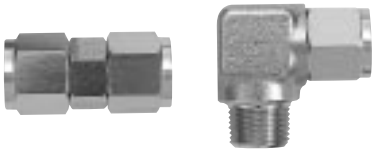
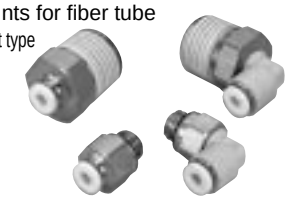
Joint

Model / product appearance	Feature	Applicable bore size	Port size						Page
			M3	M5	1/8	1/4	3/8	1/2	
● Miniature joint F Series 	Miniature type Barbed, clamp joint	ϕ3.2	●	●	●				940
		ϕ4	●	●	●				
		ϕ6		●	●				
● Joint GW Series 	Push-in joint For R screw, standard sealant is applied. Flame resistance resin is provided as standard.	ϕ3.2	●	●					948
		ϕ4	●	●	●	●			
		ϕ6		●	●	●	●		
		ϕ8			●	●	●		
		ϕ10			●	●	●	●	
		ϕ12				●	●	●	
		ϕ16					●	●	
● Joint mini-type GWJ Series 	Push-in joint For R screw, standard sealant is applied.	ϕ3.2	●	●	●				962
		ϕ4		●	●				
		ϕ6		●	●				
● Joint stainless steel type ZW Series 	Push-in joint Flame resistance resin Stainless steel material combination	ϕ4		●	●	●			968
		ϕ6		●	●	●	●		
		ϕ8			●	●	●		
		ϕ10				●	●	●	
		ϕ12					●	●	
● Female joint stainless steel type ZJ Series 	Easy Fit mechanism, tightening joint Stainless steel material	ϕ4			●	●			972
		ϕ6			●	●	●		
		ϕ8			●	●	●		
		ϕ10				●	●	●	
		ϕ12				●	●	●	
● Female joint MJ/JL Series 	Tightening joint Can be used for copper tube.	ϕ4			●	●	●		978
		ϕ6			●	●	●		
		ϕ8			●	●	●		
		ϕ10				●	●	●	
		ϕ12				●	●	●	
		ϕ15					●	●	
● Push-in joints for fiber tube standard type PG Series 	Push-in joint PP resin incorporated as standard to increase corrosion resistance	ϕ1.8	●	●	●				990

Model / product appearance	Feature	Applicable bore size	Port size						Page
			M3	M5	1/8	1/4	3/8	1/2	
● Push-in joints for fiber tube clean type CG Series 	Push-in joint PP resin incorporated as standard to increase corrosion resistance	ϕ1.8	●	●	●				994
● Push-in joints for fiber tube flame resistant type RG Series 	Push-in joint Flame resistance resin is provided. Ozone resistance material at packing seal section is provided as standard.	ϕ1.8		●	●				1000
● Dedicated joint for fiber tube PTN* Series 	With retainer collar	ϕ1.8	●	●	●				1006

Tube

Model	Feature	Tube outer diameter									Page
		ϕ1.8	ϕ3.2	ϕ4	ϕ6	ϕ8	ϕ10	ϕ12	ϕ15	ϕ16	
Fiber tube antistatic type (Push-in joint)	Extremely fine air tube as fine and flexible as lead wire. Appropriate where difficult to pipe or short piping such as narrow and tiny space, etc.	●									986
Fiber tube clean type (Push-in joint)	High corrosion resistant materials (special polyolefin) incorporated for use in cleanrooms. Ideal for fields a requiring clean environment, including semiconductor manufacturing, medicine, and foodstuff manufacturers.	●									986
Fiber tube flame resistant type (Push-in joint)	Push-in joint tubing using flame-resistant materials. Suitable for piping in narrow space while maintaining flexibility.	●									1001
Fiber tube antistatic type	This extremely fine air tubing has thinness and flexibility equivalent to a lead wire. Outstanding flexibility and high piping freedom enable piping in difficult places such as small spaces.	●									1007
Antistatic tube	This tubing prevents electrostatic discharge and dust from accumulating. Outstanding flexibility and high piping freedom enable piping in difficult places such as small spaces.		●	●	●	●	●	●			1013
Soft nylon tube	Very flexible comparing to conventional nylon tube. Appropriate for piping in limited space or complicated piping.		●	●	●	●	●	●	●	●	1016
Urethane tube	Due to new manufacturing process, as same outer diameter as it was, while larger inner diameter and increased strength are realized. This piping tube is also used for larger than flow rate.			●	●	●	●	●			1017
Urethane tube	Durable and flexible due to high mechanical strength.		●	●	●	●	●	●			1018
Coiling tube	This is a coiling extensible tube.				●	●	●	●			1018
Flame resistant tube	Flame retardant material used epoch-making tube. When welding spark, etc., contact, tube does not last burning.			●	●	●	●	●			1019

Safety precautions

Always read this section before starting use.
Refer to Intro 67 for general precautions, and to "⚠ Safety Precautions" in this section for details on each series.

Design & Selection

⚠WARNING

■ Use the product within specifications.
Using this product with fluid other than compressed air or at a pressure or temperature exceeding the specifications could result in rupture, the tube coming off, or leakage.

■ Avoid installing this product outdoors or where it is exposed to direct sunlight.

■ Do not use the normal joint if electrostatic discharge could build up. Otherwise system faults or failure could occur. An antistatic joint and antistatic tubing should be used in such a case.

⚠CAUTION

■ Confirm that the product will withstand the working environment.
● Such environments include high temperatures, a chemical atmosphere, or where chemicals, vibration, moisture, water drip, or gas are present; Outdoors or where the product could be subject to direct sunlight; or where cutting oil, coolant, or spatter could occur or where static electricity could pose a problem.

■ Confirm that PTFE can be used.
● The sealant contains PTFE (polytetrafluoroethylene resin) powder. Check that this poses no problem during use.

■ Consult with CKD if ozone could occur in supplied air. (An ozone-resistant series is available.)

■ Avoid using this product in hot or humid places, or where it could be subject to direct sunlight. Install this product where the temperature is 40℃ or less.

■ Flame-resistant resin (equivalent to UL94 Standard V-O) is provided for GW Series' push ring, but not for GWJ Series. Check specifications when selecting the product.

Installation & Adjustment

⚠WARNING

■ Securely insert the tube until it contacts the joint's tube end, and check that it does not come off the joint.

■ Before replacing tubing, stop the air flow and confirm that no pressure remains.

Piping

⚠CAUTION

■ Observe the following precautions when using nylon tubes or urethane tubes for piping material.
● Use the designated tube and CKD plastic plug (GWP Series). Do not use metal plugs.
Tube outer diameter precision
· Polyamide tube : Within ± 0.1mm
· Polyurethane tube (up to ϕ 6): Within ± 0.1mm
(ϕ 8 to): Within $^{+0.1}_{-0.15}$ mm
Use a tube with a hardness of 92° or more. If a tube that does not satisfy diameter accuracy or hardness is used, chucking force may drop or the tube may come off or be difficult to insert.
Consult with CKD when using a nondesignated tube or plug.
● Use a flame resistant tube or metal pipe where spatter could occur.
● When using the standard push-in joint on the spiral tube, fix the base of the tube with a hose band. Rotation occurs, and holding performance is decrease.
● Cut the tube at right angles using a dedicated cutting tool.
● Do not use a worn or damaged tube that could be crushed or rupture.
● Do not reuse the tube, which is worn and deformed.
● Do not let tube directly contact other structures because it could wear and break.

■ Do not use this valve for applications that constantly rotate, vibrate or which have a tube that moves vigorously.
● The elbow type can be mounted by turning it, but must not be used for constant rotating or oscillating applications. Otherwise the joint could be damaged.
● Provide sufficient allowance in the tube so that it does not bent suddenly.

■ Use tubing within the minimum bending radius but long enough to avoid sharp bends.

● Consider changes in tubing length caused by pressure when tubing is connected, and provide sufficient length within the minimum tube bending radius.

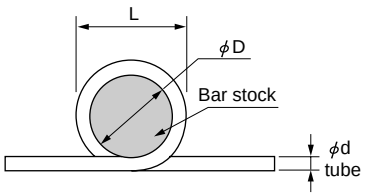
● Measuring method

(1) Minimum bending radius (JIS B8381)

The values are based on JIS B8381.

If tubing is tightly wound around a round rod, indicate the rod radius when variation η reaches 25%.

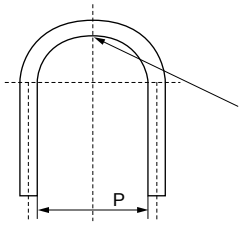
$$\eta = \left(1 - \frac{L - D}{2d}\right) \times 100$$



η : Deforming ratio (%)
d : Tube outer diameter (mm)
L : Measuring volume (mm)
D : Round rod diameter (mm) (Minimum bending radius of 2 time)

(2) Minimum installation radius

To measure, simply bend the tube and confirm the radius when tube diameter deformation is 10%.



