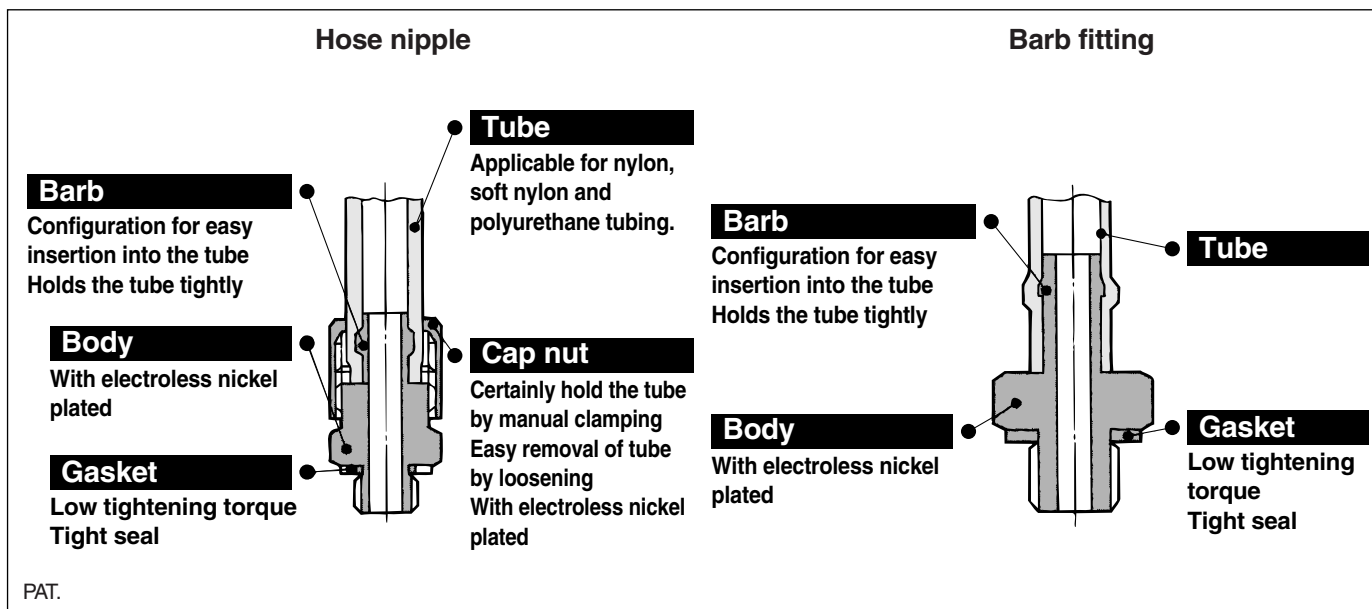


Miniature Fittings

M3, M5, R 1/8

Series M



Compact piping space

Hose nipple tubing connection/disconnection is simple while keeping a large retaining force.

Line up various styles

For air connection in confined areas.

Accepts many styles of plastic tubing

Hose nipple and hose elbow accepts nylon, soft nylon, and polyurethane tubing.



Specifications

Applicable tubing material		Nylon	Soft nylon	Polyurethane
Applicable tubing	M3	—	—	—
	M5-R 1/8	ø4/ø2.5 ø6/ø4	ø3.18/ø2.18 ø4/ø2.5 ø6/ø4	ø3.18/ø2 ø4/ø2.5, ø6/ø4
Max. operating pressure (at 20°C)		1.5 MPa	1.0 MPa	0.8 MPa
Connection size		M3, M5, R 1/8		
Thread		JIS B 0209 Class 2 (Metric coarse thread), JIS B 0203 (Taper pipe thread)		

Principal Parts Material

Material	Body	C3604BD (Nipple M-3N, M-5N: Stainless steel 303)
	Gasket	PVC, Nylon 66: GF30%, Stainless steel 304, NBR

Fitting Markings for Applicable Tubing Material (Barb fitting, Barb elbow, Barb elbow (H))

Tubing material determines the compatible fittings. (Refer to the table below.)

