

Series 10-M

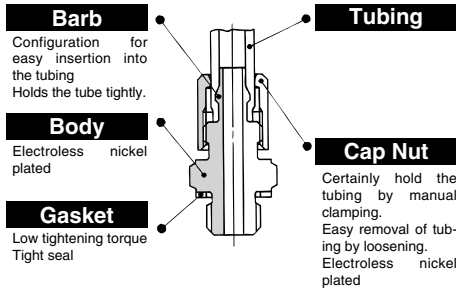
Miniature Fittings

RoHS

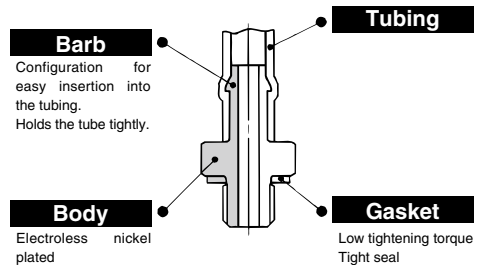
Construction



Hose nipple



Barb fitting



Specifications

Tubing material		Polyurethane
Fluid		Air, N ₂ , Water (Note 1, 2, 3)
Applicable tubing	M3	ø3.18/ø2, ø4/ø2.5
	M5-R1/8	ø3.18/ø2 ø4/ø2.5, ø6/ø4
Max. operating pressure (at 20°C)		0.8 MPa
Ambient and fluid temperature		-5 to 60°C, Water: 0 to 40°C (No freezing)
Connection size		M3, M5, R1/8
Grease		Fluorine grease (10-M-5UN only)
Cleanliness class (ISO class)		Class 3

Note 1) Barb fitting, barb elbow, barb elbow (H) are not compatible with water.
 Note 2) 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 3) As the universal nipple comes with grease, it cannot be used when N₂ is used as clean, dry air.

Principal Parts Materials

Material	Body	Electroless nickel plated C3604 (Nipple 10-M-3N, 10-M-5N: Stainless steel 303)
	Gasket	Nylon 66, GF30%, Stainless steel 304 + NBR

Directional Control Valves

Air Cylinders

Rotary Actuators

Air Grippers

Air Preparation Equipment

Modular F. R.

Pressure Control Equipment










Fittings & Tubing





Flow Control Equipment

Pressure Switches/ Pressure Sensors

















Miniature Fittings 10-M











Series M3, R1/8

Series	Model	Description	Application	Note
M3	10-M-3AU-3	Barb fitting for polyurethane tubing 	For piping polyurethane tubing	ø3.18/2 x M3
	10-M-3AU-4			ø4/2.5 x M3
	10-M-3ALU-3	Barb elbow for polyurethane tubing 	For piping polyurethane tubing	ø3.18/2 x M3
	10-M-3ALU-4			ø4/2.5 x M3
	10-M-3UL	Universal elbow 	Body rotates at 360° around the stud axis.	M3 female x M3 male
	10-M-3UT	Universal tee 	Body rotates at 360° around the stud axis.	M3 female x M3 female x M5 male
	10-M-3N	Nipple 	Connection for fitting to workpiece and fitting to fitting	M3 male x M5 male
	10-M-3P	Plug 	Use to plug unused M3 port	
	10-M-3G2	Gasket 	To seal M3 thread	Material: Stainless steel 304 + NBR

Series	Model	Description	Application	Note
R 1/8	10-M-01AU-4	Barb fitting for polyurethane tubing 	For polyurethane tubing	ø4/2.5 x R1/8
	10-M-01AU-6			ø6/4 x R1/8
	10-M-01H-4	Hose nipple 		ø4/2.5 x R1/8
	10-M-01H-6			ø6/4 x R1/8

Series M5

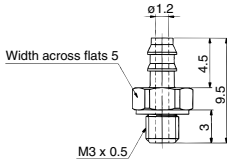
Series	Model	Description	Application	Note
M5	10-M-5AU-3	Barb fitting for polyurethane tubing 	For piping polyurethane tubing	ø3.18/2 x M5
	10-M-5AU-4			ø4/2.5 x M5
	10-M-5AU-6			ø6/4 x M5
	10-M-5ALU-3	Barb elbow for polyurethane tubing 	For piping polyurethane tubing	ø3.18/2 x M5
	10-M-5ALU-4			ø4/2.5 x M5
	10-M-5ALU-6			ø6/4 x M5
	10-M-5ALHU-3	Barb elbow (H) for polyurethane tubing 	For piping polyurethane tubing	ø3.18/2 x M5
	10-M-5ALHU-4			ø4/2.5 x M5
	10-M-5ALHU-6			ø6/4 x M5
	10-M-5H-4	Hose nipple 	For piping polyurethane tubing	ø4/2.5 x M5
10-M-5H-6		ø6/4 x M5		
10-M-5HL-4	Hose elbow 	For piping polyurethane tubing	ø4/2.5 x M5	
10-M-5HL-6			ø6/4 x M5	
10-M-5HLH-4	Hose elbow (H) 		Body rotates at 360° around the stud axis.	ø4/2.5 x M5
10-M-5HLH-6			ø6/4 x M5	
10-M-5L	Elbow 	One-sided 90° elbow	M5 female x M5 female	

