switches separately, mounting brackets (90-BMG2-012) are required. Order them separately. For details, refer to page 325.

Ordering the Auto Switches

Please be aware that the order part numbers for the rotary actuator mounted and individual auto switches are different.
(Example) Part number for ordering D-M9BWL-900:
- Rotary actuator mounted type: 25A-MSQB-10A-M9BWL
  (Omit the first "D-" and the last "-900" or "-901".)
- Individual auto switch: D-M9BWL-900
  (Place the order with the part number for auto switch shown in the table above.)

∗ Lead wire length symbols: 0.5 m……Nil (Example) M9NW
1 m…… M (Example) M9NWM
3 m…… L (Example) M9NWL
5 m…… Z (Example) M9NWZ

∗1 Lead wire for a solid state auto switch with "-901" at the end of part number has been changed to a cable for a robot use.

Applicable Air Gripper Series

Auto switches											Air grippers							
Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Electrical entry direction	Auto switch model	Lead wire length [m] 0.5 Nil	1 M	3 L	5 Z	Pre-wired connector SDPC	JMHZ2 8 to 20	JMHZ2-X6900 8 to 20	JMHZ2-X7460 8 to 20	MHZ2 10 to 40	MHZL2 10 to 25	MHZJ2 10 to 25	MHZJ2-X6100 32, 40	MHZL2-X5955 10 to 20
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	In-line	D-M9N-900	●	●	●	○	—	●	●	●	●	●	●	●	●
				3-wire (PNP)		D-M9P-900	●	●	●	○	—	●	●	●	●	●	●	●	●
				2-wire		D-M9B-900	●	●	●	○	—	●	●	●	●	●	●	●	●
				3-wire (NPN)	Perpendicular	D-M9NV-900	●	●	●	○	—	●	●	●	●	●	●	●	●
				3-wire (PNP)		D-M9PV-900	●	●	●	○	—	●	●	●	●	●	●	●	●
				2-wire		D-M9BV-900	●	●	●	○	—	●	●	●	●	●	●	●	●
	Diagnostic indication (2-color indicator)			3-wire (NPN)	In-line	D-M9NW-900	●	●	●	○	—	●	●	●	●	●	●	●	●
				3-wire (PNP)		D-M9PW-900	●	●	●	○	—	●	●	●	●	●	●	●	●
				2-wire		D-M9BW-900	●	●	●	○	○	●	●	●	●	●	●	●	●
				3-wire (NPN)	Perpendicular	D-M9NWV-900	●	●	●	○	—	●	●	●	●	●	●	●	●
				3-wire (PNP)		D-M9PWV-900	●	●	●	○	—	●	●	●	●	●	●	●	●
				2-wire		D-M9BWV-900	●	●	●	○	○	●	●	●	●	●	●	●	●
	—			3-wire (NPN)	In-line	D-Y59A-900	●	—	●	○	—	—	—	—	●	●	—	—	—
				3-wire (PNP)		D-Y7P-900	●	—	●	○	—	—	—	—	●	●	—	—	—
				2-wire		D-Y59B-900	●	—	●	○	—	—	—	—	●	●	—	—	—
				3-wire (NPN)	Perpendicular	D-Y69A-900	●	—	●	○	—	—	—	—	●	●	—	—	—
				3-wire (PNP)		D-Y7PV-900	●	—	●	○	—	—	—	—	●	●	—	—	—
				2-wire		D-Y69B-900	●	—	●	○	—	—	—	—	●	●	—	—	—
	Diagnostic indication (2-color indicator)			3-wire (NPN)	In-line	D-Y7NW-900	●	—	●	○	—	—	—	—	●	●	—	—	—
				3-wire (PNP)		D-Y7PW-900	●	—	●	○	—	—	—	—	●	●	—	—	—
				2-wire		D-Y7BW-900	●	—	●	○	—	—	—	—	●	●	—	—	—
				3-wire (NPN)	Perpendicular	D-Y7NWV-900	●	—	●	○	—	—	—	—	●	●	—	—	—
				3-wire (PNP)		D-Y7PWV-900	●	—	●	○	—	—	—	—	●	●	—	—	—
				2-wire		D-Y7BWV-900	●	—	●	○	—	—	—	—	●	●	—	—	—
	—			3-wire (NPN)	In-line	D-S991-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
						D-S992-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
				3-wire (PNP)		D-S9P1-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
						D-S9P2-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
				2-wire		D-T991-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
						D-T992-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
				3-wire (NPN)	Perpendicular	D-S99V1-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
						D-999V2-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
				3-wire (PNP)		D-S9PV1-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
						D-S9PV2-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
				2-wire		D-T99V1-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
						D-T99V2-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
				3-wire (NPN)	In-line	D-S791-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
						D-S792-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
				3-wire (PNP)		D-S7P1-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
						D-S7P2-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
				2-wire		D-T791-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
						D-T792-901*1	●	—	●	○	—	—	—	—	—	—	—	—	—
Reed auto switch	—	Grommet	Yes	2-wire	In-line	D-A93L-900	—	—	●	—	—	—	—	—	—	—	—	—	—
			No			D-A90L-900	—	—	●	—	—	—	—	—	—	—	—	—	—