Shall be the minimum mounting pitch when the deformation rate is 10%.
Min. installation radius = P/2

■ Always flush just before piping pneumatic component.

● Any foreign matter that has entered during piping must be removed so it does not enter the pneumatic component. Remove all swarf and foreign debris generated during piping and tube insertion before starting use.

■ When supplying compressed air for the first time after connecting pipes, do not apply high pressure suddenly.

● Piping connection could be dislocated or the piping tube fly off, leading to accidents.

■ After connecting piping, check pipe connections for air leaks before supplying compressed air.

● Apply a leakage detection agent on pipe connections with a brush, and check for air leaks.

■ Apply adequate torque when connecting pipes.

● To prevent air leak and to protect thread. Tighten by hand at first so that threads are not damaged, then use a tool.

Check that the tool's hexagon face and wrench are the correct size.

(Reference value)

Port thread	Tightening torque N·m
M3	0.3 to 0.6
M5	1.0 to 1.5
Rc1/8	3 to 5
Rc1/4	6 to 8
Rc3/8	13 to 15
Rc1/2	16 to 18

* The above values apply when the mating screw is a JISB 0203 tapered female thread for piping (material: C3604BD).

■ Pipe so that piping connections do not become dislocated due to device movement, vibration, or tension, etc.

● Control of actuator speed will be disabled if piping on the exhaust side of the pneumatic circuit is disengaged.

● When using the chuck holding mechanism, the chuck will be released creating a hazardous state.

● Confirm that the tube has been inserted properly, and make sure that there is no tension during use.
The tube could be dislocated or damaged if there is any tension.

■ Make sure that the joint and tube are not twisted or pulled, and that moment load is not applied.

■ Do not tighten while pressure is applied.

■ Observe the following precautions when using nylon tubes or urethane tubes for piping material.

● Use a flame resistant tube or metal pipe where spatter could occur.

● Use a hydraulic hose for common piping for hydraulic and pneumatic specifications.

● When using the standard push-in joint on the spiral tube, fix the base of the tube with a hose band. Rotation occurs, and holding performance is decrease.

● When using for hot liquids, use a soldered screw joint. The push-in join cannot be used.

■ Check that tubing is not worn or damaged.

● Tubing could be crushed, break, or be dislocated.

■ Use the designated tube.

■ Securely insert the tube to the tube end, and make sure that the tube cannot be pulled off.

Safety precautions

Always read this section before starting use.
Refer to Intro 67 for general precautions, and to "⚠ Safety Precautions" in this section for details on each series.

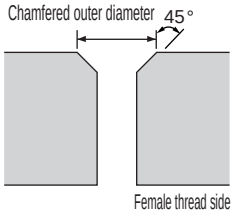
Installation & Adjustment

⚠CAUTION

■ Cut the tube with a dedicated cutter, and cut at a perpendicular angle.

■ If the set screw is M3 or M5 screw, the chamfered outer diameter of the female thread side must be within the following values.

Port thread	Chamfered outer diameter (mm)
M3	ϕ3.3 to 3.9
M5	ϕ5.4 to 5.8

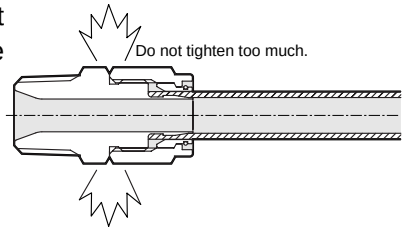


■ The effective sectional area of the turn elbow (GWL*-*-T, GWL*-*-2T) varies based on the direction.

ZJ Series

■ Except for separating the main body and nut, do not disassemble or modify joint components. Otherwise functions cannot be guaranteed.

■ This product and nuts are made of the same material (SUS316).
When tightening, stop as soon as the body and nut come in contact.
Tightening tubing too much could cause seizure at threads, making it difficult to remove tubing.



Keeping

■ The joint is made of highly corrosion-resistant material, but rust could spread from another point. Avoid storing this part with products made of other materials, and store in a clean, dry place.

ZJ Series

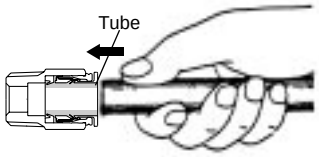
■ Store this product with nuts as a set. If parts are stored separately, the body and nut threads or body protrusions (seals) could be damaged or connection faults or leaks occur.

During Use & Maintenance

⚠CAUTION

Mounting and removal

Installation



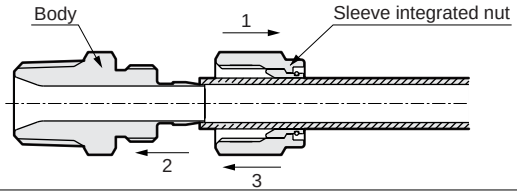
Push the tube in until it contacts the tube end.
Check that the tube is not dislocated from the joint. Tube goes in 15 to 21mm into the end of the joint body. The end of the mounted tube must be cut at a right angle.

Removal

While pushing the push ring with a finger, pull the tube to remove it.

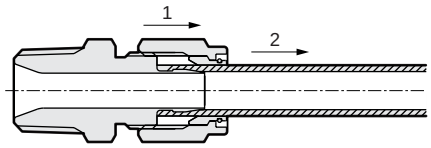
ZJ Series

Installation



Pass tubing through the sleeve integrated with the nut.
Insert tubing into the main body, and tighten the sleeve integrated with the nut until it contacts the body.
Stop tightening the sleeve integrated with the nut when the body and nut come in contact.
Tightening tubing too much could cause seizure at threads, making it difficult to remove tubing.

Removal



Loosen the sleeve integrated with the nut and pull out tubing.
The sleeve integrated with the nut can be reused.

F Miniature joint

Port size M3 to 1/8 (Rc or R)

RoHS CAD

- 44 types of miniature joints are available with port size M3, M5, bore size ϕ 3.2, ϕ 4, ϕ 6

■ Barbed joint

Straight/FTS

· Applicable tube O.D.: ϕ 3.2 to ϕ 6
· Page: 942

Elbow/FTL

· Applicable tube O.D.: ϕ 3.2 to ϕ 6
· Page: 942

Branch/FTT

· Applicable tube O.D.: ϕ 3.2 to ϕ 6
· Page: 942

Barbed nipple/FTS-0

· Applicable tube O.D.: ϕ 3.2 to ϕ 6
· Page: 942

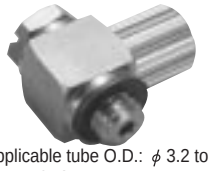
■ Clamp joint

Straight/FCS

· Applicable tube O.D.: ϕ 3.2 to ϕ 6
· Page: 943

■ Double screw nipple

Elbow/FCL



· Applicable tube O.D.: ϕ 3.2 to ϕ 6
· Page: 943

Straight/FNS

· Page: 943

■ Socket

Straight/FSS

· Page: 943

Elbow/FSL

· Page: 944

Branch/FST

· Page: 944

■ Adjustable socket

Elbow/FAL

· Page: 944

Branch/FAT

· Page: 944

Cross/FAX

· Page: 945

Deforming tee union/FAY

· Page: 945

■ Bush

FBS

· Page: 945

■ Bulk head

FWS sales unit: 5 pieces

· Page: 945

■ Plug

FPL

· Page: 946

■ Extension

FLS

· Page: 946

■ Manifold

FMB sales unit: 1 piece

· Page: 946

FMH sales unit: 1 piece

· Page: 946

■ Gasket

FGS sales unit: 100 pieces

· Page: 946

- If sales unit is not specified, the product is packed 10 pcs/bag.

Specifications

Descriptions	F
Working fluid	Compressed air
Max. working pressure MPa	0.7 or less
Ambient / fluid temperature ℃	-5 to 60 (no freezing)
Applicable tube	Soft nylon tube (model no. FH-3224, F-1504, F-1506) Urethane tube (model no. U-9504, U-9506) note

Note: Use urethane tube within 0 to 60℃ range.
(Refer to page 1012 for the dimensions of tube and working pressure.)

How to order

F A B C – D

- F: Miniature joint
- A: Shape
- B: Flow path shape
- C: Applicable tube O.D.
- D: Port size

Note 1: Refer to model no. sections in dimensions (pages 941 to 946) for detailed combination of model no.
Note 2: Sales unit is 10 pieces/1 bag. Refer to the system table on page 940 for model sales units.

