

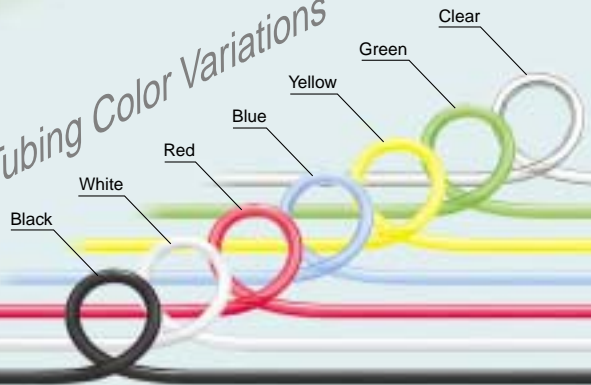
Miniature Tubing & Miniature Fittings

Series TU/M

O.D. $\varnothing 2$ X I.D. $\varnothing 1.2$

Minimum bending radius: 4 mm

Tubing Color Variations



Four types of fittings are available.

Barb fitting



Port size
M3 x 0.5
M5 x 0.8

Barb elbow



Port size
M3 x 0.5
M5 x 0.8

Barb one-touch



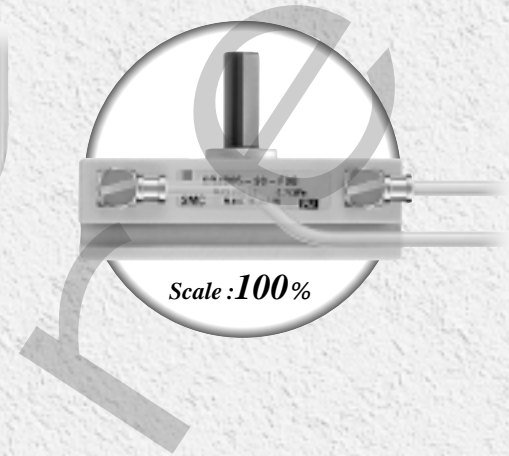
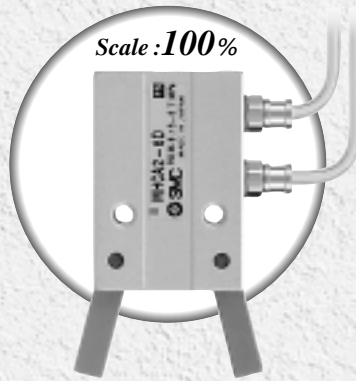
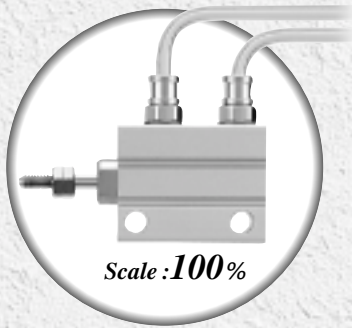
Tubing size
$\varnothing 3.2$
$\varnothing 4$

Reducer

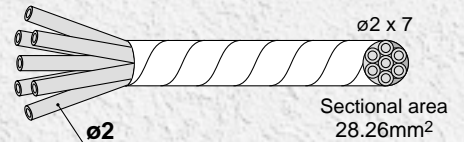
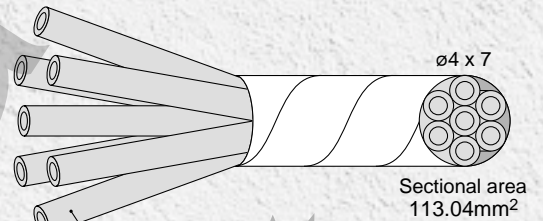
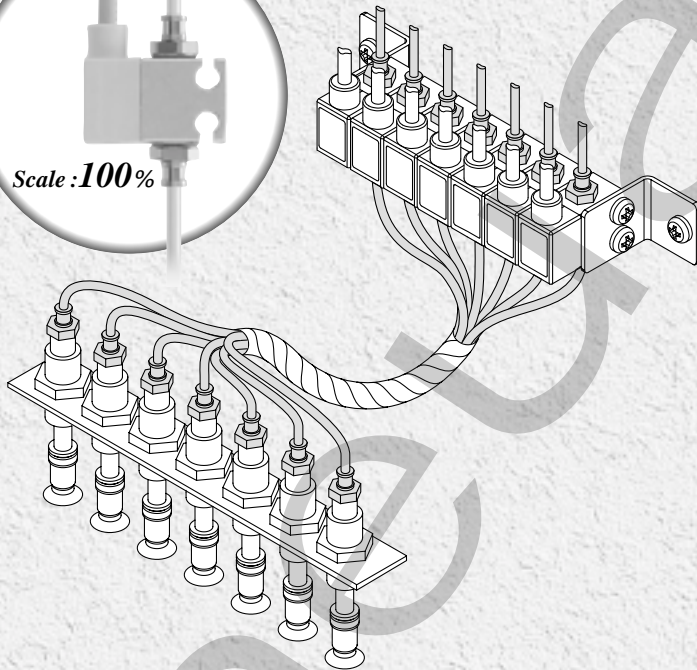
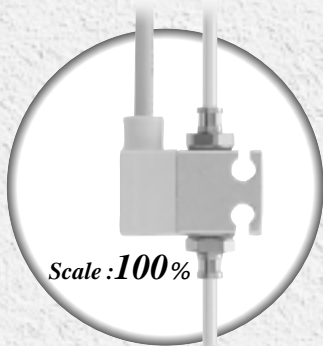