∗ Solid state auto switches marked with a "○" are produced upon receipt of order.

∗ Note that the individual auto switch with part number of "S□□" and "T□□" have the right-hand-type (□□□1) and the left-hand-type (□□□2).
When you order the actuator with two auto switches at the part number of the actuator, one each of the right-hand-type and the left-hand-type are shipped together with the actuator.

∗ When the MHZ2-10, MHZL2-10, MHL2-10 to 40, or MHS3-32 air gripper is ordered with auto switch, mounting brackets are supplied with the air gripper. When the auto switch is used at the square groove on the side with other cylinder bore sizes, or ordering only auto switches separately, mounting brackets (90-BMG2-012) are required. Order them separately. For details, refer to page 325.

Ordering the Auto Switches

Please be aware that the order part numbers for the air gripper mounted and individual auto switches are different.
(Example) Part number for ordering D-M9BWL-900:

- Air gripper mounted type: 25A-MHZ2-16D-M9BWL
  (Omit the first "D-" and the last "-900" or "-901".)
- Individual auto switch: D-M9BWL-900
  (Place the order with the part number for auto switch shown in the table above.)

∗ Lead wire length symbols: 0.5 m.....Nil (Example) M9NW
1 m..... M (Example) M9NWM
3 m..... L (Example) M9NWL
5 m..... Z (Example) M9NWZ

∗1 Lead wire for a solid state auto switch with "-901" at the end of part number has been changed to a cable for a robot use.

