Technical Data 2: How to Mount and Move the Auto Switch

Mounting Bracket Band Mounting Type

<Applicable auto switch>

Solid state ······ D-M9N, M9P, M9B, M9NV, M9PV, M9BV, D-M9NW, M9PW, M9BW, M9NWV, M9PWV, M9BWV, D-M9NA, M9PA, M9BA, M9NAV, M9PAV, M9BAV Reed D-A90, A93, A96, A90V, A93V, A96V

How to Mount and Move the Auto Switch

Mounting the Auto Switch

- 1. Wrap the auto switch mounting band around the cylinder where the auto switch will be mounted without bending the reinforcing plates.
- 2. Connect the switch holder and switch bracket, and place them between the two ends of the auto switch mounting band (1).
- 3. Hook the bent part of the auto switch mounting band reinforcing plates onto the upper surface of the switch bracket. Bend the base of the auto switch mounting band reinforcing plates until the through holes of the switch bracket, the through holes of the auto switch mounting band, and the holes of the M3 female thread are aligned. Adjust the switch bracket so that both ends of the auto switch mounting band are inserted into the inner walls on both side surfaces of the switch bracket. For the D-M9 A (V) type auto switch, do not install the switch bracket on the indicator light.
- 4. Pass the auto switch mounting screw (M3) supplied with the auto switch mounting band from the through-hole side of the auto switch mounting band and engage it with the M3 female thread of the auto switch mounting band through the through-hole in the switch bracket.
- 5. Tighten the auto switch mounting screw with the specified tightening torque to secure the switch bracket and switch holder.

Tightening torque for auto switch mounting screw (N.m)

Cylinder series Tightening: CDJ2,CDJ2X,CDJ5,CDLJ2,CDVJ5,CDVJ3 0.8 to CDM2,CDM3,CDM2Y,CDLM2,CDVM3,CDVM3,CDG1,CDG3,CDG1Y,	e ()	,
CDJ2,CDJ2X,CDJ5,CDLJ2,CDVJ5,CDVJ3 0.8 to CDM2,CDM3,CDM2Y,CDM2X,CDLM2,CDVM3,CDQ1,CDG3,CDG1Y,	Cylinder series Tig	Fightening torque
CDM2.CDM3.CDM2Y.CDM2X.CDLM2.CDVMJ5.CDVM3.CDG1.CDG3.CDG1Y.	DLJ2,CDVJ5,CDVJ3	0.8 to 1.0
CDLG1,CDNG,MGG,MGC,MLGC,REC,RHC,RSDG,CDLG1,CHN,CHDM	,CDLM2,CDVMJ5,CDVM3,CDG1,CDG3,CDG1Y, GC,REC,RHC,RSDG,CDLG1,CHN,CHDM	0.6 to 0.7

6. Insert the auto switch into the auto switch mounting groove of the switch holder (2) 7. After checking the detection position, tighten the set screw (M2.5) supplied

- with the auto switch to secure the auto switch. At this time, the tightening torque for the set screw (M2.5) supplied with the auto switch must be 0.05 to 0.1 N·m
- When tightening the set screw supplied with the auto switch, use a
- watchmaker's screw driver with a handle diameter of 5 to 6 mm. 8. Attach a protective cover to the tip of the auto switch mounting screw (M3).

Adjusting the Auto Switch Position

- (1) To make the fine adjustment, loosen the set screw (M2.5) supplied with the auto switch and slide the auto switch inside the auto switch mouthing groove to adjust the position.
- (2) To move the auto switch setting position largely, loosen the screw (M3) that secures the auto switch mounting band and slide the auto switch together with the switch holder on the cylinder tube to adjust the position.

Auto Switch Mounting Bracket Part No. (Including a, b, c and d shown in the figure.)

	Bore size (mm)								
	(3	1	0	16				
Cylinder series	D-M9□(V)	D-M9A (V)	D-M9□(V)	D-M9 A(V)	D-M9[(V)	D-M9 A(V)			
	D-M9 W(V)		D-M9⊟W(V)		D-M9 W(V)				
	D-A9⊟(V)		D-A9⊟(V)		D-A9⊟(V)				
CDJ2, CDJ2X	BJ6-006	BJ6-006S	BJ6-010	BJ6-010S					
CDJ2Y, CDVJ3, 5	(A set of a, b, c, d, g)	(A set of b, c, e, f, g)	(A set of a, b, c, d, g)	(A set of b, c, e, f, g)	BJ6-016	BJ6-016S			
CDBJ2, CDLJ2	-	-	-	-	(A Secora, o, c, o, g)	(A SELOID, C, E, I, G			
CD IS				BJ6-010S		BJ6-016S			
CD35				(A set of b, c, e, f, g)	_	(A set of b, c, e, f, g)			

Note) The products other than those with "-Z" show the cylinders with the part number "-C"

Auto Switch Mounting Bracket Part No. (Including a, b, c and d shown in the figure.)

A Caution

- 1. Tighten screws with the proper tightening torque.
- 2. Set the auto switch mounting band perpendicularly to cylinder





The switch brackets have different colors

For BJ6-006: Transparent blue For BJ6-010/016/BM5-00/BMA3-00: Transparent For BJ6-010S/016S/BM5-DDS/BMA3-DDS: White For B.I6-006S: Black

<Precautions on BM5 and BMA3>

When removing the screw connection part with the auto switch mounting screw after the auto switch mounting band has been assembled, be careful not to drop the switch bracket, switch holder, auto switch mounting screw, or auto switch mounting hand

						DU	re size (mm)					
	2	0	2	5	3	2	4	0	5	0	6	3
Cylinder series	D-M9□(V) D-M9□W(V) D-A9□(V)	D-M9⊡A(V)	D-M9□(V) D-M9□W(V) D-A9□(V)	D-M9⊡A(V)	D-M9□(V) D-M9□W(V) D-A9□(V)	D-M9⊡A(V)	D-M9⊡(V) D-M9⊡W(V) D-A9⊡(V)	D-M9⊡A(V)	D-M9□(V) D-M9□W(V) D-A9□(V)	D-M9⊡A(V)	D-M9□(V) D-M9□W(V) D-A9□(V)	D-M9⊡A(V)
CDM2, CDM3 CDM2X, CDM2Y CDLM2 CDVM3, CDVM5	BM5-020 (A set of a, b, c, d)	BM5-020S (A set of b, c, e, f)	BM5-025 (A set of a, b, c, d)	BM5-025S (A set of b, c, e, f)	BM5-032 (A set of a, b, c, d)	BM5-032S (A set of b, c, e, f)	BM5-040 (A set of a, b, c, d)	BM5-040S (A set of b, c, e, f)		—		_
CDG1, CDG3, CDG1Y, MGG, RHC	BM42.020	DMA2 0000	DMA2 025	DMA2 0050	BMA2 022	DMA2 0220			BMA3-050	BMA3-050S	BMA3-063 (A set of a, b, c, d)	BMA3-063S (A set of b, c, e, f)
MGC	DIVIA3-020	DIVIA3-0203	DIVIAG-025	DIVIA3-0255	DIVIAG-032	DIVIAG-0323			(11001010,0,0,0,0)	(11001010,0,0,0,1)	_	_
CDLG1, CDNG	(A SEL 01 d, D, C, U)	(A SEL 01 D, C, E, I)	(A SEL 01 d, 0, 0, 0)	(A SEL 01 D, C, E, I)	(A Secol a, b, c, u)	(A SEL OF D, C, E, I)	BMA3-040	BMA3-040S	_	—	-	—
MLGC, REC							(A set of a, b, c, d)	(A set of b, c, e, f)	_	-	_	_
CKG1	-	-	-	-	_	_	1					
CLK2GA	-	-	-	-	BMA3-032 (A set of a, b, c, d)	BMA3-032S (A set of b, c, e, f)	1		BMA3-050	BMA3-050S	BMA3-063 (A set of a, b, c, d)	BMA3-063S (A set of b, c, e, f)
CLK2GB	-	-	-	-	_	_	_	_	(A set of a, b, c, d)	(A set of b, c, e, f)		
RSDG	-	-	—	_	-	_	BMA3-040 (A set of a, b, c, d)	BMA3-040S (A set of b, c, e, f)			_	_