Ozone specifications (Ending 5)

F - ····· - **P11**

Clean room specifications (catalog No. CB-033SA)

F - ····· - **P80**

Internal structure and parts list

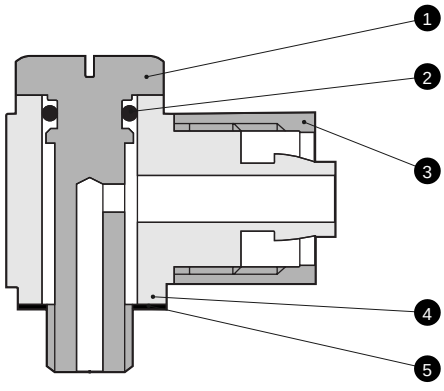


Figure shows FCL type.

No.	Part name	Material	treatment
1	Bolt	Brass	Electroless nickeling
2	O ring	Nitrile rubber	-
3	Clamp ring	Brass	Electroless nickeling
4	Body	Brass	Electroless nickeling
5	Gasket	Nitrile rubber, steel	-

Safety Precautions

(1) If urethane tube is used with 40℃ and over, use a clamp joint.
(2) Use a nylon tube with tolerance of diameter within ±0.1, while urethane $^{+0.1}_{-0.15}$ rubber tube within.
(3) Type with slit on clamp ring of clamp joint is for tube O.D. 3.2mm.
(4) If elbow, branch, cross, deforming branch or barbed joint is used at frequently moving tube section, trouble may occur. So please avoid use in such place.
(5) Bending radius of tube is to be the right value and over near a joint.

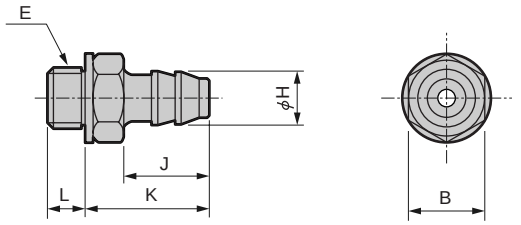
Minimum bending radius mm		Barbed joint	Clamp joint
φ3.2	Soft nylon 20	10	
φ4	Soft nylon 20	10	
	Urethane	20	10
φ6	Soft nylon 40	20	
	Urethane	40	20

Dimensions: Barbed joint (straight, elbow, branch, barbed nipple)

CAD

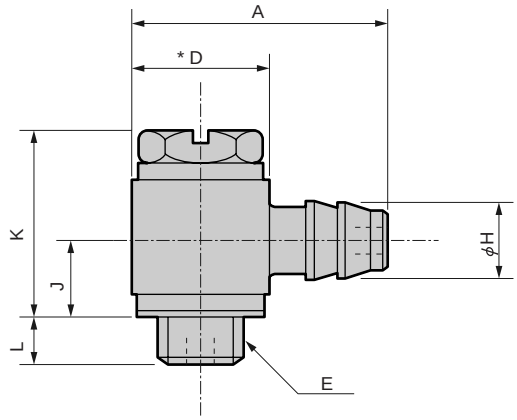
Barbed joint

● Straight/FTS



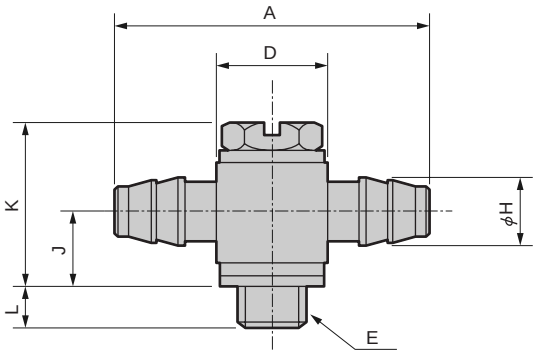
Model no.	Applicable tube O.D.ϕ	B	E	Min. bore size	H	J	K	L	Effective sectional area (mm²)
FTS4-M3	ϕ 3.2, ϕ4	4.5	M3 x 0.5	0.8	2.9	5.5	7.9	2.6	0.4
FTS4-M5	ϕ 3.2, ϕ4	7	M5 x 0.8	1.8	2.9	5.5	8.6	2.9	2.1
FTS4-6	ϕ 3.2, ϕ4	10	R1/8	1.8	2.9	5.5	9.5	8	2.1
FTS6-M5	ϕ 6	7	M5 x 0.8	2.5	4.7	7	10.1	2.9	4.1
FTS6-6	ϕ 6	10	R1/8	2.5	4.7	7	11	8	4.1

● Elbow/FTL



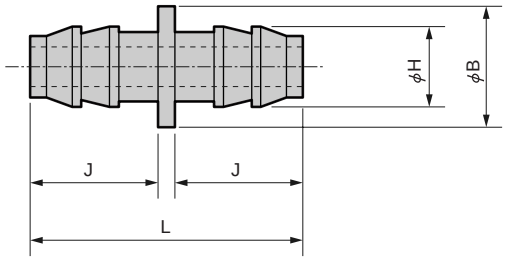
Model no.	Applicable tube O.D.ϕ	A	D	E	Min. bore size	H	J	K	L	Effective sectional area (mm²)
FTL4-M3	ϕ 3.2, ϕ4	10.5	5	M3 x 0.5	1	2.9	2.9	6.8	2.6	0.4
FTL4-M5	ϕ 3.2, ϕ4	13.5	8	M5 x 0.8	1.8	2.9	5.1	11.6	2.9	1.3
FTL6-M5	ϕ6	15	8	M5 x 0.8	1.8	4.7	5.1	11.6	2.9	1.5

● Branch/FTT



Model no.	Applicable tube O.D.ϕ	A	D	E	Min. bore size	H	J	K	L	Effective sectional area (mm²)
FTT4-M3	ϕ 3.2, ϕ4	16	5	M3 x 0.5	1	2.9	2.9	6.8	2.6	0.4
FTT4-M5	ϕ 3.2, ϕ4	19	8	M5 x 0.8	1.8	2.9	5.1	11.6	2.9	1.3
FTT6-M5	ϕ6	22	8	M5 x 0.8	1.8	4.7	5.1	11.6	2.9	1.5

● Barbed nipple/FTS*-0

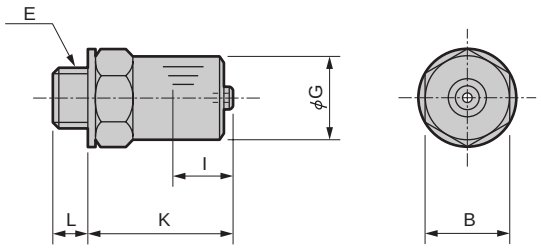


Model no.	Applicable tube O.D. ϕ	B	Min. bore size	H	J	L	Effective sectional area (mm²)
FTS4-0	ϕ 3.2, ϕ4	5	1.8	2.9	5.5	12	2.1
FTS6-0	ϕ6	7	2.5	4.7	7	15	4.1

Dimensions: Clamp joint (straight, elbow), double screw nipple (straight), socket (straight)

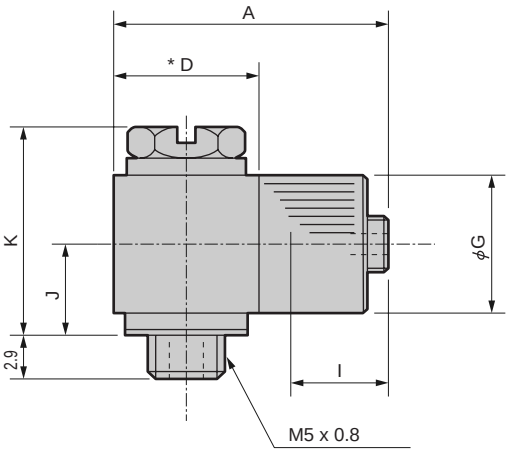
Clamp joint

● Straight/FCS



Model no.	Applicable tube O.D. ϕ	B	E	Min. bore size	G	I	K	L	Effective sectional area (mm²)
FCS3-M5	ϕ 3.2	7	M5 x 0.8	1.8	7	4.3	11.7	2.9	2.1
FCS3-6	ϕ 3.2	10	R1/8	1.8	7	4.3	12.1	8	2.1
FCS4-M5	ϕ 4	7	M5 x 0.8	1.8	7	4.3	11.7	2.9	2.1
FCS4-6	ϕ 4	10	R1/8	1.8	7	4.3	12.1	8	2.1
FCS6-M5	ϕ 6	8	M5 x 0.8	2.5	9	5	12.4	2.9	4.1
FCS6-6	ϕ 6	10	R1/8	2.5	9	5	12.8	8	4.1