Fitting size
$\varnothing 3.2$
$\varnothing 4$

Piping for compact actuator

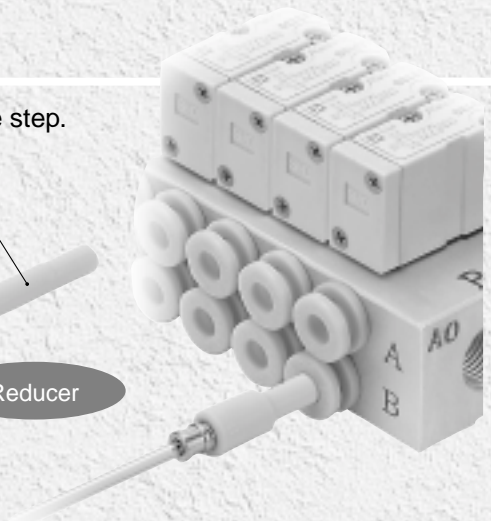
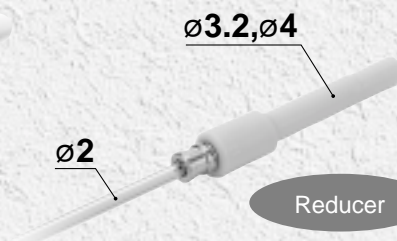
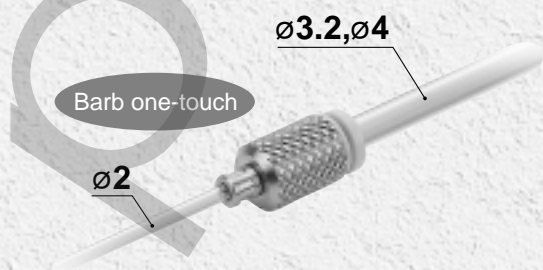


Piping for compact pressure sensor



Easy size reduction

Reduction of the tubing size from standard equipment is possible in a single step.



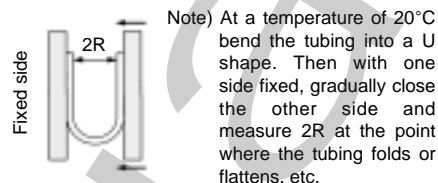
Miniture Polyurethane Tubing

Series TU

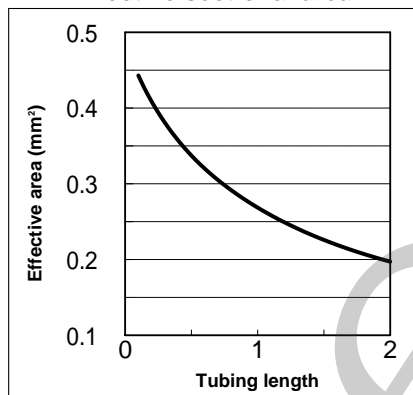
Specifications



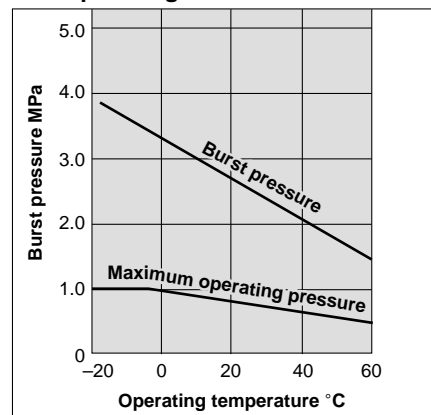
Model	TU0212
O.D. x I.D. (mm)	2 x 1.2
Fluid	Air, Water
Max. operating pressure (at 20°C)	0.8MPa
Burst prssure	Refer to pressure characteristics curve.
Min. bending radius (mm) ^{Note)}	4
Operating temperature	-20 to +60°C (Water: 0 to 40°C) (No freezing)
Material	Polyurethane
Color	Black(B), White(W), Red(R), Blue(BU), Yellow(Y), Green(G), Clear(C)



Effective sectional area



Burst Pressure Characteristic Curve and Operating Pressure



⚠ Precautions

Be sure to read before handling. Refer to page 4 through 6 for Safety Instructions and common precautions on the products mentioned in this catalog.