Applicable Air Gripper Series

Auto switches											Air grippers						
Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Electrical entry direction	Auto switch model	Lead wire length [m] 0.5 Nil	1 M	3 L	5 Z	Pre-wired connector SDPC	MHL2-Z 10 to 40	MHL2 10 to 40	MHF2 8 to 32	MHS3 MHS4 16 to 32	MHSJ3 16 to 32	MHY2 16 to 25	MHW2 20 to 50
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	In-line	D-M9N-900	●	●	●	○	—	●	●	●	●	●	●	●
				3-wire (PNP)		D-M9P-900	●	●	●	○	—	●	●	●	●	●	●	●
				2-wire		D-M9B-900	●	●	●	○	—	●	●	●	●	●	●	●
				3-wire (NPN)	Perpendicular	D-M9NV-900	●	●	●	○	—	●	●	●	●	●	●	●
				3-wire (PNP)		D-M9PV-900	●	●	●	○	—	●	●	●	●	●	●	●
				2-wire		D-M9BV-900	●	●	●	○	—	●	●	●	●	●	●	●
	Diagnostic indication (2-color indicator)			3-wire (NPN)	In-line	D-M9NW-900	●	●	●	○	—	●	●	●	●	●	●	●
				3-wire (PNP)		D-M9PW-900	●	●	●	○	—	●	●	●	●	●	●	●
				2-wire		D-M9BW-900	●	●	●	○	○	●	●	●	●	●	●	●
				3-wire (NPN)	Perpendicular	D-M9NWV-900	●	●	●	○	—	●	●	●	●	●	●	●
				3-wire (PNP)		D-M9PWV-900	●	●	●	○	—	●	●	●	●	●	●	●
				2-wire		D-M9BWV-900	●	●	●	○	○	●	●	●	●	●	●	●
	—			3-wire (NPN)	In-line	D-Y59A-900	●	—	●	○	—	●	●	—	—	—	—	●
				3-wire (PNP)		D-Y7P-900	●	—	●	○	—	●	●	—	—	—	—	●
				2-wire		D-Y59B-900	●	—	●	○	—	●	●	—	—	—	—	●
				3-wire (NPN)	Perpendicular	D-Y69A-900	●	—	●	○	—	●	●	—	—	—	—	●
				3-wire (PNP)		D-Y7PV-900	●	—	●	○	—	●	●	—	—	—	—	●
				2-wire		D-Y69B-900	●	—	●	○	—	●	●	—	—	—	—	●
	Diagnostic indication (2-color indicator)			3-wire (NPN)	In-line	D-Y7NW-900	●	—	●	○	—	●	●	—	—	—	—	●
				3-wire (PNP)		D-Y7PW-900	●	—	●	○	—	●	●	—	—	—	—	●
				2-wire		D-Y7BW-900	●	—	●	○	—	●	●	—	—	—	—	●
				3-wire (NPN)	Perpendicular	D-Y7NWV-900	●	—	●	○	—	●	●	—	—	—	—	●
				3-wire (PNP)		D-Y7PWV-900	●	—	●	○	—	●	●	—	—	—	—	●
				2-wire		D-Y7BWV-900	●	—	●	○	—	●	●	—	—	—	—	●
	—			3-wire (NPN)	In-line	D-S991-901*1	●	—	●	○	—	—	—	—	—	—	—	—
						D-S992-901*1	●	—	●	○	—	—	—	—	—	—	—	—
				3-wire (PNP)		D-S9P1-901*1	●	—	●	○	—	—	—	—	—	—	—	—
						D-S9P2-901*1	●	—	●	○	—	—	—	—	—	—	—	—
				2-wire		D-T991-901*1	●	—	●	○	—	—	—	—	—	—	—	—
						D-T992-901*1	●	—	●	○	—	—	—	—	—	—	—	—
				3-wire (NPN)	Perpendicular	D-S99V1-901*1	●	—	●	○	—	—	—	—	—	—	—	—
						D-999V2-901*1	●	—	●	○	—	—	—	—	—	—	—	—
				3-wire (PNP)		D-S9PV1-901*1	●	—	●	○	—	—	—	—	—	—	—	—
						D-S9PV2-901*1	●	—	●	○	—	—	—	—	—	—	—	—
				2-wire		D-T99V1-901*1	●	—	●	○	—	—	—	—	—	—	—	—
						D-T99V2-901*1	●	—	●	○	—	—	—	—	—	—	—	—
				3-wire (NPN)	In-line	D-S791-901*1	●	—	●	○	—	—	—	—	—	—	—	—
						D-S792-901*1	●	—	●	○	—	—	—	—	—	—	—	—
				3-wire (PNP)		D-S7P1-901*1	●	—	●	○	—	—	—	—	—	—	—	—
						D-S7P2-901*1	●	—	●	○	—	—	—	—	—	—	—	—
				2-wire		D-T791-901*1	●	—	●	○	—	—	—	—	—	—	—	—
						D-T792-901*1	●	—	●	○	—	—	—	—	—	—	—	—
Reed auto switch	—	Grommet	Yes	2-wire	In-line	D-A93L-900	—	—	●	—	—	—	—	—	—	—	—	—
			No			D-A90L-900	—	—	●	—	—	—	—	—	—	—	—	—

∗ Solid state auto switches marked with a "○" are produced upon receipt of order.

∗ Note that the individual auto switch with part number of "S□□" and "T□□" have the right-hand-type (□□□1) and the left-hand-type (□□□2).
When you order the actuator with two auto switches at the part number of the actuator, one each of the right-hand-type and the left-hand-type are shipped together with the actuator.

∗ When the MHZ2-10, MHZL2-10, MHL2-10 to 40, or MHS3-32 air gripper is ordered with auto switch, mounting brackets are supplied with the air gripper. When the auto switch is used at the square groove on the side with other cylinder bore sizes, or ordering only auto switches separately, mounting brackets (90-BMG2-012) are required. Order them separately. For details, refer to page 325.

Ordering the Auto Switches

Please be aware that the order part numbers for the air gripper mounted and individual auto switches are different.
(Example) Part number for ordering D-M9BWL-900:
- Air gripper mounted type: 25A-MHZ2-16D-M9BWL
  (Omit the first "D-" and the last "-900" or "-901".)
- Individual auto switch: D-M9BWL-900
  (Place the order with the part number for auto switch shown in the table above.)