Connection	Tubing	Fitting marking for applicable tubing material			Surface treatment (Color)
		Barb fittings	Barb elbow	Barb elbow (H)	
M3	Soft nylon tubing Polyurethane tubing		—		Electroless nickel plated (Silver color)
R 1/8, M5	Nylon tubing				Electroless nickel plated (Silver color)
	Soft nylon tubing Polyurethane tubing	Marking	Marking	Marking	Electroless nickel plated (Black color) [Except stud]

* Body of M-5E, M-5ER, M-5M is not surface-treated.
Electroless nickel plate treated is available as option -X2.

Series M3, R 1/8					Series M5				
Series	Model	Description	Application	Note	Series	Model	Description	Application	Note
M3	M-3AU-3	Barb fitting for soft tube	For soft nylon tubing	ø3.18/2.18 x M3	M5	M-5AN-4	Barb fitting for nylon tubing	For nylon tubing	ø4/2.5 x M5
	M-3AU-4		For polyurethane tubing	ø3.18/2 x M3		M-5AN-6			ø6/4 x M5
			For soft nylon and polyurethane tubing	ø4/2.5 x M3			P. 57		
	M-3ALU-3	Barb elbow for soft tubing	For soft nylon tubing	ø3.18/2.18 x M3		M-5AU-3	Barb fitting for soft tubing	For soft nylon tubing	ø3.18/2.18 x M5
			For polyurethane tubing	ø3.18/2 x M3		M-5AU-4			ø3.18/2 x M5
	M-3ALU-4		For soft nylon and polyurethane tubing	ø4/2.5 x M3		M-5AU-6			ø4/2.5 x M5
							P. 57		ø6/4 x M5
	M-3UL	Universal elbow	Body rotates at 360° around the stud axis	M3 female x M3 male		M-5ALN-4	Barb elbow for nylon tubing	• For nylon • Body rotates at 360° around the stud axis	ø4/2.5 x M5
	M-3UT	Universal tee	Body rotates at 360° around the stud axis	M3 female x M3 female x M3 male		M-5ALN-6			ø6/4 x M5
							P. 57		
R 1/8	M-3N	Nipple	Fitting to workpiece and fitting to fitting connection	M3 male x M3 male	M5	M-5ALU-3	Barb elbow for soft tubing	For soft nylon tubing	ø3.18/2.18 x M5
	M-3P	Plug	Use to plug unused M3 port			M-5ALU-4			ø3.18/2 x M5
	M-3G	Gasket	To seal M3 thread			M-5ALU-6			ø4/2.5 x M5
							P. 57		ø6/4 x M5
						M-5ALHN-4	Barb elbow (H) for nylon tubing	Body rotates at 360° around the stud axis	ø4/2.5 x M5
						M-5ALHN-6			ø6/4 x M5
							P. 57		
						M-5ALHU-3	Barb elbow (H) for soft tubing	For soft nylon tubing	ø3.18/2.18 x M5
						M-5ALHU-4			ø3.18/2 x M5
						M-5ALHU-6			ø4/2.5 x M5
R 1/8	M-01AN-4	Barb fitting for nylon tubing	For nylon tubing	ø4/2.5 x R 1/8	M5	M-5H-4	Hose nipple	For nylon, soft nylon and polyurethane tubing	ø4/2.5 x M5
	M-01AN-6			ø6/4 x R 1/8		M-5H-6			ø6/4 x M5
							P. 58		
	M-01AU-4	Barb fitting for soft tubing	For soft nylon and polyurethane tubing	ø4/2.5 x R 1/8		M-5HL-4	Hose elbow	• For nylon, soft nylon and polyurethane tubing • Body rotates at 360° around the stud axis	ø4/2.5 x M5
	M-01AU-6			ø6/4 x R 1/8		M-5HL-6			ø6/4 x M5
							P. 58		
	M-01H-4	Hose nipple	For nylon, soft nylon and polyurethane tubing	ø4/2.5 x R 1/8		M-5HLH-4	Hose elbow (H)		ø4/2.5 x M5
	M-01H-6			ø6/4 x R 1/8		M-5HLH-6			ø6/4 x M5
							P. 58		
						M-5L	Elbow	One-sided 90° elbow	M5 female x M5 female
M5	M-5T	tee	Both sides allow 90° connection	M5 female x M5 female x M5 female	M5	M-5UL	Universal elbow	Body rotates at 360° around the stud axis	M5 female x M5 male
						M-5UT	Universal tee	Body rotates at 360° around the stud axis	M5 female x M5 female x M5 male
							P. 58		
	M-5J	Extension fitting	Solid piece moves fitting up from workpiece	M5 male x M5 female		M-5N	Nipple	Fitting to workpiece and fitting to fitting connection	M5 male x M5 male
							P. 58		
	M-5UN	Universal nipple	Body rotates at 360° around the stud axis	M5 male x M5 male PAT.		M-5E	Bulkhead union	Panel-mount connection	M5 female x M5 female
							P. 58		
	M-5ER	Bulkhead reducer	Reduction from Rc 1/8 to M5 including panel or bracket mounting	Rc 1/8 x M5 female		M-5M	Manifold	For reducing Rc 1/8 female be diverted to up to 9, M5 stations, including panel or bracket mounting	Rc 1/8 x M5 female (9 stations)
							P. 59		
	M-5B	Bushing	For reducing R 1/8 female to M5.	R 1/8 x M5 female		M-5P	Plug	Use to plug unused M5 port.	
M5							P. 59		
	M-5G1	Gasket	To seal M5 thread	Material: PVC		M-5GH	Gasket (H)	M-5AL□-6 M-5ALH□-6 M-5HL-4, 6 M-5HLH-4, 6	Material: Nylon66 GF30%
							P. 59		