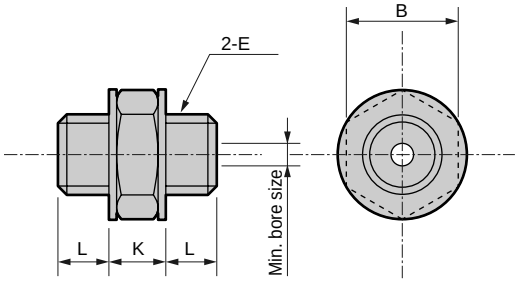
● Elbow/FCL



Model no.	Applicable tube O.D. ϕ	A	D	Min. bore size	G	I	J	K	Effective sectional area (mm²)
FCL3-M5	ϕ 3.2	16.1	8	1.8	7	4.3	5.1	11.6	1.3
FCL4-M5	ϕ 4	16.1	8	1.8	7	4.3	5.1	11.6	1.3
FCL6-M5	ϕ 6	17.8	9	1.8	9	5	6.1	13.6	1.5

Double screw nipple

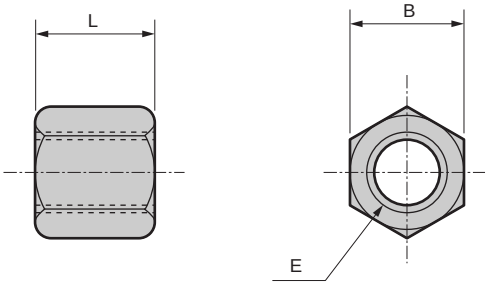
● Straight/FNS



Model no.	B	E	Min. bore size	K	L	Effective sectional area (mm²)
FNS-M3	4.5	M3 x 0.5	0.8	2.8	2.6	0.4
FNS-M5	7	M5 x 0.8	1.8	3.7	2.9	2.1

Socket

● Straight/FSS

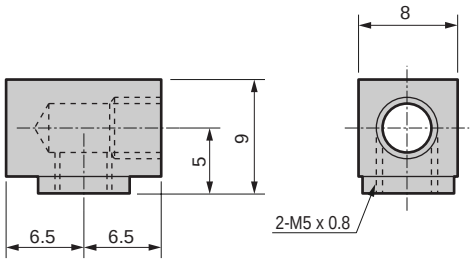


Model no.	B	E	L	Effective sectional area (mm²)
FSS-M3	4.5	M3 x 0.5	7	4
FSS-M5	7	M5 x 0.8	8	9

Dimensions: Double screw nipple (elbow), socket (branch), adjustable socket (elbow, branch)

Double screw nipple

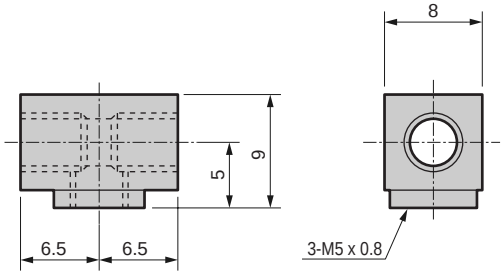
● Elbow/FSL-M5



Effective sectional area 8mm²

Socket

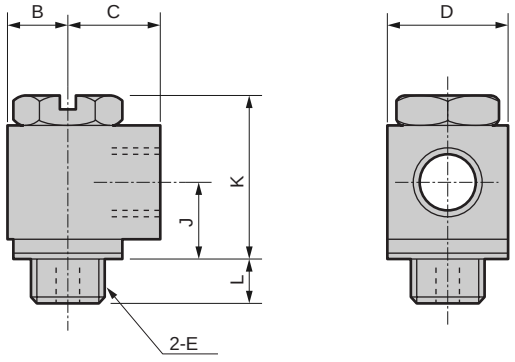
● Branch/FST-M5



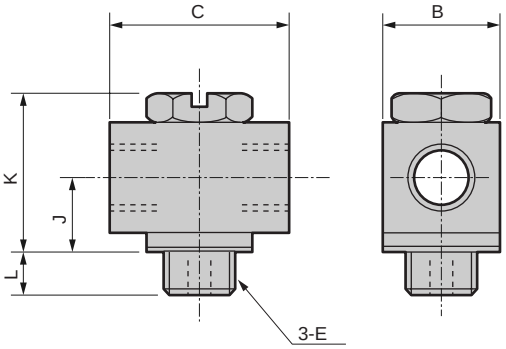
Effective sectional area 8mm²

Adjustable socket

● Elbow/FAL



● Branch/FAT



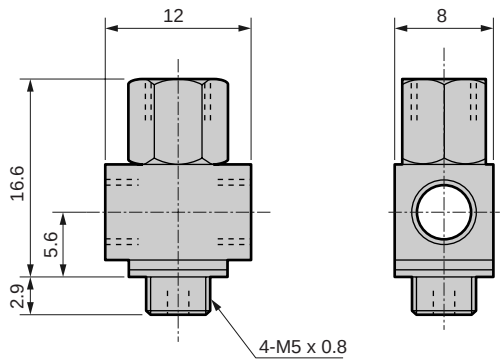
Model no.	B	C	D	E	Min. bore size	J	K	L	Effective sectional area (mm²)
FAL-M3	2.5	4.5	5	M3 x 0.5	1	2.9	6.8	2.6	0.5
FAL-M5	4	6.5	8	M5 x 0.8	1.8	5.6	11.6	2.9	1.7

Model no.	B	C	E	Min. bore size	J	K	L	Effective sectional area (mm²)
FAT-M3	5	9	M3 x 0.5	1	2.9	6.8	2.6	0.5
FAT-M5	8	12	M5 x 0.8	1.8	5.6	11.6	2.9	1.7

Dimensions: Adjustable socket (cross, deforming tee union), bush, bulk head

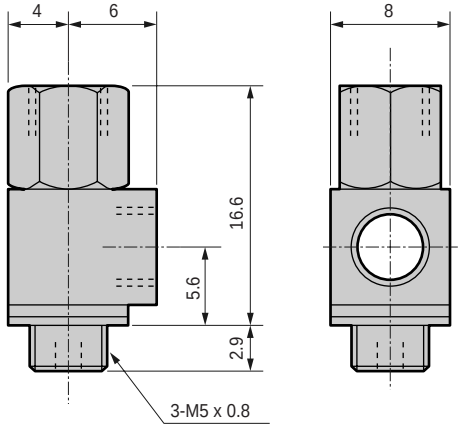
Adjustable socket

● Cross/FAX-M5



Min. bore size 1.8mm
Effective sectional area 1.7mm²

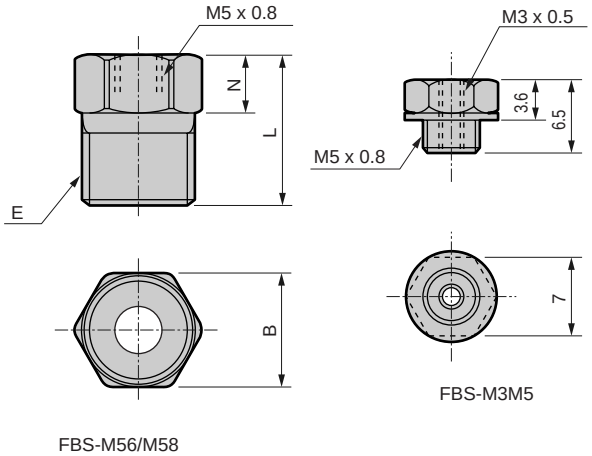
● Deforming tee union/FAY-M5



Min. bore size 1.8mm
Effective sectional area 1.7mm²

Bush

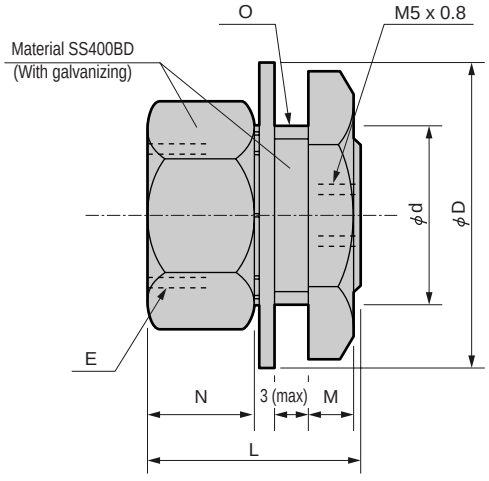
● FBS



Effective sectional area 4mm²

Bulk head

● FWS



Model no.	B	E	L	N	Effective sectional area (mm²)
FBS-M56	10	R1/8	12	4	9
FBS-M58	14	R1/4	16	5	9

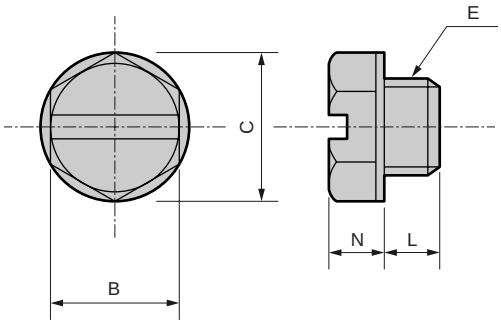
Model no.	D	d	E	L	M	N	O	Effective sectional area (mm²)
FWS-M5	14.7	8	M5 x 0.8	11	3	4	M8 x 1	9
FWS-M56	15.2	12	Rc1/8	16	5	7	M12 x 1	9