Note) The products other than those with "-Z" show the cylinders with the part number "-C". (Except MGC and MGG)





Auto Switch Mounting Bracket Part No. (Including band and screw)

O dia dan analan				Applicable bo	ore size (mm)			
Cylinder series	20	25	32	40	50	63	80	100
CDM3 CDM2 CDM2X, CDM2Y CDLM2, CDVM3/5	BA2-020	BA2-025	BA2-032	BA2-040	_	_	_	
CDA2 CDNA2	-	-	-	BH2-040	BA5-050	BAF-06	BAF-08	BAF-10
CDA2□H, CDA2Y CDL1, CE2, CDV3, CDVS1	-	-	-					
CDG3 CDG1, CDG1Y MGG, RHC					BA-05	BA-06	BA-08	BA-10
MGC	BA-01	BA-02	BA-32	BA-04		—	—	_
CDLG1, CDNG					-	-	-	-
MLGC, REC					—	—	—	-
CKG1	-	_	-				_	-
CLK2GA	_	_	BA-32		BA-05	BA-06	_	-
CLK2GB	_	—	—	_			—	-
CDG5⊡S	NBA-088S	NBA-106S	BGS1-032S	BAF-04S	BAF-05S	BAF-06S	BAF-08S	BAF-10S

[Mounting screws set made of stainless steel]

The following set of mounting screws made of stainless steel is also available. Use it in accordance with the operating environment. (Please order the auto switch mounting band separately, since it is not included.)

BBA3: For D-B5/B6/G5/K5

"D-G5BA" auto switch is set on the cylinder with the stainless steel screws above when shipped. When an auto switch is shipped independently, "BBA3" screws are attached.

Stainless Steel Mounting Screw Set

Part no.	Desc	ription		Applicable auto switch mounting bracket part no	Applicable outo ouitab
	Part	Size	Qty.	Applicable auto switch mounting bracket part no.	Applicable auto switch
				BA-01, BA-02, BA-32, BA-04 BA-05, BA-06, BA-08, BA-10	
	Auto switch mounting screw			BA2-020, BA2-025, BA2-032, BA2-040	
BBA3		M4 x 0.7 x 22L	1	BA5-050, BHN2-025, BSG1-032	D-D3, B0
				BH2-040, BH2-050, BH2-080, BH2-100	D-G5, K5
				BAF-32, BAF-04, BAF-05 BAF-06, BAF-08, BAF-10	



* Band (c) is mounted so that the projected part is on the internal side (contact side with the tube).

an auto switch mounting screw. (For BJ2-DD)

Auto Switch Mounting Bracket Part No. (Including band and screw)

Culinder series	Applicable bore size (mm)											
Cylinder series	6	10	16	20	25	32	40	50	63			
CDJ2, CDJ2X, CDJ2Y, CDVJ3/5	BJ2-006	BJ2-010	D IO 010	_	-	_	_	-	_			
CDBJ2, CDLJ2	—	-	BJ2-016	—	-	—	—	-	—			
CDM3 CDM2 CDM2X, CDM2Y CDLM2, CDVM3/5	_	_	_	Note) BM2-020A BM2-020	Note) BM2-025A BM2-025	Note) BM2-032A BM2-032	Note) BM2-040A BM2-040	_	_			
CDG3 CDG1, CDG1Y MGG, RHC	_	_	_	Note)	Note)	Note)		Note) BMA2-050A	Note) BMA2-063A BMA2-063			
MGC	_	-	-	BMA2-020A	BMA2-025A	BMA2-032A	Note)	DIVIA2-050	_			
CDLG1, CDNG	—	-	-	DIVIA2-020	Billing of a billi	BMA2-040A	—	—				
MLGC, REC	—	-	—				DIVIA2-040	DIVIA2-040	BIVIA2-040	DIVIA2-040	DIVIA2-040	_
CKG1	—	-	-	—	-	—]		Note)			
CLK2GA	—	—	—	—	—	BMA2-032]	RMA2-050A	BMA2-063A			
CLK2GB	—	-	—	—	-	—	—	BMA2-050	BMA2-063			
RSDG	_	_	_	_	_	_	BMA2-040		_			
CDJ5 S	_	BJ2-010S	BJ2-016S	_	-	_	_	_	_			

Note) The upper part numbers show the "-Z" products and the lower part numbers show other cylinders. (However, the MGC and MGG use the upper part numbers.)

[Mounting screws set made of stainless steel]

The following set of mounting screws made of stainless steel is also available. Use it in accordance with the operating environment. (Please order the auto switch mounting band separately, since it is not included.)

BBA4: For D-C7/C8/H7

"D-H7BA" switch is set on the cylinder with the stainless steel screws above when shipped.

When only an auto switch is shipped independently, "BBA4" screws are attached

Stainless Steel Mounting Screw Set

Part no.	Desci	ription		Applicable oute quiteb mounting brookst part pa	Applicable auto awitab
	Part	Size	Qty.	Applicable auto switch mounting bracket part no.	Applicable auto switch
BBA4				BJ2-006, BJ2-010, BJ2-016	
	Auto switch mounting screw		1	BM2-020(A), BM2-025(A), BM2-032(A), BM2-040(A)	D-C7 C8
		M3 x 0.5 x 14L		BMA2-020(A), BMA2-025(A), BMA2-032(A) BMA2-040(A), BMA2-050(A), BMA2-063(A)	D-H7
				BHN3-025A, BHN3-032A, BHN3-040A	





Mounting Bracket Rail Mounting Type

<Applicable auto switch>

How to Mount and Move the Auto Switch CDQP2B12 to 25

- Insert the square nut for BQ-1 in the switch mounting rail and set it at the approximate auto switch mounting position.
- Fit the convex part of the auto switch mounting bracket arm over the concave part of the rail, and slide the arm to the nut position.
- Push the auto switch mounting screw (M3 for BQ-1) lightly into the square nut through the hole of the auto switch mounting arm.
- 4. Remove the set screw (M2.5) attached to the auto switch.
- Insert the auto switch in the auto switch attachment part of the auto switch mounting bracket.
- Secure the auto switch mounting screw (M2.5). (Tightening torque of M2.5 screw: 0.1 to 0.2 N·m)
- Secure the auto switch mounting screw (3) after confirming the detecting position. (Tightening torque of M3 screw: 0.5 to 0.7 N·m)
- Modify the detecting position while the auto switch is secured at the position of (3) in the figure.