⚠ Caution

- 1 Applicable for general industry water. Consult P/A if using for other kinds of fluids. Surge pressure must be under the max. operating pressure. If exceeding that value, fitting may be damaged and tubing may burst.
- 2 The value of the max. operating pressure is at a temperature of 20°C. Refer to the burst pressure characteristics curve for other temperatures. Avoid abnormal temperature rises which may burst the tubing.
- 3 The values of the min. bending radius is at a temperature of 20°C. Higher temperatures allow the tubing to bend more.

How to Order

TU0212 B 20

Indication of tubing model

Length per roll

Symbol	Roll size
20	20m roll

Color indication

Symbol	Color
B	Black
W	White
R	Red
BU	Blue
Y	Yellow
G	Green
C	Clear

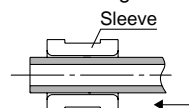
Miniature Fittings (For exclusive Miniature tubing) Series M



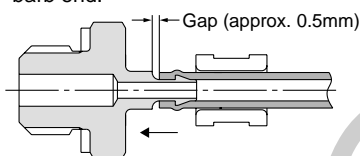
Tubing connection and removal

Installing tubing

1. Cut the tubing perpendicularly allowing additional length.
2. Insert the tubing into the sleeve.



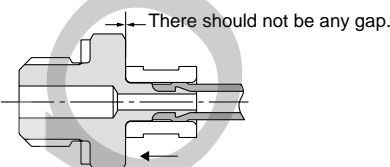
3. Insert the tubing slowly into the fittings. Make sure to secure a gap of approx. 0.5mm between the tubing end and the barb end.



4. Insert the sleeve slowly. Make sure not to allow any gap between the sleeve end side and the body end side. (Please refer to the illustration below.)

If you feel any strong resistance and cannot push the sleeve completely to the end side, this may be caused due to jamming. Remove and repeat again by starting from step 1 making sure to secure a gap in the step 3.

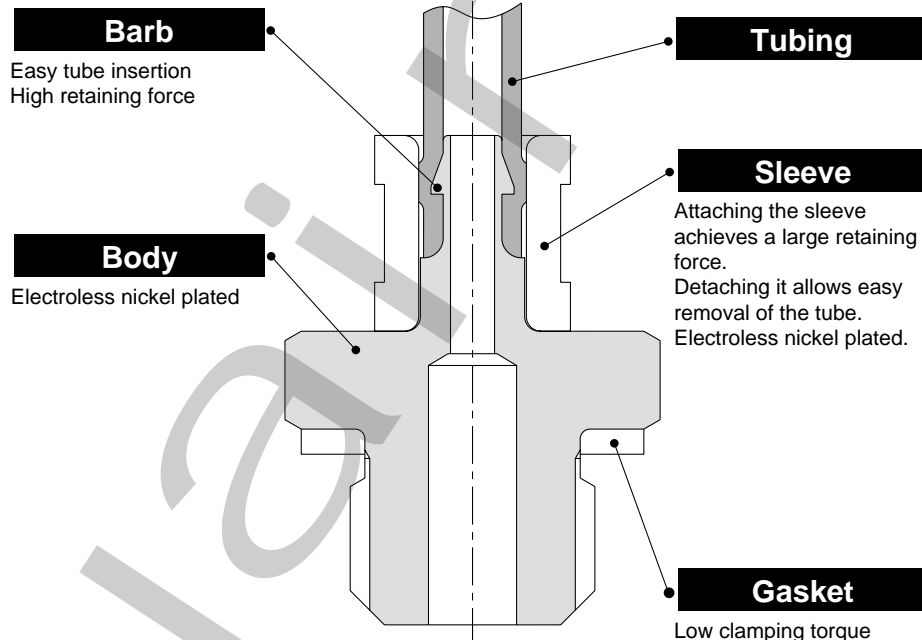
Note) When installing the tubing, the sleeve must be attached. Operation without attaching the sleeve may cause tubing disconnection.



Removing tubing

Withdraw the sleeve straight along the tubing. Use a tool such as long-nose pliers if it is difficult to pull out by hand.

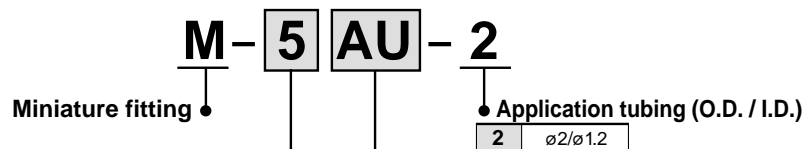
1. Withdraw the tubing straight.
2. When reusing the tubing, cut off the previously installed portion of the tubing to avoid possible leakage and/or disconnection of the tubing.