∗ Lead wire length symbols: 0.5 m.....Nil (Example) M9NW
1 m..... M (Example) M9NWM
3 m..... L (Example) M9NWL
5 m..... Z (Example) M9NWZ

∗1 Lead wire for a solid state auto switch with "-901" at the end of part number has been changed to a cable for a robot use.

Applicable Electric Actuator Series

Auto switches											Electric actuators			
Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Electrical entry direction	Auto switch model	Lead wire length [m]				Pre-wired connector	LEJS	LEKFS	LEY	LEYG
							0.5 Nil	1 M	3 L	5 Z	SDPC	40 to 63	16 to 40	16 to 40	16 to 40
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	In-line	D-M9N-900	●	●	●	○	—	●	●	●	●
				3-wire (PNP)		D-M9P-900	●	●	●	○	—	●	●	●	●
				2-wire		D-M9B-900	●	●	●	○	—	●	●	●	●
				3-wire (NPN)	Perpendicular	D-M9NV-900	●	●	●	○	—	●	●	●	●
				3-wire (PNP)		D-M9PV-900	●	●	●	○	—	●	●	●	●
				2-wire		D-M9BV-900	●	●	●	○	—	●	●	●	●
	Diagnostic indication (2-color indicator)			3-wire (NPN)	In-line	D-M9NW-900	●	●	●	○	—	●	●	●	●
				3-wire (PNP)		D-M9PW-900	●	●	●	○	—	●	●	●	●
				2-wire		D-M9BW-900	●	●	●	○	○	●	●	●	●
				3-wire (NPN)	Perpendicular	D-M9NWV-900	●	●	●	○	—	●	●	●	●
				3-wire (PNP)		D-M9PWV-900	●	●	●	○	—	●	●	●	●
				2-wire		D-M9BWV-900	●	●	●	○	○	●	●	●	●

∗ Solid state auto switches marked with a "○" are produced upon receipt of order.
∗ Auto switches cannot be ordered with the actuator part number. They should be ordered separately. Please refer below for ordering.

Ordering the Auto Switches

• Individual auto switch: D-M9BWL-900
(Place the order with the part number for auto switch shown in the table above.)

∗ Lead wire length symbols: 0.5 m..... Nil (Example) M9NW
1 m..... M (Example) M9NWM
3 m..... L (Example) M9NWL
5 m..... Z (Example) M9NWZ

25A- Series
Auto Switch Mounting

Refer to pages 315 to 322 for the cylinder series and auto switch combinations that are actually possible.

Band Mounting Type

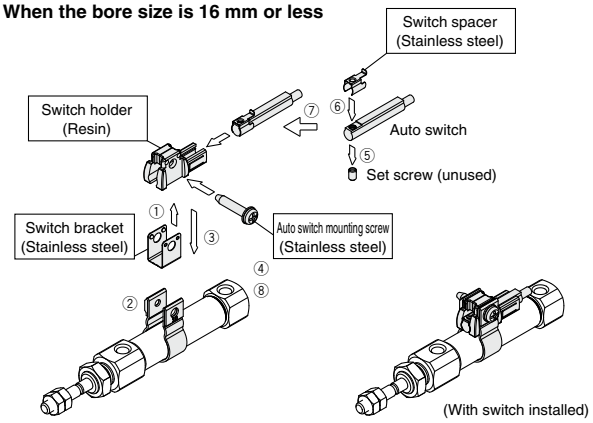
Target auto switches: D-M9□-900, D-M9□W-900, D-M9BWSDPC-900, D-M9BWVSDPC-900, D-A90L-900, D-A93L-900

Auto Switch Mounting Bracket Part Nos.