* Gaskets are prepared for other items than the above, too.

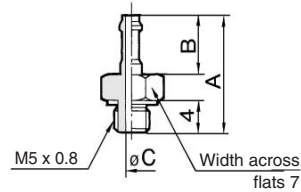
Part no.	Application	Material
M-5G2	For M5 thread for Series KQ2, KJ	Stainless steel 304,
M-6G	For M6 thread for Series KQ2	NBR
M-10/32G	For 10-32UNF thread for Series KQ2	

Series M5

Barb Fitting for Nylon Tubing: M-5AN-4/-6



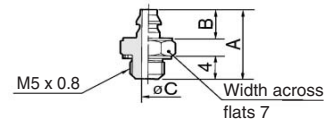
Model	A	B	øC	Effective area (mm ²)	Weight (g)
M-5AN-4	12	5	1.8	2.1	1.6
M-5AN-6	14	8	2.5	4.0	1.7



Barb Fitting for Soft Tubing: M-5AU-3/-4/-6



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



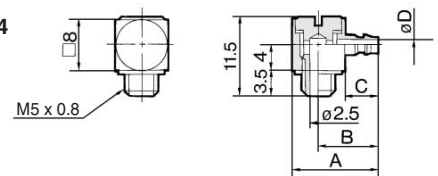
Barb Elbow for Nylon Tubing: M-5ALN-4/-6

Barb Elbow for Soft Tubing: M-5ALU-3/-4/-6

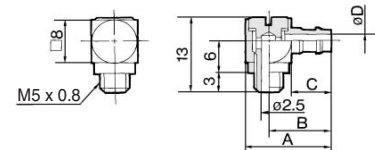


Model	A	B	C	øD	Effective area (mm ²)	Weight (g)
M-5ALN-4	13	9	5	1.8	1.4	4.0
M-5ALN-6	15	11	7	2.5	2.4	4.4
M-5ALU-3	12.5	8.5	4.5	1.6	1.1	4.0
M-5ALU-4	13.3	9.3	5	1.8	1.4	4.1
M-5ALU-6	15.3	11.3	7	2.5	2.4	4.5

M-5ALN-4
M-5ALU-3/-4



M-5ALN-6
M-5ALU-6



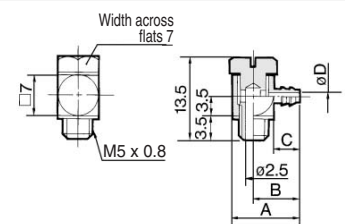
Barb Elbow for Nylon Tubing: M-5ALHN-4/-6

Barb Elbow for Soft Tubing: M-5ALHU-3/-4/-6

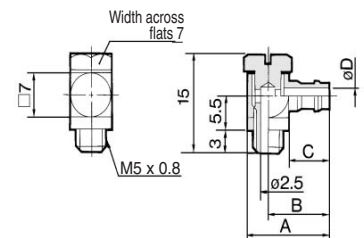


Model	A	B	C	øD	Effective area (mm ²)	Weight (g)
M-5ALHN-4	12	8.5	5	1.8	1.4	3.2
M-5ALHN-6	14	10.5	7	2.5	2.4	3.7
M-5ALHU-3	11.5	8	4.5	1.6	1.1	3.2
M-5ALHU-4	12.3	8.8	5	1.8	1.4	3.3
M-5ALHU-6	14.3	10.8	7	2.5	2.4	3.9