Specifications

Applicable tube material	Polyurethane
Applicable tube dia.	ø2/ø1.2
Max. operating pressure (at 20°C)	1MPa
Port size	M3, M5, ø3.2, ø4
Thread	JIS B0209 Class 2 (Metric coarse thread)

How to order



Model

AU	Barb fitting	M3, M5
ALU	Barb elbow	M3
ALHU		M5
F	Barb one-touch	ø3.2, ø4
R	Reducer	

Port size

3	M3 x 0.5
5	M5 x 0.8
32	ø3.2
04	ø4

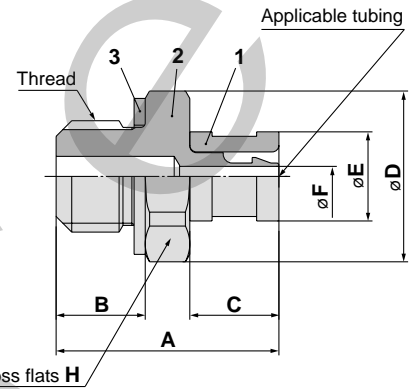
Barb fitting: M-3AU-2, M-5AU-2



Applicable tubing O.D. x I.D. (mm)	Thread	Model	H	A	B	C	D	E	F	Weight g
			$\varnothing 2 \times \varnothing 1.2$	M3 x 0.5	M-3AU-2	4.5	9	3	4	
	M5 x 0.8	M-5AU-2	7	10	4		7.7			1.5

Parts list

No.	Description	Material	Note
1	Sleeve	Brass	Electroless nickel plated
2	Barb fitting	Brass	Electroless nickel plated
3	Gasket	NBR, Stainless steel	-



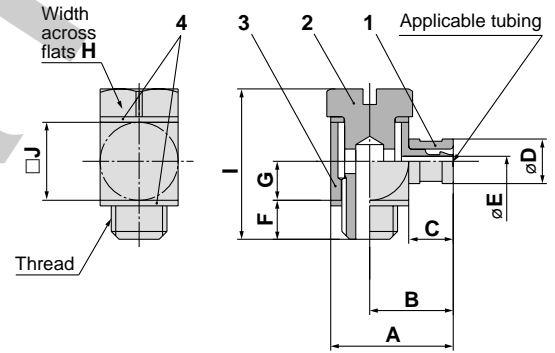
Barb elbow: M-3ALU-2, M-5ALHU-2



Applicable tubing O.D. x I.D. (mm)	Thread	Model	H	A	B	C	D	E	F	G	I	J	Weight g
			$\varnothing 2 \times \varnothing 1.2$	M3 x 0.5	M-3ALU-2	5	9	6.5	4	4	0.9	2.5	
	M5 x 0.8	M-5ALHU-2	7	11	7.5				3	3.5	13.5	7	3.5

Parts list

No.	Description	Material	Note
1	Sleeve	Brass	Electroless nickel plated
2	Stud	Brass	Electroless nickel plated
3	Barb elbow	Brass	Electroless nickel plated
4	Gasket	NBR, Stainless steel	-



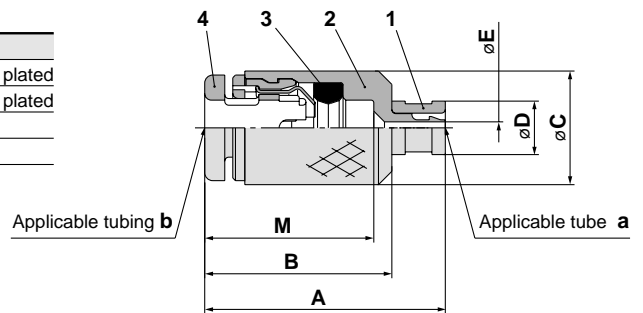
Barb one-touch: M-32F-2, M-04F-2



Applicable tubing (mm) a (O.D. x I.D.) b (O.D.)	Model	A	B	C	D	E	M	Weight g
		$\varnothing 2 \times \varnothing 1.2$	M-32F-2	17.7	13.7	7.5	4	
	M-04F-2	18	14	8.5				2.9

Parts list

No.	Description	Material	Note
1	Sleeve	Brass	Electroless nickel plated
2	Body	Brass	Electroless nickel plated
3	Seal	NBR	-
4	Cassette	POM, Stainless steel	-



Reducer: M-32R-2, M-04R-2



Applicable tubing O.D. x I.D. (mm)	Fitting size $\varnothing D$	Model	A	B	C	E	F	Weight g
			$\varnothing 2 \times \varnothing 1.2$	M-32R-2	36	20.5	31.5	
	M-04R-2		36.5		32			0.8

Parts list

No.	Description	Material	Note
1	Sleeve	Brass	Electroless nickel plated
2	Studded body	Brass	Electroless nickel plated
3	Stem	PP	-