Dimensions: Plug, extension, manifold, gasket

CAD

Plug

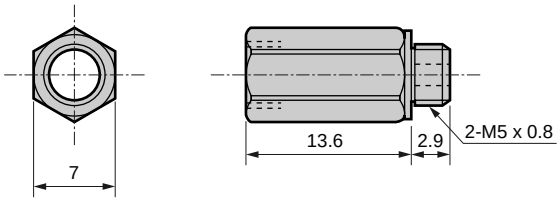
● FPL



Model no.	B	C	E	N	L
FPL-M3	4.5	4.9	M3 x 0.5	2.4	2.6
FPL-M5	7	7.8	M5 x 0.8	3.1	2.9

Extension

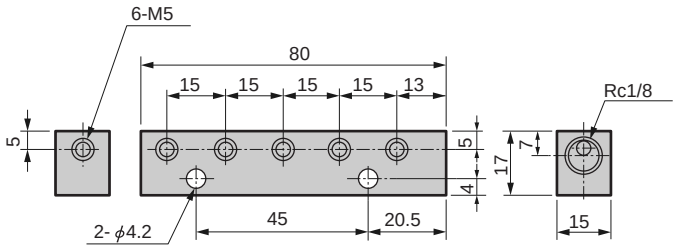
● FLS-M5



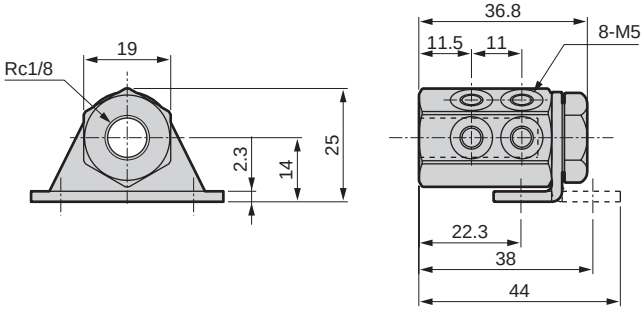
Effective sectional area 2.1mm^2

Manifold

● FMB-M56

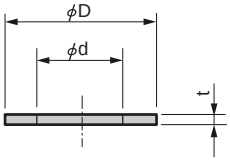


● FMH-M56



Gasket

● FGS



Model no.	D	d	t
FGS-M3	4.8	2.8	0.4
FGS-M5	7.8	4.8	0.6

GW Joint

Port size M3 to 1/2 (Rc or R)

● Wide connection joints and models

CAD

■ Straight type

Single straight GWS*-*

Applicable tube O.D. ϕ
4
6
8
10
12
16

· Page: 952

Single straight GWS*-*-S

Applicable tube O.D. ϕ
3.2
4
6
8
10
12

· Page: 952

Female straight GWS*-*-M

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 952

Bulk head female GWS*-*-E

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 952

Bulk head GWS*-*-X

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 953

Bulk head female connector GWM*-*-X

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 953

Straight GWS*-0

Applicable tube O.D. ϕ
4
6
8
10
12
16

· Page: 953

Different diameter straight GWS*-0

Applicable tube O.D. ϕ
4, 6
6, 8
8, 10
10, 12

· Page: 953

Plug reducer GWS*-*P

Applicable tube O.D. ϕ
4
6
8
10

· Page: 954

Plug GWP*-0

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 954

■ Elbow type

Plug reducer GWP*-0

Applicable tube O.D. ϕ
4, 6
6, 8
8, 10
10, 12

· Page: 954

Single elbow GWL*-*

Applicable tube O.D. ϕ
4
6
8
10
12
16

· Page: 954

Long elbow GWL*-*-L

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 955

Single 45° elbow GWL*-*-45

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 955

Turn elbow GWL*-*-T

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 955

■ Tee union type

Elbow GWL*-0

Applicable tube O.D. ϕ
4
6
8
10
12
16

· Page: 955

Both push-in branch GWT*-*

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 956

D type tee union GWT*-*-D

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 956

Tee union GWT-0

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 956

Y type tee union GWY*-0

Applicable tube O.D. ϕ
4, 4
6, 6
8, 8
10, 10
12, 12
6, 4
8, 6
10, 8
12, 10

· Page: 956

● Sales unit is 10 pieces/1 box.

Refrigerating type dryer
Desiccant type dryer
High polymer membrane dryer
Air filter
Auto. drain / others
F.R.L. (Module unit)
F.R.L. (Separate)
Compact F.R.
Precise regulator
F.R.L. (Related products)
Clean F.R.
Electro pneumatic regulator
Air booster
Speed control valve
Silencer
Check valve / others
Joint / tube
Vacuum filter
Vacuum regulator
Suction plate
Magnetic spring buffer
Mechanical pressure SW
Electronic pressure SW
Contact / close contact conf. SW
Air sensor
Pressure SW for coolant
Small flow sensor
Small flow controller
Flow sensor for air
Flow sensor for water
Total air system
Total air system (Gamma)
Ending
Joint
Joint/tube

Product introduction: Page 950
Specifications, model no., internal structure: Page 951

Both ports Y tee union GWY*-*

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 957

Cross shaped GWCR*-0

Applicable tube O.D. ϕ
8
10
12

· Page: 957

2 port turn elbow GWL*-*-2T

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 957

Tetrapod shaped (with R) GWTR*-*

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 957

FY type (with R) GWFY*-*

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 958

Double Y type (with R) GWWY*-*

Applicable tube O.D. ϕ
4
6

· Page: 958

Tetrapod shaped GWTR*-0

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 958

FY type GWFY*-0

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 958

Double Y type GWWY*-0

Applicable tube O.D. ϕ
6, 4
8, 6

· Page: 959

Blanking plug GWP*-B

Connecting joint Diameter ϕ
4
6
8
10
12
16

· Page: 959

L type plug GWP*-L

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 959

C type plug GWP*-C

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 959

Y type plug GWP*-Y

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 960

Cap GWC*

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 960

Manifold (single/with R) GWMF*-*

Applicable tube O.D. ϕ
4, 6
4, 8
6, 8
6, 10
8, 10

· Page: 960

Manifold (single solenoid) GWMF*-0

Applicable tube O.D. ϕ
4, 6
4, 8
6, 8
6, 10
8, 10

· Page: 960

Manifold (double/with R) GWMF*-*-W

Applicable tube O.D. ϕ
4, 8
6, 10
8, 12

· Page: 961

Manifold (double solenoid) GWMF*-0-W

Applicable tube O.D. ϕ
4, 8
6, 10
8, 12

· Page: 961

Insert ring Custom order

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 961

● Sales unit is 10 pieces/1 box.

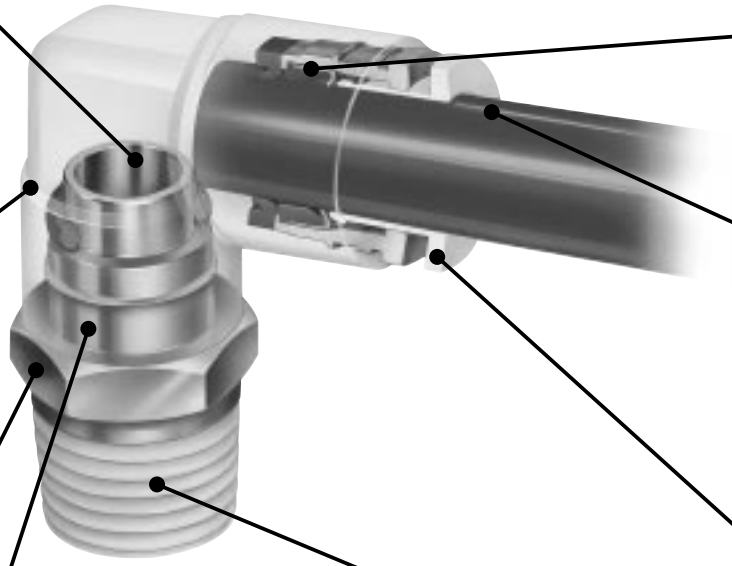
GW Joint

Port size M3 to 1/2 (Rc or R)

Work environment and device-friendly flame-resistant white body

Joint series for greatly reducing piping space

1. Push in joint for pneumatic piping.
2. Compact size for space saving.
3. V shaped packing seal to realize smooth insertion and accurate seal.
4. Freely rotating elbow union to make piping and removal work easier.
5. White body blends into working environment. Electroless nickel used for brass sections.
6. Flame resistant resin (equivalent to UL94 Standards V-0) used for GW Series body and push ring.