Series	Model	Description	Application	Note
M5	10-M-5T	Tee 	Both sides allow 90° connection	M5 female x M5 female x M5 female
	10-M-5UL	Universal elbow 	Body rotates at 360° around the stud axis.	M5 female x M5 male
	10-M-5UT	Universal tee 	Body rotates at 360° around the stud axis.	M5 female x M5 female x M5 male
	10-M-5J	Extension fitting 	Solid piece moves fitting up from workpiece	M5 male x M5 female
	10-M-5N	Nipple 	Connection for fitting to workpiece and fitting to fitting	M5 male x M5 male
	10-M-5UN	Universal nipple 	Body rotates at 360° around the center of axis.	M5 male x M5 male PAT.
	10-M-5B	Bushing 	For reducing R1/8 female to M5	R1/8 x M5 female
	10-M-5P	Plug 	Use to plug unused M5 port	
	10-M-5G2	Gasket 	To seal M5 thread	Material: Stainless steel 304 + NBR
	10-M-5GH	Gasket (H) 	10-M-5ALU-6 10-M-5ALHU-6 10-M-5HLH-4, 6 10-M-5HLH-4, 6	Material: Nylon 66, GF30%

Series M3

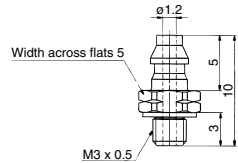
Barb Fitting for Polyurethane Tubing: 10-M-3AU-3

Effective area: 0.9 mm²
Weight: 0.6 g



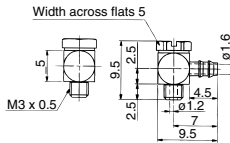
Barb Fitting for Polyurethane Tubing: 10-M-3AU-4

Effective area: 0.9 mm²
Weight: 0.7 g



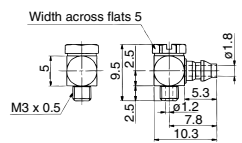
Barb Elbow for Polyurethane Tubing: 10-M-3ALU-3

Effective area: 0.6 mm²
Weight: 0.8 g



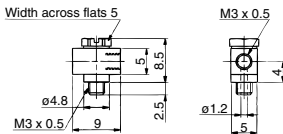
Barb Elbow for Polyurethane Tubing: 10-M-3ALU-4

Effective area: 0.6 mm²
Weight: 0.9 g



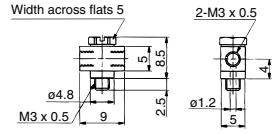
Universal Elbow: 10-M-3UL

Effective area: 0.6 mm²
Weight: 1.6 g



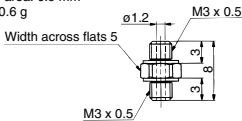
Universal Tee: 10-M-3UT

Effective area: 0.6 mm²
Weight: 1.4 g



Nipple: 10-M-3N

Effective area: 0.9 mm²
Weight: 0.6 g



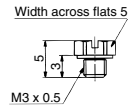
Gasket: 10-M-3G2

Weight: 0.03 g



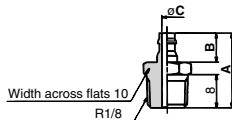
Plug: 10-M-3P

Weight: 0.5 g



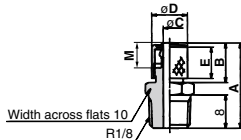
Series R1/8

Barb Fitting for Polyurethane Tubing: 10-M-01AU-4, -6



Model	A	B	C	Effective area (mm ²)	Weight (g)
10-M-01AU-4	15.1	5	1.8	2.1	6.5
10-M-01AU-6	17.1	7	2.5	4.0	6.7

Hose Nipple: 10-M-01H-4, -6



Model	A	B	C	D	E	M	Effective area (mm ²)	Weight (g)
10-M-01H-4	18.6	8.5	1.8	6.5	7	5	2.1	7.1
10-M-01H-6	19.6	9.5	3	8.5	8	6	5.5	7.7

Directional Control Valves

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Pressure Control Equipment

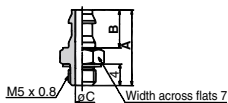
Fittings & Tubing

Flow Control Equipment

Pressure Switches/Pressure Sensors

Series M5

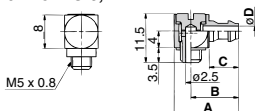
Barb Fitting for Polyurethane Tubing: 10-M-5AU-3, -4, -6



Model	A	B	C	Effective area (mm ²)	Weight (g)
10-M-5AU-3	11.5	4.5	1.6	1.7	1.5
10-M-5AU-4	12	5	1.8	2.1	1.6
10-M-5AU-6	14	7	2.5	4.0	1.8