CDQP2B32 to 100

- 1. Insert the square nut for BQ-2 in the switch mounting rail and set it at the approximate auto switch mounting position.
- Fit the protruding part of the switch mounting spacer over the concave part of the rail, and slide the spacer to the nut position.
- Fit the convex part of the auto switch mounting bracket arm over the concave part of the switch spacer.
- Turn the auto switch mounting screw (M3 for BQ-2) lightly into the square nut through the mounting holes of the auto switch mounting arm and switch spacer.
- 5. Remove the set screw (M2.5) attached to the auto switch.
- Insert the auto switch in the auto switch attachment part of the auto switch mounting bracket.
- Secure the auto switch mounting screw (M2.5). (Tightening torque of M2.5 screw: 0.1 to 0.2 N·m)
- Secure the auto switch mounting screw (4) after confirming the detecting position. (Tightening torque of M3 screw: 0.5 to 0.7 N·m)
- 9. Modify the detecting position while the auto switch is secured at the position of (4) in the figure.



BQ-1 and BMU1-025 are a set of a and b shown above. BQ2-012 is a set of c and d shown above.



BQ-2 is a set of a, b and c shown above. BQ2-012 is a set of d and e shown above.

Culinder ceries					Applicable bo	ore size (mm)						
Cylinder series	12	16	20	25	32	40	50	63	80	100		
CDQP2B	BQ-1 BQ2-012	BQ-1 BQ2-012	BQ-1 BQ2-012	BQ-1 BQ2-012					PO 0	PO 0		
CDBQ2, CDQ2X CDLQ, CDQM RDQ	_	_	_	-	BO-2	BO-2	BQ-2	BQ-2 BQ2-012	BQ2-012	BQ-2 BQ2-012		
RDLQ, RZQ	-	_	_	-	BQ2-2 BQ2-012	BQ2-012	BQ2-012	BQ2-012	BQ2-012			_
MK2T	-	-	-					BO 2	—	-		
CE1	BQ-1 BQ2-012	-	BQ-1 BQ2-012] —					BQ2-012	-	-	
CXT	—	—	-	—			—	—	—	-		
CKQ, CLKQ	_	-	-	-	_	-	BQ-2 BQ2-012	-	_	-		
MDU	_	-	-	BMU1-025	BMU1-025	BMU1-025	BMU1-025	BMU1-025 BQ2-012	_	-		
MDLU	_	_	_	002-012	DQ2-012	DQ2-012	DQ2-012	_	_	_		

Auto Switch Mounting Bracket Part No. (Nut, screws, (spacer) and auto switch mounting bracket; two kinds of auto switch mounting brackets are used as a set.)

Note 1) Color or gloss differences in the metal surfaces have no effect on metal performance

The special properties of the chromate (trivalent) applied to the main body of the auto switch mounting bracket for BQ2-012 result in differences in coloration depending on the production lot, but these have no adverse impact on corrosion resistance.

Note 2) When installing D-M9□A(V)L with BQ2-012 shown above, use BQ2-012S with stainless steel auto switch mounting screws (M2.5 x 0.45 x 6 L).

Note 3) D-A9 type cannot be mounted on the MDU, MDLU series.

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- 1. Slide the auto switch mounting nut inserted into the mounting rail and set it at the auto switch mounting position.
- Fit the convex part of auto switch mounting arm into the concave part of auto switch mounting rail. Then slide the switch over the nut.

(CDQ2 series: Fit the convex part of auto switch mounting arm through the auto switch spacer into the concave part of auto switch mounting rail.)

- Push the auto switch mounting screw lightly into the mounting nut through the hole of auto switch mounting arm.
- After reconfirming the detecting position, tighten the mounting screw to secure the auto switch. (Tightening torque of M3 screw should be 0.5 to 0.7 N·m.)
- Modification of the detecting position should be made in the condition of 3.





Auto Switch Mounting Bracket Part No. (Including nut, screw, (spacer))

Outline days a series						Applica	ble bore siz	ze (mm)					
Cylinder series	12	16	20	25	32	40	50	63	80	100	125	140	160
CDQP2B	BQ-1	BQ-1	BQ-1	BQ-1	BQ-2	BQ-2	BQ-2	BQ-2	BQ-2	BQ-2	_	_	-
CDBQ2, CDQ2X CDLQ, CDQM RDQ	_	-	_	_				BQ-2	BQ-2	BQ-2	_	_	_
RDLQ, RZQ	-	-	-	-	BQ-2	BQ-2	BQ-2		-	—	—	-	-
MK2T	-	_	_	_				PO 1	_	_	_	_	-
CE1	BQ-1	_	BQ-1	-	1			BQ-2	_	_	_	_	-
CXT	-	-	-	_			_	_	_	_	_	-	-
MDU (Except Z)	_	_	-	D1 11 14 005	DMUM 005	DMUK 005	D	BMU1-025	_	_	_	_	-
MDLU	-	-	-	BMU1-025	BIVIU 1-025	BMU1-025	BMU1-025	_	_	_	_	_	—

[Mounting screws set made of stainless steel]

The set of stainless steel mounting screws (with nuts) described below is available and can be used depending on the operating environment. (Please order the auto switch spacer BQ-2, since it is not included.)

BBA2: For D-A7/A8/F7/J7

"D-F7BA" auto switch is set on the cylinder with the stainless steel screws above when shipped.

When only an auto switch is shipped independently, "BBA2" screws are attached.

Stainless Steel Mounting Screw Set

		Description		Applicable outs quitab mounting brookst part pa		
Part no.	t no. Part		Size	Qty.	Applicable auto switch mounting bracket part no.	Applicable auto switch
			M3 x 0.5 x 6L	1	BMU1-025	
BBA2	1	Auto switch mounting screw	M3 x 0.5 x 8L	1	BQ-1	
			M3 x 0.5 x 10L	1	BQ-2	D-E7 17
	2	Auto switch mounting nut (Hexagon nut)	M3 x 0.5	1	BQ-1] 0-17, 37
	3	Auto switch mounting nut (Convex shape)	M3 x 0.5	1	BQ-2	

Note 1) A spacer for BQ-2 (black resin) is not included.

Note 2) When using D-A9=(V)/M9=(V)/M9=W(V)/M9=A(V) auto switches with BQ2-012, use stainless steel screws suitable for the auto switch mounting bracket applicable for each cylinder series.



Mounting Bracket Rail Mounting Type

<Applicable auto switch> Solid state D-P3DWA

How to Mount and Move the Auto Switch



- Insert the auto switch mounting nut into the groove on the auto switch mounting rail.
- 2. Remove the hexagon socket head cap screw (M2.5) that is attached to the auto switch. Mount the auto switch mounting bracket (pressed stainless steel bracket) on the auto switch and tighten the hexagon socket head cap screw (M2.5) you have removed 3 to 4 turns to temporarily mount the bracket.
- 3. Put the spring washer through the hexagon socket head cap screw (M3), and then put the screw through the hole in the flange of the auto switch mounting bracket (pressed stainless steel bracket). Screw it into the M3 tapped part of the auto switch mounting nut and tighten it 3 to 4 turns to temporarily mount the auto switch.
- After checking the detection position, tighten each hexagon socket head cap screw firmly.
- 5. Modification of the detection position should be made in the condition of 3.