Cylinder series	Applicable bore size [mm]											
	8	10	12	16	20	25	32	40	50	63	80	100
25A-CDJ2 25A-CDJ2K 25A-CDBJ2	—	∗1 25A-BJ7-010S	—	∗1 25A-BJ7-016S	—	—	—	—	—	—	—	—
25A-CD85∗4	25A-BJ7-008S	25A-BJ7-010S	25A-BJ7-012S	25A-BJ7-016S	25A-BM6-020S	25A-BM6-025S	—	—	—	—	—	—
25A-CDM2	—	—	—	—	∗2 25A-BM6-020S	∗2 25A-BM6-025S	∗2 25A-BM6-032S	∗2 25A-BM6-040S	—	—	—	—
25A-CDG1 25A-CDBG1	—	—	—	—	∗3 25A-BMA4-020S	∗3 25A-BMA4-025S	∗3 25A-BMA4-032S	∗3 25A-BMA4-040S	∗3 25A-BMA4-050S	∗3 25A-BMA4-063S	—	—
25A-MGG	—	—	—	—	∗3 25A-BMA4-020S	∗3 25A-BMA4-025S	∗3 25A-BMA4-032S	∗3 25A-BMA4-040S	∗3 25A-BMA4-050S	—	—	—

∗1 The combination of the auto switch mounting band (BJ2-□□□S/with a stainless steel screw) and the holder set (BJ3-1).
∗2 The combination of the auto switch mounting band (for BM2-□□□) and stainless steel screw (BBA4), and the holder set (BJ3-1).
∗3 The combination of the auto switch mounting band (for BMA2-□□□) and stainless steel screw (BBA4), and the holder set (BJ3-1).
∗4 D-A90L-900 and D-A93L-900 auto switches cannot be mounted on bore size ø8, ø10, or ø12 cylinders.

When the bore size is 16 mm or less



When the bore size is 20 mm or more

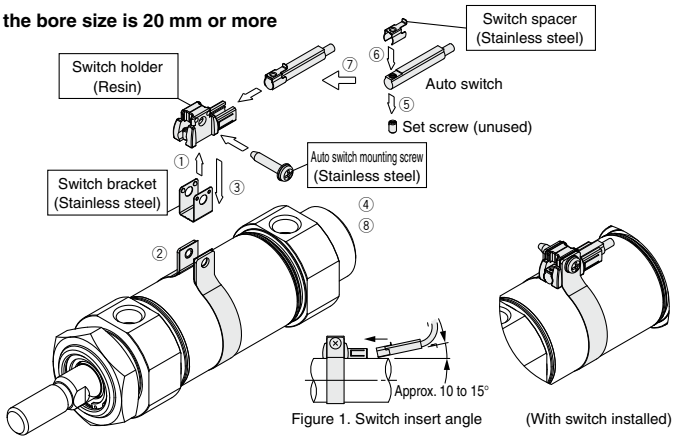
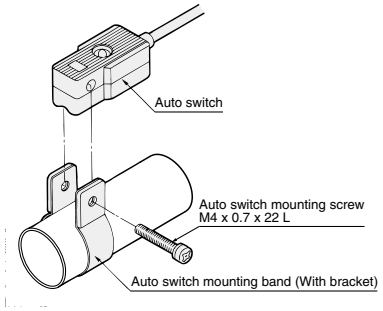


Figure 1. Switch insert angle

Applicable cylinder series: 25A-CDG1, 25A-CDBG1
Applicable auto switches : D-G5□-900, D-K59-900, D-G5□W-900, D-K59W-900, D-K59WSDPC-900

Auto Switch Mounting Bracket Part Nos.

Cylinder series	Applicable bore size [mm]	
	80	100
25A-CDG1 25A-CDBG1	BA-08S	BA-10S



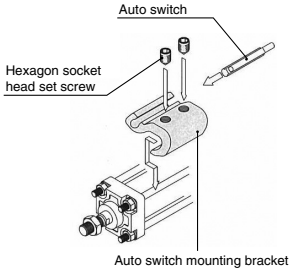
Tie-rod Mounting Type

Target auto switches: D-M9□-900, D-M9□V-900, D-M9□W-900, D-M9□WV-900, D-M9BWSDPC-900, D-M9BWVSDPC-900 : D-A90L-900, D-A93L-900

Auto Switch Mounting Bracket Part Nos.