Full flow within bore size

· There are no sections narrower than the bore size.
· A flow equivalent to the bore size can be run.

White color Flame resistance resin (GW Series)

· White body blends into the work environment.
· Flame resistance PBT (Equivalent to UL94 standards V-O) is provided as standard.

Electroless nickel used for brass sections

· Electroless nickel is used as standard for all brass parts to improve corrosion resistance and appearance.

Easy piping work

· The section of the pipe connected with the main unit rotates freely, so the piping removal direction can be set as needed.

Accurate tube holding

· The chuck bracket acts in the direction in which the tube is dislocated, ensuring highly reliable holding.

Push-in installation

· The tube can be connected to the piping joint by pushing the tube in.
· V shaped packing is used for the seal between the tube and joint. The tube can be inserted with light force while obtaining a sure seal.

Easy tube removal

· The push evenly pushes and opens the chuck, so the tube is completely released from the chuck and can be removed smoothly.

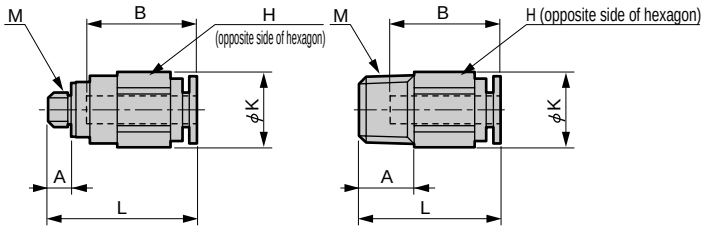
Sealant applied on threads as standard

· Teflon resin is coated on threads.
· Sealing tape is not needed, reducing work hours.
· An even seal is attached and there is no worry of leakage, etc.

Dimensions: Single straight / single straight (round) / female straight / bulk head female

Single straight

● GWS*-*

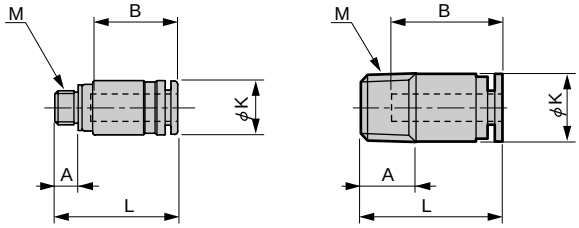


M5 type

Model no.	Applicable tube O.D. φ	M	H	K	L	A	B	Min. bore size	Effective sectional area mm²
GWS 4-M5	4	M5 x 0.8	10	11	21.5	3.4	16	2.5	4
GWS 4- 6		R1/8	10	11	20.5	8	16	2.5	4
GWS 4- 8		R1/4	14	15.8	19.5	11	16	2.5	4
GWS 6-M5	6	M5 x 0.8	12	13.5	23	3.4	17.5	2.5	4.4
GWS 6- 6		R1/8	12	13.5	23	8	17.5	4	10.3
GWS 6- 8		R1/4	14	15.8	23.5	11	17.5	4	10.3
GWS 6-10		R3/8	17	19.1	21.5	12	17.5	4	10.3
GWS 8- 6	8	R1/8	14	15.8	28	8	19	5	17.5
GWS 8- 8		R1/4	14	15.8	27	11	19	6	22.4
GWS 8-10		R3/8	17	19.1	22.5	12	19	6	22.4
GWS10- 6	10	R1/8	17	19.1	31	8	21.5	5	17.5
GWS10- 8		R1/4	17	19.1	32.5	11	21.5	8	30.5
GWS10-10		R3/8	17	19.1	28.5	12	21.5	8	30.5
GWS10-15		R1/2	22	24	26.5	15	21.5	8	30.5
GWS12- 8	12	R1/4	19	21.4	35.5	11	23	8	35.5
GWS12-10		R3/8	19	21.4	30.5	12	23	10	40
GWS12-15		R1/2	22	24	29.5	15	23	10	40
GWS16-10	16	R3/8	24	26.5	42	12	28	12	90
GWS16-15		R1/2	24	26.5	37.5	15	28	13	90

Single straight (round)

● GWS*-*-S

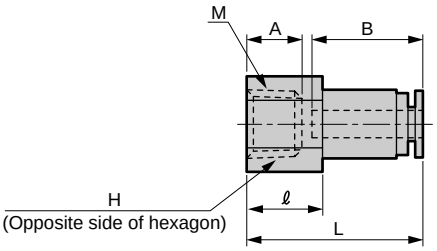


M3, M5 type

Model no.	Applicable tube O.D. φ	M	K	L	A	B	Hexagon head hole diameter	Effective sectional area mm²
GWS 3-M3-S	3.2	M3 x 0.5	6.9	15.7	2.4	11.7	1.5	1.4
GWS 3-M5-S		M5 x 0.8	6.9	16.7	3.4	11.7	2	2.7
GWS 4-M3-S	4	M3 x 0.5	7.9	16.9	2.4	12.9	1.5	1.6
GWS 4-M5-S		M5 x 0.8	7.9	17.9	3.4	12.9	2	2.7
GWS 4- 6-S		R1/8	9.8	20.5	8	16	2.5	4.1
GWS 6-M5-S	6	M5 x 0.8	9.9	19.2	3.4	14.2	2.5	4.4
GWS 6- 6-S		R1/8	11.8	23	8	17.5	4	10.6
GWS 6- 8-S		R1/4	13.8	23	11	17.5	4	10.6
GWS 8- 6-S	8	R1/8	14	28	8	19	5	20.4
GWS 8- 8-S		R1/4	14	27	11	19	6	22
GWS 8-10-S		R3/8	17	22.5	12	19	6	22
GWS10- 6-S	10	R1/8	17.5	30.5	8	21.5	5	20.1
GWS10- 8-S		R1/4	17.5	28.5	11	21.5	6	26.3
GWS10-10-S		R3/8	17.5	28.5	12	21.5	8	30.1
GWS10-15-S		R1/2	22	26.5	15	21.5	8	30.1
GWS12- 8-S	12	R1/4	19.5	34	11	23	6	26.3
GWS12-10-S		R3/8	19.5	29.5	12	23	8	37.9
GWS12-15-S		R1/2	22	28.5	15	23	8	37.9

Female straight

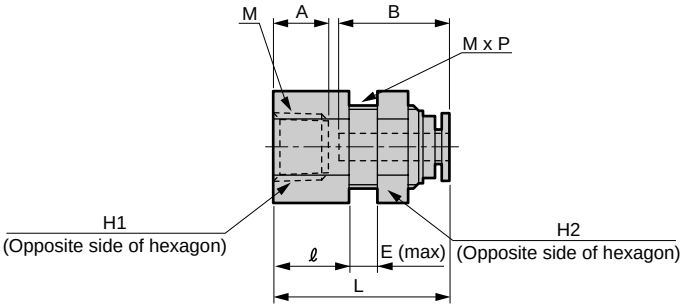
● GWS*-*-M



Model no.	Applicable tube O.D. φ	M	H	L	ℓ	A	B	Min. bore size	Effective sectional area mm²
GWS 4- 6-M	4	Rc1/8	12	25.5	11	8	16	2.5	4
GWS 4- 8-M		Rc1/4	17	28.5	14	11	16	2.5	4
GWS 6- 6-M	6	Rc1/8	14	27	11	8	17.5	4	10.3
GWS 6- 8-M		Rc1/4	17	30	14	11	17.5	4	10.3
GWS 6-10-M		Rc3/8	19	31	15	12	17.5	4	10.3
GWS 8- 6-M	8	Rc1/8	17	28.5	11	8	19	6	22.4
GWS 8- 8-M		Rc1/4	17	31.5	14	11	19	6	22.4
GWS 8-10-M		Rc3/8	19	32.5	15	12	19	6	22.4
GWS10- 8-M	10	Rc1/4	19	34.5	14	11	21.5	8	30.5
GWS10-10-M		Rc3/8	19	35.5	15	12	21.5	8	30.5
GWS12- 8-M	12	Rc1/4	22	36	14	11	23	10	35.5
GWS12-10-M		Rc3/8	22	37	15	12	23	10	35.5
GWS12-15-M		Rc1/2	24	40	18	15	23	10	35.5