Auto Switch Mounting Bracket Part No. (Including Bracket, Bolt, Nut)

Culinder series	Bore size (mm)							
Cylinder series	25	32	40	50	63			
MDU		1	3MU4-0405	3				
MDLU	BMU4-040S —							

Note 1) The tightening torque for a hexagon socket head cap screw (M2.5) is 0.2 to 0.3 N·m. Hold the shorter side of a hexagon wrench, and turn it to tighten. (Too much tightening may break the switch)

Note 2) The tightening torque for a hexagon socket head cap screw (M3) is 0.5 to 0.7 N·m.

<Applicable auto switch> Solid state D-P4DW

How to Mount and Move the Auto Switch



- Mount the auto switch mounting bracket onto the auto switch mounting nut by tightening bracket fixing screw lightly through the mounting hole on the top of bracket.
- Insert the auto switch mounting bracket assembly (bracket + nut) into the mounting groove and set it at the auto switch mounting position.
- 3. Push the auto switch mounting screw lightly into the auto switch through the auto switch mounting hole to secure.
- After reconfirming the detecting position, tighten the mounting screw to secure the auto switch mounting bracket and the auto switch. (Tightening torque should be 0.5 to 0.7 N·m.)

Auto Switch Mounting Bracket Part No. (Including bracket, screw)

0.11.1	Applicable bore size (mm)								
Cylinder series	40	50	63	80	100				
CDBQ2 CDQ2X CDLQ, CDQM	BQP1-050	BQP1-050	BQP1-050	BQP1-050	BQP1-050				
MK2T				_	_				
RZQ				_	-				
CKQ, CLKQ	_		_	_	_				

Note) Please consult SMC for mounting on the CDQ2 series.

<Applicable auto switch> Solid state D-P4DW

How to Mount and Move the Auto Switch



- From the cutoff part of the rail on the cylinder body, insert the auto switch mounting nuts (2 pcs.) into the rail groove.
- Slide the auto switch mounting nuts (2 pcs.) and set into the auto switch mounting position roughly. (25 mm or more should be left for the distance between 2 nuts.)
- Insert the convex portion of the auto switch mounting bracket into the concave portion of a rail groove. Through-hole for the auto switch mounting bracket should be placed on the auto switch mounting nut.
- 4. Put a flat washer (ø8 x o3.3) through a hexagon socket head screw (with spring washer, M3 x 0.5 x 5 L) and passing through the hole of an auto switch mounting bracket, then turning it lightly down to a mounting nut of auto switch. (2 locations)
- 5. Put a round head Phillips screw (with spring washer, M3 x 0.5 x 14 L) through the auto switch's through-hole (2 locations), and then push it down into the M3 tapped part on the auto switch mounting bracket while turning it lightly.
- 6.After reconfirming the detecting position, tighten the auto switch mounting screw to secure the auto switch mounting bracket and the auto switch. (Tightening torque of M3 screw should be 0.5 to 0.7 N-n.)

Auto Switch Mounting Bracket Part No. (Including bracket, screw)

Culinder ceries	Applicable bore size (mm)						
Cylinder series	40	50	63				
MDU			BMU2-040				
MDLU	BMU2-040	BM02-040	-				

<Applicable auto switch> Solid state D-F6N, D-F6P, D-F6B

How to Mount the Auto Switch (For HYQ, HYC, HYG)

Proper tightening torque

When tightening auto switch mounting screws, use a special tool (D-F6B-650) or a torque wrench.

The tightening torque for the auto switch mounting screw (M3) is 0.8 to 1.4 $\text{N}{\cdot}\text{m}{.}$



Use the tightening torque below when installing the auto switch mounting rail at maintenance.

Screw size	Tightening torque (N·m)
M4	1.1 to 1.9

Use the tightening torque below when mounting an auto switch body on the mounting rail.

Tightening torque (N·m)	
0.8 to 1.4	

Mounting Bracket Tie-rod Mounting Type

<Applicable auto switch>

Solid state D-M9N(V), D-M9P(V), D-M9B(V), D-M9NW(V), D-M9PW(V), D-M9BW(V), D-M9NA(V), D-M9PA(V), D-M9BA(V) Reed D-A90(V), Á93(V), A96(V)

How to Mount and Move the Auto Switch

- 1. Fix it to the detecting position with a set screw by installing an auto switch mounting bracket in cylinder tie-rod and letting the bottom surface of an auto switch mounting bracket contact the cylinder tube firmly.
- 2. Fix it to the detecting position with a set screw (M4). (Use a hexagon wrench.)
- 3. Fit an auto switch into the auto switch mounting groove to set it roughly to the mounting position for an auto switch.
- 4. After confirming the detecting position, tighten up the mounting screw (M2.5) attached to an auto switch, and secure the auto switch.
- 5. When changing the detecting position, carry out in the state of 3.
- Note 1) To protect auto switches, ensure that main body of an auto switch should be embedded into auto switch mounting groove with a depth of 15 mm or more.
- Note 2) Set the tightening torque of a hexagon socket head set screw (M4) to be 1 to 1.2 N·m.
- Note 3) When tightening an auto switch mounting screw (M2.5), use a watchmaker's screwdriver with a grip diameter of 5 to 6 mm. Also, tighten with a torque of about 0.05 to 0.15 N·m, or about 0.05 to 0.10 N·m for D-M9DA.



Auto Switch Mounting Bracket Part No. (Including Bracket, Set Screw)

O dia dan a suis s	Applicable bore size (mm)										
Cylinder series	32	40	50	63	80	100	125	140	160	180	200
MDB, MDBY MDWB, MDNB	BMB5 -032	BMB5 -032	BA7 -040	BA7 -040	BA7 -063	BA7 -063	BA7-080	-	-	-	—
CDA2 CDA2□H CDA2Y, CDNA2 CE2, CDV3, CDVS1	_	BA7 -040	BA7 -040	BA7 -063	BA7 -080	BA7 -080		_	_		_
CDL1	-									-	-
CDS1, CDLS	-	-	_			-	BS5	BS5	BS5	BS5-180	BS5-200
CDS2, CDS2Y	-	-	-	-	-	-	-125	-125	-160	-	-
CDNS	-	_	_	_	_	-				-	-

ely (page 1395), and use the stainless steel set screws, after selecting set screws of the appropriate length for the cylinder series-as shown in the table above.

Note 2) Color or gloss differences in the metal surfaces have no effect on metal performance.