M-5ALHN-4
M-5ALHU-3/-4



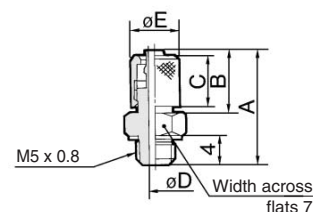
M-5ALHN-6
M-5ALHU-6



Hose Nipple: M-5H-4/-6



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



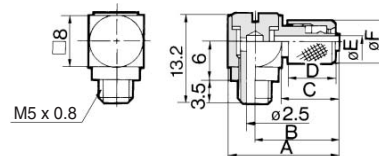
Series M

Series M5

Hose Elbow: M-5HL-4/-6



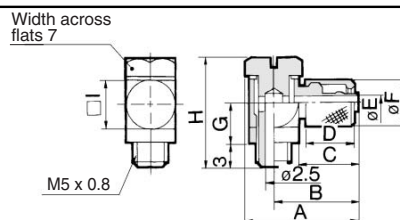
Model	A	B	C	D	øE	øF	Effective area (mm ²)	Weight (g)
M-5HL-4	16.5	12.5	8.5	7	1.8	6.5	1.4	4.4
M-5HL-6	17.5	13.5	9.5	8	2.5	8.5	2.4	5.2



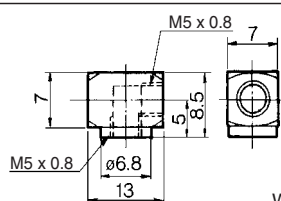
Hose Elbow: M-5HLH-4/-6



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

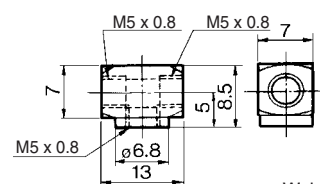


Elbow: M-5L



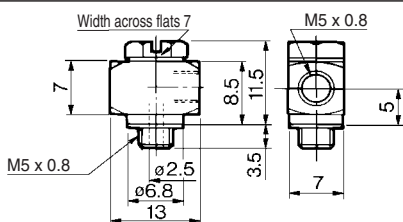
Weight: 4.2 g

Tee: M-5T



Weight: 3.5 g

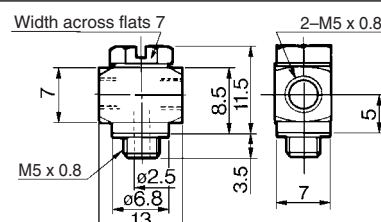
Universal Elbow: M-5UL



Effective area: 2.4 mm²

Weight: 5.3 g

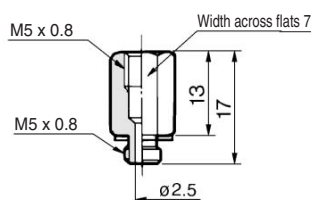
Universal Tee: M-5UT



Effective area: 2.4 mm²

Weight: 4.8 g

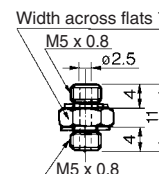
Extension Fitting: M-5J



Effective area: 4.0 mm²

Weight: 3.6 g

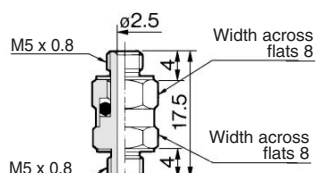
Nipple: M-5N



Effective area: 4.0 mm²

Weight: 1.5 g

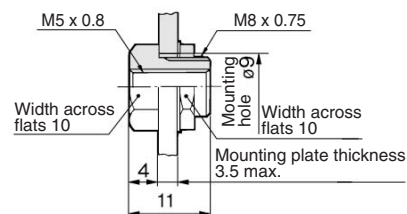
Universal Nipple: M-5UN



Effective area: 4.0 mm²

Weight: 3.9 g

Bulkhead Union: M-5E



For the plate thickness 3.5 to 6 mm, give the plate tapping M8 x 0.75, and then screw-in.

Weight: 4.6 g