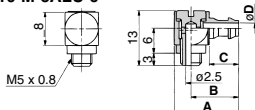
Barb Elbow for Polyurethane Tubing: 10-M-5ALU-3, -4, -6

10-M-5ALU-3,-4



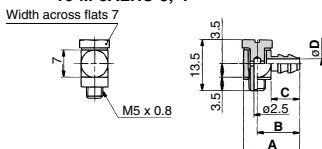
Model	A	B	C	D	Effective area (mm ²)	Weight (g)
10-M-5ALU-3	13	9	4.5	1.6	1.1	4.0
10-M-5ALU-4	13.5	9.5	5	1.8	1.4	4.1
10-M-5ALU-6	15.5	11.5	7	2.5	2.4	4.5

10-M-5ALU-6



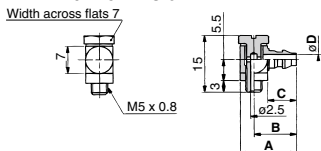
Barb Elbow for Polyurethane Tubing: 10-M-5ALHU-3, -4, -6

10-M-5ALHU-3,-4

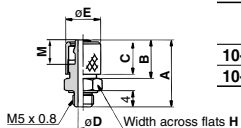


Model	A	B	C	D	Effective area (mm ²)	Weight (g)
10-M-5ALHU-3	12	8.5	4.5	1.6	1.1	3.2
10-M-5ALHU-4	12.5	9	5	1.8	1.4	3.3
10-M-5ALHU-6	14.5	11	7	2.5	2.4	3.9

10-M-5ALHU-6



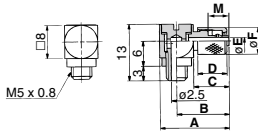
Hose Nipple: 10-M-5H-4, -6



Model	A	B	C	D	E	H	M	Effective area (mm ²)	Weight (g)
10-M-5H-4	15.5	8.5	7	1.8	6.5	7	5	2.1	2.7
10-M-5H-6	16.5	9.5	8	2.5	8.5	8	6	4.0	3.9

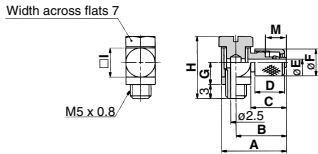
Series M5

Hose Elbow: 10-M-5HL-4, -6



Model	A	B	C	D	E	F	M	Effective area (mm ²)	Weight (g)
10-M-5HL-4	16.5	12.5	8.5	7	1.8	6.5	5	1.4	4.4
10-M-5HL-6	17.5	13.5	9.5	8	2.5	8.5	6	2.4	5.2

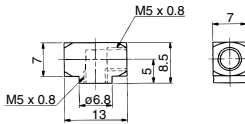
Hose Elbow: 10-M-5HLH-4, -6



Model	A	B	C	D	E	F	G	H	I	M	Effective area (mm ²)	Weight (g)
10-M-5HLH-4	15.5	12	8.5	7	1.8	6.5	5.5	15	7	5	1.4	4.5
10-M-5HLH-6	17.5	13.5	9.5	8	2.5	8.5	6	16	8	6	2.4	6.6

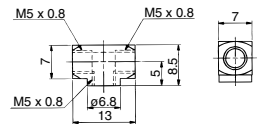
Elbow: 10-M-5L

Weight: 4.2 g



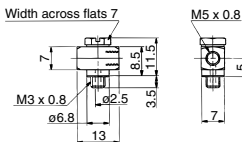
Tee: 10-M-5T

Weight: 3.5 g



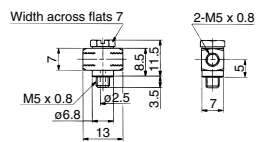
Universal Elbow: 10-M-5UL

Effective area: 2.4 mm²
Weight: 5.3 g



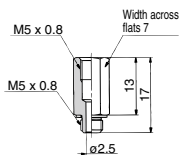
Universal Tee: 10-M-5UT

Effective area: 2.4 mm²
Weight: 4.8 g



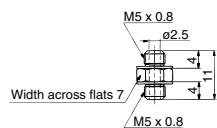
Extension Fitting: 10-M-5J

Effective area: 4.0 mm²
Weight: 3.6 g



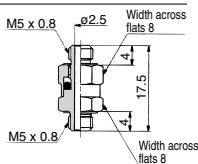
Nipple: 10-M-5N

Effective area: 4.0 mm²
Weight: 1.5 g



Universal Nipple: 10-M-5UN

Effective area: 4.0 mm²
Weight: 3.9 g



Directional Control Valves

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Pressure Control Equipment

Fittings & Tubing

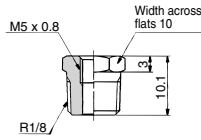
Flow Control Equipment

Pressure Switches/ Pressure Sensors

Series M5

Bushing: 10-M-5B

Weight: 5.8 g



Plug: 10-M-5P

Weight: 1.3 g



Gasket: 10-M-5G2

Weight: 0.04 g



Gasket: 10-M-5GH

Weight: 0.04 g