Bulk head female

● GWS*-*-E

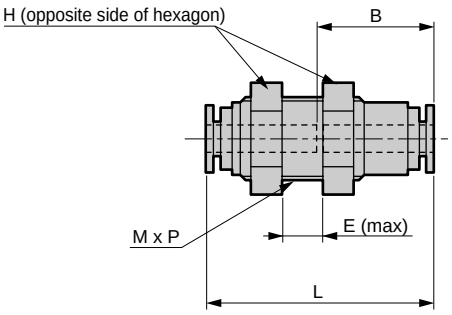


Model no.	Applicable tube O.D. φ	M	H1	H2	L	ℓ	A	B	E	M x P	Installation hole dia.	Min. hole dia.	Effective sectional area mm²
GWS 4- 6-E	4	Rc1/8	14	14	25.5	11	8	16	5	M12 x 1	13	2.5	4
GWS 4- 8-E		Rc1/4	17	14	28.5	14	11	16	5	M12 x 1	13	2.5	4
GWS 6- 6-E	6	Rc1/8	17	17	27	11	8	17.5	5	M14 x 1	15	4	10.3
GWS 6- 8-E		Rc1/4	17	17	30	14	11	17.5	5	M14 x 1	15	4	10.3
GWS 6-10-E		Rc3/8	19	17	31.5	15	12	17.5	5	M14 x 1	15	4	10.3
GWS 8- 6-E	8	Rc1/8	19	19	28.5	11	8	19	6	M16 x 1	17	6	22.4
GWS 8- 8-E		Rc1/4	19	19	31.5	14	11	19	6	M16 x 1	17	6	22.4
GWS 8-10-E		Rc3/8	19	19	32.5	15	12	19	6	M16 x 1	17	6	22.4
GWS10- 8-E	10	Rc1/4	22	23	34.5	14	11	21.5	9	M20 x 1	21	8	30.5
GWS10-10-E		Rc3/8	22	23	35.5	15	12	21.5	9	M20 x 1	21	8	30.5
GWS12-10-E	12	Rc3/8	24	26	37.5	15	12	23	10	M22 x 1	23	9	35.5
GWS12-15-E		Rc1/2	24	26	40.5	18	15	23	10	M22 x 1	23	9	35.5

Dimensions: Bulk head / bulk head female connector / straight / different diameter straight

Bulk head

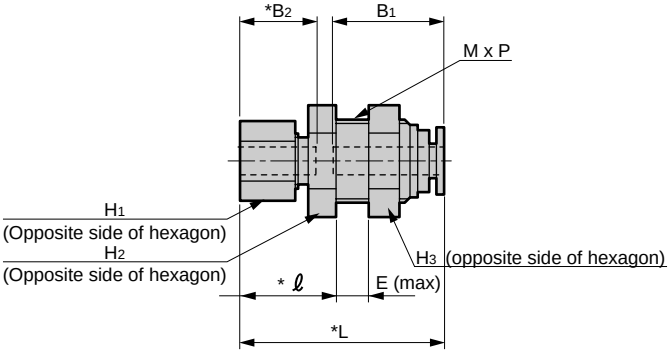
● GWS*-*-X



Model no.	Applicable tube O.D. ϕ	H	L	B	E	M x P	Installation hole diametr.	Min. bore size	Effective sectional area mm²
GWS 4-0-X	4	14	33	16	7.5	M12 x 1	13	2.5	4
GWS 6-0-X	6	17	36	17.5	9.5	M14 x 1	15	4	10
GWS 8-0-X	8	19	39	19	12.5	M16 x 1	17	6	22
GWS10-0-X	10	23	44.5	21.5	18	M20 x 1	21	8	30
GWS12-0-X	12	26	47	23	20.5	M22 x 1	23	9	35

Bulk head female connector

● GWM*-*-X

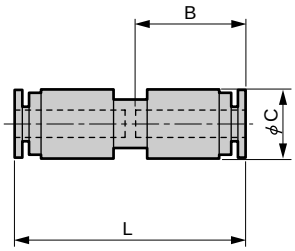


Note: An insert ring (MJU) is required for urethane tube on tightening joint side.
* dimension shows a rough dimension before tightening a nut.

Model no.	Applicable tube O.D. ϕ	H1	H2	H3	L	ℓ	B1	B2	E	M x P	Installation hole dia.	Min. hole dia.	Effective sectional area mm²
GWM 4-0-X	4	10	14	14	29.5	15	16	11	5	M12 x 1	13	2.5	4
GWM 6-0-X	6	12	17	17	33	16	17.5	11.5	5	M14 x 1	15	4	10
GWM 8-0-X	8	14	19	19	35	17.5	19	13	6	M16 x 1	17	6	22
GWM10-0-X	10	17	22	23	40	19.5	21.5	14.5	9	M20 x 1	21	8	30
GWM12-0-X	12	19	24	26	43.5	21	23	16	10	M22 x 1	23	9	35

Straight

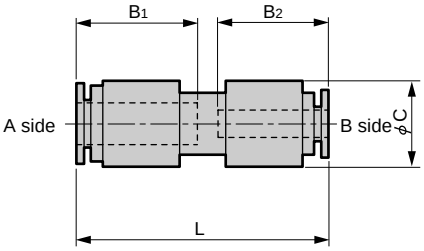
● GWS*-0



Model no.	Applicable tube O.D. ϕ	L	B	C	Min. bore size	Effective sectional area mm²
GWS 4-0	4	33.5	16	10	2.5	4
GWS 6-0	6	36.5	17.5	12.5	4	10
GWS 8-0	8	39.5	19	14.5	6	22
GWS10-0	10	45	21.5	17.5	8	30
GWS12-0	12	47.5	23	20	10	35
GWS16-0	16	58	28	26.5	13.2	90

Different diameter straight

● GWS*-0



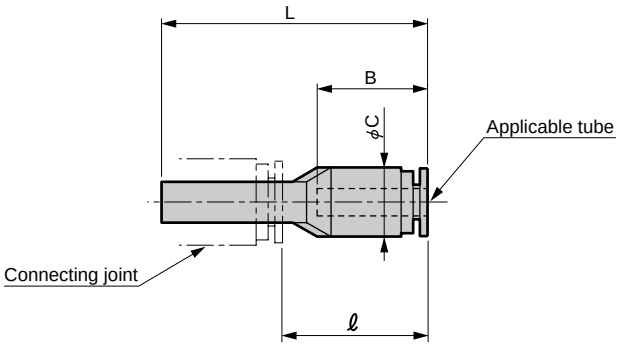
Model no.	Applicable tube O.D. ϕ		L	B1	B2	C	Min. bore size	Effective sectional area mm²
	A side	B side						
GWS 46-0	6	4	36.5	17.5	16	12.5	2.5	4
GWS 68-0	8	6	39.5	19	17.5	14.5	4	10
GWS 810-0	10	8	45	21.5	19	17.5	6	22
GWS1012-0	12	10	47.5	23	21.5	20	8	30

Dimensions: Plug reducer / plug / plug reducer / single elbow

CAD

Plug reducer

● GWS*-*-P

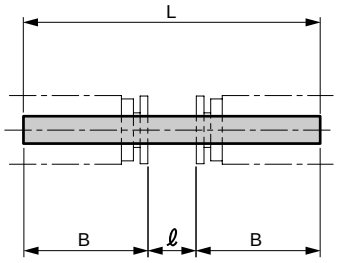


Model no.	Applicable tube O.D. ϕ	Connecting joint dia. ϕ	L	ℓ *	B	C	Min. bore size	Effective sectional area mm²
GWS 4- 6P	4	6	38.5	21	16	10	2.3	3.5
GWS 6- 4P	6	4	42	26	17.5	12.5	2.3	3.5
GWS 6- 8P		8	41	22	17.5	12.5	4	10
GWS 6-10P		10	42	20	17.5	12.5	4	10
GWS 8-10P	8	10	44.5	22.5	19	14.5	6	22
GWS 8-12P		12	44	21	19	14.5	6	22
GWS10-12P	10	12	48	25	21.5	17.5	8	30

* For connecting joint, dimension of CKD (GW Series) are shown.

Plug

● GWP*-0



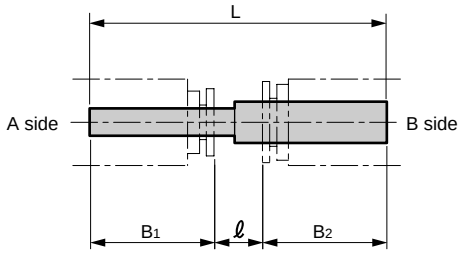
Material: Polyamide resin

Model no.	Connecting joint diameter ϕ	L	B *	ℓ *	Min. hole diameter	Effective sectional area mm²
GWP 4-0	4	43	16	11	2.5	4
GWP 6-0	6	43	17.5	8	4	10.3
GWP 8-0	8	47	19	9	6	22.4
GWP10-0	10	56	21.5	13	7.5	30
GWP12-0	12	61	23	15	9.2	35.5

* For connecting joint, dimension of CKD (GW Series) are shown.