Cylinder series	Applicable bore size [mm]									
	32	40	50	63	80	100	125	140	160	200
25A-MDB	90-BMB5-032	90-BMB5-032	90-BA7-040	90-BA7-040	90-BA7-063	90-BA7-063	—	—	—	—
25A-C96SD 25A-C96ND	90-BMB5-032	90-BMB5-032	90-BA7-040	90-BA7-040	90-BA7-063	90-BA7-063	∗1 90-BA7-080	—	—	—
25A-CDA2	—	90-BA7-040	90-BA7-040	90-BA7-063	90-BA7-080	90-BA7-080	—	—	—	—
25A-CDS2 25A-CDNS	—	—	—	—	—	—	25A-BS6-125	25A-BS6-125	25A-BS6-160	—
25A-MDWB	90-BMB5-032	90-BMB5-032	90-BA7-040	90-BA7-040	90-BA7-063	90-BA7-063	—	—	—	—
25A-C95SD	—	—	—	—	—	—	—	—	25A-BS6-160	25A-BS6-160

∗1 Only applicable to the 25A-C96SD



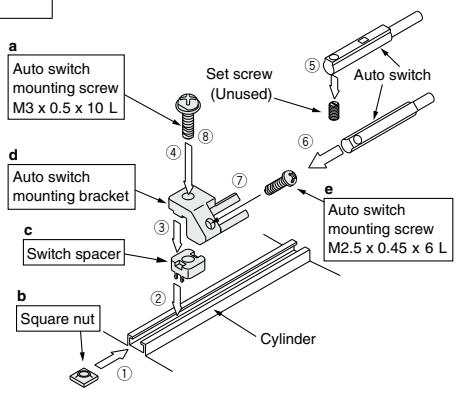
Refer to pages 315 to 322 for the cylinder series and auto switch combinations that are actually possible.

Rail Mounting Type

Target auto switches: D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900, D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900, D-A90L-900, D-A93L-900

Auto Switch Mounting Bracket Part No.

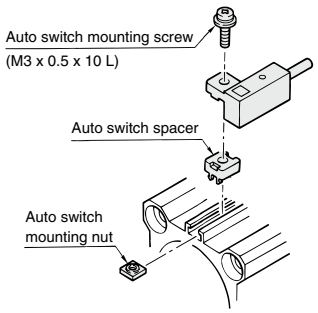
Cylinder series	Applicable bore size [mm]							
	20	25	32	40	50	63	80	100
25A-CDBQ2 25A-CDLQ	—	—	25A-BQ2-032			—	—	—



Target auto switches: D-F79-900, D-F7P-900, D-J79-900, D-F7NV-900, D-F7PV-900, D-F7BV-900, D-F79W-900, D-F7PW-900, D-J79W-900, D-F7NWV-900, D-F7BWV-900

Auto Switch Mounting Bracket Part No.

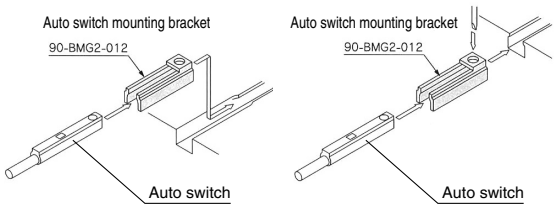
Cylinder series	Applicable bore size [mm]							
	20	25	32	40	50	63	80	100
25A-CDBQ2 25A-CDLQ	—	—	25A-BQ-2					



Refer to pages 315 to 322 for the cylinder/air gripper series and auto switch combinations that are actually possible.
For combinations other than those shown in the table below, direct mounting without the use of auto switch mounting brackets is possible.

Direct Mounting Type

Target auto switches: D-M9□-900, D-M9□V-900, D-M9□W-900,
D-M9□WV-900, D-M9BWSDPC-900,
D-M9BWVSDPC-900
D-F8□-900
: D-A90L-900, D-A93L-900



Auto Switch Mounting Bracket Part Nos.