The special properties of the chromate applied to the main body of the auto switch mounting bracket for BA7-D, BMB5-D and BS5-D result in differences in coloration depending on the production lot, but these have no adverse impact on corrosion resistance. Note 3) D-A9
 type cannot be mounted on e50 of the CDA2
 CD

How to Mount and Move the Auto Switch

<Applicable auto switch> Solid state ····· D-F59, D-F5P, D-J59, D-F5BA D-F59W, D-F5PW, D-J59W, D-F59F, D-F5NT Reed D-A53, D-A54, D-A56, D-A64, D-A67, D-A59W

- 1. Fix the auto switch on the auto switch mounting bracket with the auto switch mounting screw (M4) and install the set screw.
- 2. Fit the auto switch mounting bracket into the cylinder tie-rod and then fix the auto switch at the detecting position with the hexagonal wrench. (Be sure to put the auto switch on the surface of cylinder tube.)
- 3. When changing the detecting position, loosen the set screw to move the auto switch and then re-fix the auto switch on the cylinder tube. (Tightening torgue of M4 screw should be 0.6 to 0.8 N·m.)

Auto switch mounting screw (M4) Auto switch <u>s</u> Auto switch mounting bracket Set screw (M4) Tie-rod

Auto Switch Mounting Bracket Part No. (Including bracket, screw, set screw)

Culinder earlies					Applica	ble bore siz	ze (mm)				
Cylinder series	32	40	50	63	80	100	125	140	160	180	200
MDB, MDBY MDWB, MDNB	BT-03	BT-03	BT-05	BT-05	BT-06	BT-06	BT-08		-	-	_
CDA2 CDA2 CDA2 CDA2Y CDNA2, CE2 CDV3, CDVS1	_	BT-04	BT-04	BT-06	BT-08	BT-08	_	_	_	_	_
CDL1	-	1								-	-
CDS1, CDLS	_	_	_	_	_	_	BT 10	PT 10	DT 16	BT-18A	BT-20
CDS2, CDS2Y	_	-	-	-	-	—	DI-12	DI-12	D1-10	-	—
CDNS	—	—	-	-	-	—				-	-

[Mounting screws set made of stainless steel]

The following set of mounting screws made of stainless steel is also available. Use it in accordance with the operating environment.

(Please order the auto switch mounting band separately, since it is not included.)

BBA1: For D-A5/A6/F5/J5

"D-F5BA" auto switch is set on the cylinder with the stainless steel screws above when shipped. When an auto switch is shipped independently, "BBA1" screws are attached.

Stainless Steel Mounting Screw Set

D		Description		Applicable auto quitab mounting bracket part pa	Annlinghing suite suiteb	
Part no.	No. Part		Size	Qty.	Applicable auto switch mounting bracket part no.	Applicable auto switch
	1	Auto switch mounting screw	M4 x 0.7 x 8L	1	BT-DD	
					BT-03, BT-04, BT-05 BT-06, BT-08, BT-12	D-A5, A6 D-F5, J5
	2	Set screw	M4 x 0.7 x 6L	2	BA4-040, BA4-063, BA4-080 BMB4-032, BMB4-050	D-Z7, Z8 D-Y5, Y6, Y7
BBA1					BMB5-032 BA7-040, BA7-063, BA7-080	D-A9 D-M9
					BT-16, BT-18A, BT-20	D-A5, A6 D-F5
	3	Set screw	M4 x 0.7 x 8L	3	BS4-125, BS4-160 BS4-180, BS4-200	D-Z7, Z8 D-Y5, Y6, Y7
					BS5-125, BS5-160 BS5-180, BS5-200	D-A9 D-M9

Note 1) A spacer for BQ-2 (black resin) is not included.

Note 2) When using D-A9□(V)/M9□(V)/M9□W(V)/M9□A(V) auto switches with BQ2-012, use stainless steel screws suitable for the auto switch mounting bracket applicable for each cylinder series.

∕⊘SMC

Mounting Bracket Tie-rod Mounting Type

<Applicable auto switch>

Solid state D-G39C, D-K39C Reed D-A33C, D-A34C, D-A44C

- Fix the auto switch mounting bracket (A) on the auto switch with the set screw.
- 2. Fit the concave part of auto switch mounting bracket into tie-rod and set the auto switch at the mounting position.
- Insert the auto switch mounting bracket (B) from the underneath and put lightly in the tie-rod with the mounting screw.
- 4. Set the whole body to the detecting position by sliding, tighten the mounting screw to secure the auto switch. (Tightening torque of M5 screw should be 2 to 3 N·m.)
- 5. Modification of the detecting position should be made in the condition of 3.



Auto Switch Mounting Bracket Part No. (Including bracket, screw)

	Applicable bore size (mm)							
Cylinder series	40	50	63	80	100			
CDA2, CDV3, CDVS1 CDL1, CE2, CNA2	BA3-040	BA3-050	BA3-063	BA3-080	BA3-100			

<Applicable auto switch> Solid state D-Y59^a_b, D-Y69^a_b, D-Y7P(V), D-Y7NW(V), D-Y7PW(V), D-Y7BW(V), D-Y7BA ReedD-Z73, D-Z76, D-Z80

How to Mount and Move the Auto Switch



Note 1) When tightening an auto switch mounting screw, use a watchmaker's screwdriver with a grip diameter of 5 to 6 mm.

> Also, set the tightening torque to be 0.05 to 0.1 N·m. As a guide, turn 90° from the position where it comes to feel tight. Set the tightening torque of a hexagon socket head set screw (M4 x 0.7) to be 1 to 1.2 N·m.

Auto Switch Mounting Bracket Part No. (Including Bracket, Set Screw)

 Fix it to the detecting position with a set screw by installing an auto switch mounting bracket in cylinder tie-rod and letting the bottom surface of an auto switch mounting bracket contact the cylinder tube firmly.

(Use hexagon wrench)

- Fit an auto switch into the auto switch mounting groove to set it roughly to the auto switch mounting position for an auto switch.
- After confirming the detecting position, tighten up the mounting screw attached to an auto switch, and secure the switch.
- 4. When changing the detecting position, carry out in the state of 2.
- * To protect auto switches, ensure that main body of an auto switch should be embedded into auto switch mounting groove with a depth of 15 mm or more.

Culinder corice	Applicable bore size (mm)										
Cylinder series	32	40	50	63	80	100	125	140	160	180	200
MDB, MDBY MDWB, MDNB	BMB4-032	BMB4-032	BMB4-050	BMB4-050	BA4-063	BA4-063	BA4-080	—	—	—	—
CDA2 CDA2□H CDA2Y CDNA2, CE2	_	BA4-040	BA4-040	BA4-063	BA4-080	BA4-080	_	_	_	_	_
CDL1	-]]	
CDS1, CDLS	-	-	-	-	-	-	BS4-125	DO4 105		BS4-180	BS4-200
CDS2, CDS2Y	-	-	-	-	-	-		-125 BS4-125 BS4	BS4-160	-	-
CDNS	-	-	-	-	-	-	1			-	-

Note 2) When using type D-Y7BA please order stainless steel screw set BBA1 separately (page 1395), and use the stainless steel set screws, after selecting set screws of the appropriate length for the cylinder series—as shown in the table above.