Cylinder series / Air gripper series	Applicable bore size [mm]													
	4	6	10	12	15	16	20	25	32	40	50	63	80	100
25A-MDU	—	—	—	—	—	—	—	MUZ-025	MUZ-025	MUZ-025	MUZ-025	MUZ-025	—	—
25A-MY1B	—	—	—	—	—	Not required	Not required	BMY3-016	BMY3-016	BMY3-016	—	90-BMG2-012	—	—
25A-MY1M	—	—	—	—	—	Not required	Not required	90-BMG2-012	90-BMG2-012	90-BMG2-012	90-BMG2-012	90-BMG2-012	—	—
25A-MY1C	—	—	—	—	—	Not required	Not required	90-BMG2-012	90-BMG2-012	90-BMG2-012	90-BMG2-012	90-BMG2-012	—	—
25A-MY1H	—	—	—	—	—	Not required	Not required	BMY3-016	BMY3-016	BMY3-016	—	—	—	—
25A-MY3□	—	—	—	—	—	BMY3-016	BMY3-016	BMY3-016	BMY3-016	BMY3-016	BMY3-016	BMY3-016	—	—
25A-CY3R	—	—	—	—	Not required	—	Not required	90-BMG2-012	90-BMG2-012	90-BMG2-012	90-BMG2-012	90-BMG2-012	—	—
25A-RSH	—	—	—	—	—	—	90-BMG2-012	—	90-BMG2-012	—	—	—	—	—
25A-MHZ2	—	—	90-BMG2-012	—	—	∗1	∗1	∗1	∗1	∗1	—	—	—	—
25A-MHZL2	—	—	90-BMG2-012	—	—	∗1	∗1	∗1	—	—	—	—	—	—
25A-MHL2	—	—	90-BMG2-012	—	—	90-BMG2-012	90-BMG2-012	90-BMG2-012	90-BMG2-012	90-BMG2-012	—	—	—	—
25A-MHS3 25A-MHS4	—	—	—	—	—	Not required	Not required	Not required	90-BMG2-012	—	—	—	—	—

∗1 When mounting D-M9 type of auto switch onto the square groove of the side of the air gripper, the auto switch mounting bracket (90-BMG2-012) is required.

25A- Series
Precautions
Be sure to read this before handling products.

Precautions

⚠Caution

■ Change of material

For the 25A- series, there is a restriction on the use of copper and zinc as main components in the metal materials used. Keep in mind that the aluminum alloy, aluminum die cast, and some of the stainless steel materials contain traces of copper (Cu) and/or zinc (Zn) as an additive element.

However, copper is used in some parts—the coils of solenoid valves, the circuit boards, connector pins, and lead wires of electrical equipment and auto switches, and the motors, cables, and drivers of electric actuators—whose materials cannot be easily changed to alternative materials.

In addition, some magnets (including the surface treatment) contain copper (Cu) and/or zinc (Zn). However, due to their magnetic characteristics, it is impossible to use alternative materials.

■ Particle generation (metallic contaminants)

Usage of metal stoppers and/or shock absorbers on an air slide table produces metal-to-metal collision and contact, and may generate wear particles. Do not use metal stoppers and/or shock absorbers in an environment where wear particles are problem.

When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.

The following models of air gripper may generate dust particles, as metal-to-metal collisions occur when fingers are fully closed.

· MHZ2
· MHZL2 (Except -X5955)
· MHF2
· MHY2
· MHW2

■ Static electricity

Refrain from using the electrical equipments including detection switches (e.g., pressure switches and flow switches) in electrostatically-charged environments. Otherwise, they may cause the system to fail or to malfunction.

■ Piping

Usage of nylon tubing and polyurethane tubing in environments with a low dew point may affect dew points of ambient air and inside of piping. Use fluoropolymer tubing (TL series) or stainless steel tubing (Supply it on your own) in environments with a low dew point.

■ Chemical environment

Refrain from using the products in such environments as exposed to chemicals. Otherwise, resin parts may deteriorate.

If you want SMC to test the products for the effects of chemicals attached to them, send the products back to SMC after thoroughly cleaning them.

Consult your SMC sales representative for further details.

UL Approved Product

⚠Caution

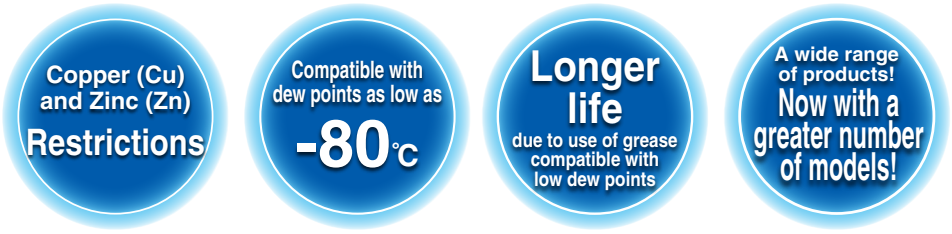
When conformity to UL is required, the product should be used with a UL1310 Class 2 power supply.

The product is a UL approved product only if it has a c UL us mark on the body.

■ **Trademark**
DeviceNet® is a registered trademark of ODVA, Inc.
EtherNet/IP® is a registered trademark of ODVA, Inc.
EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

Series Compatible with Secondary Batteries

25A- Series



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Ⓐ Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.