Mounting Bracket Tie-rod Mounting Type

<Applicable auto switch>

Solid state ····· D-P3DWA

Applicable cylinder/actuator						
Clamp sulinder	CKG1	ø40 to ø63				
Clamp cylinder	CKGA	ø 80, ø100				
Clamp cylinder with lock	CLK2G	ø40 to ø63				
Air adiadar	CDA2Y	~40 ~50				
Air cylinder	CDA2	Ø40, Ø50				
Air cylinder with lock	CDNA2	ø 40 , ø 50				

How to Mount and Move the Auto Switch



- Remove the hexagon socket head cap screw A (M2.5) that is attached to the auto switch. Mount the auto switch mounting bracket (pressed stainless steel bracket) on the auto switch and tighten the hexagon socket head cap screw A (M2.5) you have removed 3 to 4 turns to temporarily mount the bracket.
- 2. Put the hexagon socket head cap screw C (M4) through the hole in the flange (partially circular arc shape) of the auto switch mounting bracket (pressed stainless steel bracket), screw it into the M4 tapped part on the top of the auto switch mounting bracket B (aluminum), and tighten it 3 to 4 turns to temporarily mount the bracket.
- 3. Screw the hexagon socket head cap screws B (M4) into two M4 tapped parts on the side of the auto switch mounting bracket B (aluminum) to the extent that the tips of the hexagon socket head cap screw B (M4) do not protrude to the inside of the U-shape of the auto switch mounting bracket B (aluminum).
- 4. Fit the U-shape part of the auto switch mounting bracket B (aluminum) that has been assembled in step 3 to the switch mounting rod of the cylinder, and then put the part E of the auto switch mounting bracket (pressed stainless steel bracket) in contact with the cylinder tube. After checking the detection position, tighten the hexagon socket head cap screws A, C, B in order. At this time, tighten the hexagon socket head cap screws B evenly.
- 5. Modification of the detection position should be made in the condition of 4.
- Note 1) The tightening torque for a hexagon socket head cap screw (M2.5) is 0.2 to 0.3 N·m. Hold the shorter side of a hexagon wrench, and turn it to tighten. (Too much tightening may break the switch)
- Note 2) Tighten the hexagon socket head cap screws B and C (M4) with a tightening torque of 1 to 1.2 N·m.

Auto Switch Mounting Bracket Part No. for CK Series (Including bracket, screw)

Cylindor/Actuator sorios	Bore size (mm)						
Cylindel/Actuator series	40 50 63 80 100						
CKG1, CLK2G		BK7-040S		-	_		
CKGA		— BK7-080S					

Auto Switch Mounting Bracket Part No. for CA Series (Including bracket, screw)

Culinder/Actuator aprice			Bore size (mm)		
Cylindel/Actuator series	40	50	63	80	100
CDA2Y CDA2, CDNA2	BK7-	040S		_	

<Applicable auto switch> Solid state D-P3DWA

Applicable cylinder/actuator						
	MDB	~20 to ~105				
	MDBY	032 to 0125				
	CDA2					
Air cylinder	CDA2Y	Ø63 to Ø100				
	CDA2					
	CDS1	ø125 to ø200				
	CDS2	ø125 to ø160				
	MDWB, MDNB	ø32 to ø100				
Air ovlinder with look	CDNA2	Ø63 to Ø100				
All cylinder with lock	CDLS	ø125 to ø200				
	CDNS	Ø125 to Ø160				

How to Mount and Move the Auto Switch α 32



Auto Switch Mounting Bracket Part No. for MB/CA/CS Series (Including bracket, screw)

Applicable outinder		Applicable bore size											
Applicable cylinder	32	40	50	63	80	100	125	140	160	180 — —	200		
MDB	BA10-032S	BA10-040S	BA10	BA10-050S		BA10-063S		_	_	_	-		
MDWB, MDNB	BA10-032S	BA10-040S	BA10	-050S	BA10-063S		—	-	-	-	-		
CDA2, CDNA2	_	BK7-04	OS Note 1)	BA10-063S	BA10-080S		_	-	_	_	-		
CDS1, CDLS	_	_	_	_	_	_	BS7-	125S	BS7-160S	BS7-180S	BS7-200S		
CDS2, CDNS	-	—	—	—	-	—	BS7-125S		BS7-160S		-		

Note 1) For details about how to mount and move the BK7-040S for ø40 and ø50 of the CDA2/CDNA2 series, refer to the description for the CKG1 series. * Differences in color and glossiness of the metal surface treatment do not affect the performance.

Due to the characteristics of the chromate treatment applied to the whole body of the auto switch mounting bracket, the color may be slightly different between manufacturing lots. However, this will not reduce the corrosion resistance.



Mounting Bracket Tie-rod Mounting Type

<Applicable auto switch> Solid state D-P4DW

How to Mount and Move the Auto Switch

MDB-Z, MDB, MDBB, MDBY, MDNB



CDA2-Z, CDA2, CDBA2, CDA2Y, CDNA2, CDL1 (ø40 to ø100)



1. (For MDB-Z, MDB, MDBY)

Slightly screw the hexagon socket head cap screw (M4 x 0.7 x 8 L) into the M4 tapped portion of auto switch mounting bracket. (2 locations). Use caution that the tip of the hexagon socket head cap screw should not stick out to the concave portion of auto switch mounting bracket.

(For CDA2-Z, CDA2)

Slightly screw the hexagon socket head cap screw (M4 x 0.7 x 6 L) into the M4 tapped portion of auto switch mounting bracket. (2 locations). Use caution that the tip of the hexagon socket head set screw should not stick out to the concave portion of auto switch mounting bracket.

2. (For MDB-Z, MDB, MDBY)

Put a hexagon socket head cap screw (M3 \times 0.5 \times 14 L) through the auto switch's through-hole (2 locations), and then push it down into the M3 tapped part on the auto switch mounting bracket while turning it lightly.

(For CDA2-Z, CDA2)

Put a hexagon socket head cap screw (with spring washer M3 x 0.5 x 14 L) through the auto switch's through-hole (2 locations), and then push it down into the M3 tapped part on the auto switch mounting bracket while turning it lightly.

- Place the concave part of the auto switch mounting bracket into the cylinder tie-rod, and slide the auto switch mounting bracket in order to set roughly to the detecting position.
- After reconfirming the detecting position, tighten the M3 mounting screw to secure the auto switch by making the bottom face of auto switch attached to the cylinder tube. (Tightening torque of M3 screw should be 0.5 to 0.7 N-m.)
- Tighten up M4 screw of auto switch mounting bracket to secure the auto switch mounting bracket. (Ensure that tightening torque of M4 screw should be set 1.0 to 1.2 N·m.)

Auto Switch Mounting Bracket Part No. (Including bracket, screw)

Outlinden enviro	Applicable bore size (mm)									
Cylinder series	32	40	50	63	80	100	125			
MDB	PMP3T 040	PMP3T 040	PMP2T 050	DMD3T 050	PMP3T 090	DMP3T 090	BAP2T-080			
MDBY, MDWB, MDNB	DIVID31-040	DIVIDS 1-040	DIVID31-030	DIVIDS 1-050	DIVIDS 1-000	DIVIDO I -000	—			
CDA2 CDA2Y, CDL1, CDNA2	_	BAP2-040	BAP2-040	BAP2-063	BAP2-080	BAP2-080	_			

Mounting Bracket Direct Mounting Type

<Applicable auto switch>

Solid state	D-M9N(V), M9P(V), M9B(V),
	D-M9NW(V), M9PW(V), M9BW(V),
	D-M9NA(V), M9PA(V), M9BA(V)
Reed	D-A90(V), A93(V), A96(V)

How to Mount and Move the Auto Switch



Auto Switch Mounting Screw Tightening Torque (N-m)

Auto switch model	Tightening torque
D-M9□(V) D-M9□W(V) D-A9□(V)	0.05 to 0.15
D-M9□A(V)	0.05 to 0.10

MY2 Series

When mounting auto switches, insert them into the cylinder's switch groove from the direction shown in the drawing. After setting in the mounting position, use a flat head watchmaker's screwdriver to tighten the provided set screw.



(Note) When tightening an auto switch mounting screw, use a watchmaker's screwdriver with a grip diameter of 5 to 6 mm. Refer to the table above for the tightening torque.



 Insert the auto switch mounting bracket into the auto switch mounting groove to set it roughly to the auto switch mounting position.

Auto switch

- Insert the auto switch into the attachment part of the auto switch mounting bracket.
- After confirming the detecting position, secure the auto switch by tightening the set screw (M2.5) attached to the auto switch.
- 4. When changing the detecting position, carry out in the state of 2.
- Note 1) When tightening a set screw (M2.5), use a watchmaker's screwdriver with a grip diameter of 5 to 6 mm. Also set the tightening torque to be 0.1 to 0.15 N·m.

Applicable bore size (mm)

Cylinder series		_								
2,	12	16	20	25	32	40	50	63	80	100
MY1B	—	-	-	—	-	-	—	BMG2	BMG2 -012	BMG2 -012
MY1M, MY1MW	—	—	_	BMG2	BMG2	BMG2	BMG2	-012	-	-
MY1C, MY1CW	—	-	-	-012	-012	-012	-012		-	-
CY3R	—	-	—	BMG2	BMG2	BMG2	BMG2 -012	BMG2 -012	—	—
REAR	-	-	-	-012	-012	-012	-	-	-	-
REBR	-	_	_			-		-	-	
MGPS	-	-	-	—	-	-		-		—
MGP, MGPA MGQ, MVGQ	BMG2 -012	BMG2	BMG2	BMG2	BMG2		BMG2 -012		BMG2	
MGP□-□A	—	-012	-012	-012	-012	BMG2			-012	BMG2
MLGP	—	—				-012		BMG2		
MGF	-	-	-	—	-		—	012	-	012
MGT	-	-	-	-	-	-	-		BMG2 -012	
RSH	_	_	BMG2 -012	_	BMG2 -012	_	_	_	-	_
RS1H	_	-	_	_	_	_	BMG2 -012	BMG2 -012	BMG2 -012	_

Auto Switch Mounting Bracket Part No.

Note 2) Color or gloss differences in the metal surfaces have no effect on metal performance.

The special properties of the chromate applied to the main body of the auto switch mounting bracket for BMG2-012 result in differ-ences in coloration depending on the production lot, but these have no adverse impact on corrosion resistance.

- Note 3) The D-A9□(V) type cannot be mounted on the product series shown below. MY1B, MY1M, MY1C, MY1MW and MY1CW series with e 25 or more. MGF, RSH and RS1H series
- Note 4) The D-M9[[W]V type cannot be mounted on the product series shown below. MY1B series with e50, MY1[]W series with e16 and e20, CY3R, REAR and REBR series

Mounting Bracket Direct Mounting Type

<Applicable auto switch>

Solid state ----- D-M9N(V), M9P(V), M9B(V), D-M9NW(V), M9PW(V), M9BW(V), D-M9NA(V), M9PA(V), M9BA(V) Solid state ----- D-A90(V), A93(V), A96(V)

How to Mount and Move the Auto Switch

When attaching an auto switch, first take a switch spacer between your fingers and press it into a switch mounting groove. When doing this, confirm that it is set in the correct mounting orientation, or reattach if necessary. Next, insert an auto switch into the groove and slide it until it is positioned under the switch spacer.

After establishing the mounting position, use a watchmakers flat head screwdriver to tighten the switch mounting screw which is included.

Note) When tightening an auto switch mounting screw, use a watchmaker's screwdriver with a grip diameter of 5 to 6 mm. Also, tighten with a torque of about 0.05 to 0.1 N-m.



Switch Spacer No.

	Applica	able bore siz	e (mm)					
6	10	16	20	25				
_	_	_	_					
_	_	_	_					
_	_		BMY3-016					
_	— BMY3-016		_	DIVIT3-UTC				
BMY3-016	BMY3-016		DMV0.010					
_	—	_	DIVIT-010					
Applicable bore size (mm)								
32	40	50 63						
		_	_					
BMY3-016		_						
	BMY3-016	BMY3-016	DN0/0 040					
_		_	BIVIY3-016					
DMV0.010		_	_					
DIVIT 3-016	_	_	_					
	6 	Applica 6 10 BMY3-016 BMY3-016 BMY3-016 BMY3-016 BMY3-016 BMY3-016 BMY3-016	Applicable bore siz 6 10 16 BMY3-016 BMY3-016 BMY3-016 32 40 50 BMY3-016 BMY3-016 BMY3-016 BMY3-016 BMY3-016 BMY3-016	Applicable bore size (mm) 6 10 16 20 - - - - - - - - - - - - - - - - - - - - - - - - BMY3-016 BMY3-016 BMY3-016 BMY3-016 - - BMY3-016 32 40 50 63 - BMY3-016 - - - - BMY3-016 - BMY3-016 - - BMY3-016 - - - - BMY3-016 - - - - - BMY3-016 - - - - - - BMY3-016 - - - - - - BMY3-016 - - - - - -				

<Applicable auto switch>

Solid state ----- D-M9N(V), M9P(V), M9B(V), D-M9NW(V), M9PW(V), M9BW(V), D-M9NA(V), M9PA(V), M9BA(V) Reed ------- D-A90(V), A92(V), A96(V)

How to Mount and Move the Auto Switch



- 1. After picking up a switch spacer between your fingers, push it in the cylinder tube groove.
- 2. Confirm that it is set in the correct mounting orientation.



- Insert an auto switch into the groove of the auto switch mounting bracket.
- 4. While keeping the condition in (3) above, insert the auto switch mounting bracket into the auto switch mounting groove of the cylinder to set it roughly to the auto switch mounting position.
- After confirming the detecting position, secure the auto switch by tightening the auto switch mounting screw (M2.5).
- Note 1) When tightening an auto switch mounting screw (M2.5), use a watchmaker's screwdriver with a grip diameter of 5 to 6 mm. Also, set the tightening torque to be 0.1 to 0.15 N-m.

Auto Switch Mounting Bracket Part No.

(Switch spacer and auto switch mounting bracket; two kinds of auto switch mounting brackets are used as a set.)

Culinder series	Applica	able bore siz	e (mm)					
Cylinder series	32	40	50					
MDB1	BMP1-032 BMG2-012	BMP1-032	BMP1-032					
MGZ, MGZR	—	BING2-012	BIMG2-012					
Cylinder series	Applicable bore size (mm)							
oyinder series	63	80	100	125				
MDB1	BMP1-032	BMP1-032	BMP1-032 BMG2-012	BMP1-032 BMG2-012				
MGZ. MGZR	BING2-012	BINIG2-012	_	_				

Note 2) Color or gloss differences in the metal surfaces have no effect on metal performance.

The special properties of the chromate applied to the main body of the auto switch mounting bracket for BMG2-012 result in differ-ences in coloration depending on the production lot, but these have no adverse impact on corrosion resistance.

How to Mount and Move the Auto Switch

A 20 strokes or less



* It is recommended to mount the switch bracket from the rear end.

- 1. First, insert the auto switch inside the switch groove.
- Next, push the switch bracket from a position above the auto switch into the groove.
- After setting the mounting position, use a flat blade screwdriver to tighten the mounting screw supplied with the auto switch so as to secure the auto switch.

B 25 strokes or more



- 1. First, push the switch bracket into the switch groove.
- Next, after the auto switch has been inserted into the groove, slide it sideways to overlap it with the switch bracket.
- Insert the auto switch so that its top end slides into a portion under the switch bracket.
- After setting the mounting position, use a flat blade screwdriver to tighten the mounting screw supplied with the auto switch so as to secure the auto switch.
- Note 1) Even for 25 strokes or more, the auto switch can be mounted in the same manner as described in A.
- Note 2) When tightening an auto switch mounting screw, use a watchmaker's screwdriver with a grip diameter of 5 to 6 mm. Also, set the tightening torque to be 0.05 to 0.1 N-m. As a guide, turn 90° from the position where it comes to feel tight.

Switch Bracket No.

Culinder series	Applicable bore size (mm)							
Cylinder series	25	32	40	50	63			
MU	MUZ-025							

<Applicable auto switch> Solid state D-Y59^a_B, Y69^a_B, D-Y7P(V), D-Y7NW(V), Y7PW(V), Y7BW(V), D-Y7BA Reed D-Z73, Z76, Z80

How to Mount and Move the Auto Switch



- Insert the auto switch into the mounting groove and set it at the auto switch mounting position.
- 2. After reconfirming the detecting position, tighten the mounting screw to secure the auto switch.
- **3.** Modification of the detecting position should be made in the condition of 1.

How to Mount and Move the Auto Switch



When attaching an auto switch, first take a switch spacer between your fingers and press it into a switch mounting groove. When doing this, confirm that it is set in the correct mounting orientation, or reattach if necessary. Next, insert an auto switch into the groove and slide it until it is positioned under the switch spacer. After establishing the mounting position, use a watchmakers flat head screwdriver to tighten the auto switch mounting screw which is included.



Switch Spacer No.

Outlindex certico	Applicable bore size (mm)								
Cylinder series	32	40	50	63	(mm) 80	100			
MDB1		BMP1-032							

Mounting Bracket Direct Mounting Type

<Applicable auto switch> Reed D-E73A, E76A, E80A

How to Mount and Move the Auto Switch



- Insert the auto switch mounting nut into the auto switch mounting groove and then set the auto switch at the mounting position by sliding.
- Put the convex part of auto switch into the auto switch mounting groove and slide it over the nut.
- Push the auto switch mounting screw lightly into the switch mounting nut through the auto switch mounting hole.
- After reconfirming the detecting position, tighten the mounting screw to secure the auto switch. (Tightening torque of M2.5 screw should be 0.1 to 0.2 N·m.)

Auto Switch Mounting Bracket Part No. (Including nut, screw)

Cylinder	Арр	Applicable bore size (mm)						
series	25	32	40					
ML1 M2.5 x	10 L BMY1-025	BMY1-025	BMY1-025					

<Applicable auto switch> Solid state D-P4DW

How to Mount and Move the Auto Switch



- Insert the hexagon socket head cap screw (M2.5 x 0.45 x 8 L) down lightly to the M2.5 tapped portion of the lower part of auto switch mounting bracket's concave part. (2 locations) Use caution to avoid the tip of a screw from sticking out of the auto switch mounting bracket's bottom surface.
- Install a spring washer in the hexagon socket head cap bolt (M3 x 0.5 x 16 L), then put it through the part of through-holes (2 locations) of an auto switch.
- 3. As for auto switch mounting bracket, slightly thread the hexagon socket head cap screw w into M3 tapped portion. (2 locations)
- 4. Fit the auto switch mounting bracket into the auto switch mounting groove on the cylinder body, and then slide it to the detection position roughly.
- After reconfirming the detecting position, tighten the mounting screw to secure the auto switch.

Auto Switch Mounting Bracket Part No. (Including bracket, screw)

Culinder earles	Applicable bore size (mm)									
Cylinder series	32	40	50	63	80	100				
MLGP	BMG1-040	BMG1-040	BMG1-040	DMO1 040	PMC1 040	BMG1-040				
MGT	-	-	-	BING 1-040	DIVIGIT-040					

Caution Auto Switch Mounting Tool

 When tightening hexagon socket head cap screw of an auto switch, use a hexagon wrench key 2 and 2.5, depending on the case.

Tightening Torque

@SMC

- As a guide, set approximately 0.3 to 0.5 N·m for M2.5, 0.5 to 0.7 N·m for M3 respectively.

How to Mount and Move the Auto Switch

Ø12 to Ø25

- Insert the nut into the auto switch mounting slot on the cylinder tube, and place it in the roughly estimated setting position.
- 2. Engage the ridge on the auto switch mounting arm with the recess in the cylinder tube rail, and slide it to the position of the nut.
- Gently screw the auto switch mounting screw into the thread of the auto switch mounting nut through the mounting hole on the auto switch mounting arm.
- Confirm where the mounting position is, and tighten the auto switch mounting screw to fix the auto switch. The tightening torque of the M2.5 screw must be 0.25 to 0.35 N-m.
- 5. The detection position can be changed under the conditions in step 3.

Ø32 to Ø160

- Insert the nut into the auto switch mounting slot on the cylinder tube, and place it in the roughly estimated setting position.
- With the lower tapered part of the auto switch spacer facing the outside of the cylinder tube, line up the M2.5 through hole with the M2.5 female thread of the auto switch mounting nut.
- Gently screw the auto switch mounting nut fixing screw (M2.5) into the thread of the auto switch mounting nut through the mounting hole.
- Engage the ridge on the auto switch mounting arm with the recess in the auto switch spacer.
- Tighten the auto switch mounting screw (M3) to fix the auto switch. The tightening torque of the M3 screw must be 0.35 to 0.45 N·m.
- Confirm where the mounting position is, and tighten the auto switch fixing screw (M2.5) to fix the auto switch mounting nut. The tightening torque of the M2.5 screw must be 0.25 to 0.35 N-m.
- 7. The detection position can be changed under the conditions in step 5.

Auto Switch Mounting Bracket Part No. (Including bracket, screw)

	Culinder earles	Applicable bore size (mm)												
Cylinder series	12	16	20	25	32	40	50	63	80	100	125	140	160	
ſ	CDQ2 CDQ2Y	BQ4-012	BQ4-012	BQ4-012	BQ4-012	BQ5-032								
l	МК	-	-	BQ4-012	BQ4-012	BQ5-032	BQ5-032	BQ5-032	BQ5-032	—	_	_	-	_
l	RSDQ	_	BQ4-012	BQ4-012	_	BQ5-032	BQ5-032	BQ5-032	_	—	—	—	_	_



ø32 to ø160