Plug reducer

● GWP*-0



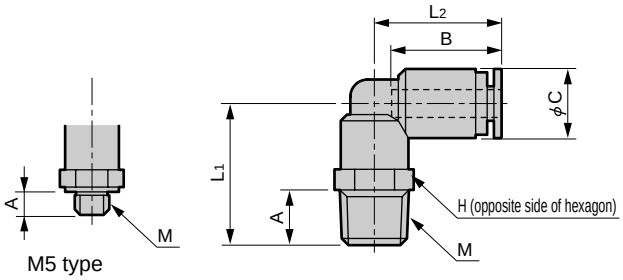
Material: Polyamide resin

Model no.	Joint port size ϕ		L	ℓ *	B1 *	B2 *	Min. bore size	Effective sectional area mm²
	A side	B side						
GWP 46-0	4	6	43	9.5	16	17.5	2.3	4
GWP 68-0	6	8	45	8.5	17.5	19	4	10.3
GWP 810-0	8	10	50.5	10	19	21.5	6	22.4
GWP1012-0	10	12	58	13.5	21.5	23	7.5	30

* For connecting joint, dimension of CKD (GW Series) are shown.

Single elbow

● GWL*-*



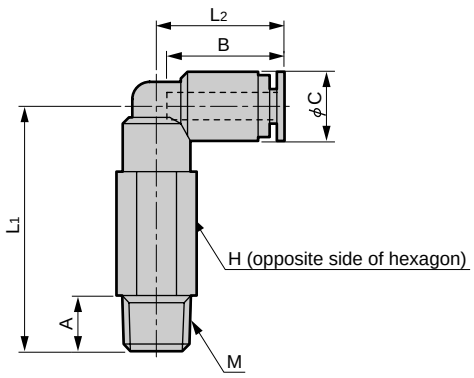
M5 type

Model no.	Applicable tube O.D. ϕ	M	H	L1	L2	A	B	C	Min. bore size	Effective sectional area mm²
GWL 4-M5	4	M5 x 0.8	8	15	18	3.4	16	10	2.5	3.2
GWL 4- 6		R1/8	10	20.5	18.5	8	16	10	2.5	3.2
GWL 4- 8		R1/4	14	24	18.5	11	16	10	2.5	3.2
GWL 6-M5	6	M5 x 0.8	10	15	20	3.4	17.5	12.5	2.5	4.2
GWL 6- 6		R1/8	12	24	21	8	17.5	12.5	4	8
GWL 6- 8		R1/4	14	27.5	21	11	17.5	12.5	4	8
GWL 6-10		R3/8	17	29	21	12	17.5	12.5	4	8
GWL 8- 6	8	R1/8	14	25.5	23.5	8	19	14.5	6	18
GWL 8- 8		R1/4	14	28.5	23.5	11	19	14.5	6	18
GWL 8-10		R3/8	17	30	23.5	12	19	14.5	6	18
GWL10- 6	10	R1/8	17	28	27	8	21.5	17.5	6.5	24.3
GWL10- 8		R1/4	17	31	27	11	21.5	17.5	8	27
GWL10-10		R3/8	17	32.5	27	12	21.5	17.5	8	27
GWL10-15		R1/2	22	35.5	27	15	21.5	17.5	8	27
GWL12- 8	12	R1/4	19	33	29.5	11	23	20	8.5	33
GWL12-10		R3/8	19	34.5	29.5	12	23	20	9	35
GWL12-15		R1/2	22	37.5	29.5	15	23	20	9	35.5
GWL16-10	16	R3/8	22	41	35.5	12	28	26.5	12	80
GWL16-15		R1/2	22	44	35.5	15	28	26.5	12	80

Dimensions: Long elbow / single 45° elbow / turn elbow / elbow

Long elbow

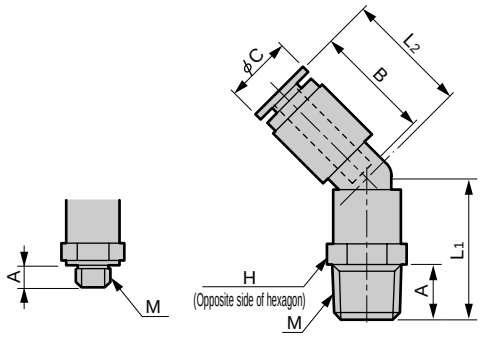
● GWL*-*-L



Model no.	Applicable tube O.D. φ	M	H	L1	L2	A	B	C	Min. bore size	Effective sectional area mm²
GWL 4- 6-L	4	R1/8	10	35.5	18.5	8	16	10	2.5	3.2
GWL 4- 8-L		R1/4	14	39	18.5	11	16	10	2.5	3.2
GWL 6- 6-L	6	R1/8	12	40	21	8	17.5	12.5	4	8
GWL 6- 8-L		R1/4	14	43.5	21	11	17.5	12.5	4	8
GWL 8- 6-L	8	R1/8	14	44.5	23.5	8	19	14.5	6	18
GWL 8- 8-L		R1/4	14	47.5	23.5	11	19	14.5	6	18
GWL 8-10-L		R3/8	17	49	23.5	12	19	14.5	6	18
GWL10- 8-L	10	R1/4	17	56	27	11	21.5	17.5	8	27
GWL10-10-L		R3/8	17	57.5	27	12	21.5	17.5	8	27
GWL10-15-L		R1/2	22	60.5	27	15	21.5	17.5	8	27
GWL12- 8-L	12	R1/4	19	60	29.5	11	23	20	8.5	33
GWL12-10-L		R3/8	19	61.5	29.5	12	23	20	9	34.5
GWL12-15-L		R1/2	22	64.5	29.5	15	23	20	9	34.5

Single 45° elbow

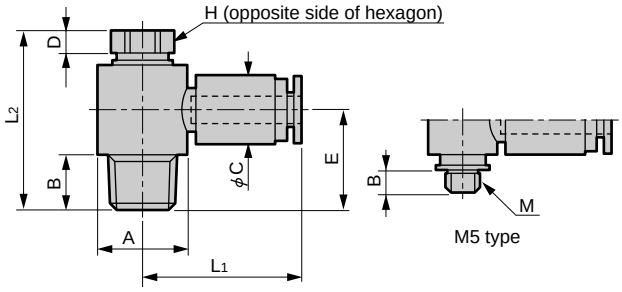
● GWL*-*-45



Model no.	Applicable tube O.D. φ	M	H	L1	L2	A	B	C	Min. hole dia.	Effective sectional area mm²
GWL 4-M5-45	4	M5 x 0.8	8	14.5	18	3.4	16	10	2.5	3.6
GWL 4- 6-45		R1/8	10	20.5	18	8	16	10	2.5	3.6
GWL 4- 8-45		R1/4	14	24	18	11	16	10	2.5	3.6
GWL 6-M5-45	6	M5 x 0.8	10	15	18.5	3.4	17.5	12.5	2.5	4.3
GWL 6- 6-45		R1/8	12	23.5	20	8	17.5	12.5	4	9.2
GWL 6- 8-45		R1/4	14	27	20	11	17.5	12.5	4	9.2
GWL 6-10-45		R3/8	17	28.5	20	12	17.5	12.5	4	9.2
GWL 8- 6-45	8	R1/8	14	25	22	8	19	14.5	6	20
GWL 8- 8-45		R1/4	14	28	22	11	19	14.5	6	20
GWL 8-10-45		R3/8	17	29.5	22	12	19	14.5	6	20
GWL10- 6-45	10	R1/8	17	26	25	8	21.5	17.5	6.5	25.5
GWL10- 8-45		R1/4	17	29	25	11	21.5	17.5	8	29
GWL10-10-45		R3/8	17	30.5	25	12	21.5	17.5	8	29
GWL10-15-45		R1/2	22	33.5	25	15	21.5	17.5	8	29
GWL12- 8-45	12	R1/4	19	30.5	27	11	23	20	8.5	35.5
GWL12-10-45		R3/8	19	32	27	12	23	20	9	39
GWL12-15-45		R1/2	22	35	27	15	23	20	9	39

Turn elbow

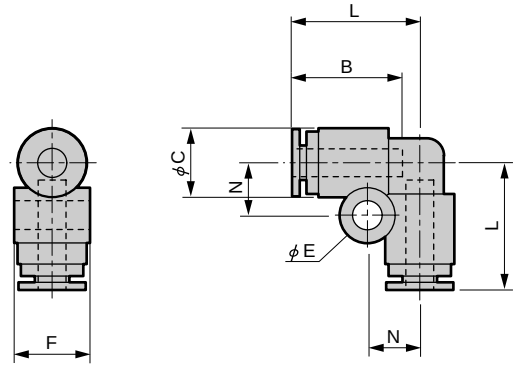
● GWL*-*-T



Model no.	Applicable tube O.D. φ	M	H	L1	L2	A	B	C	D	E	Effective sectional area mm²
GWL 4-M5-T	4	M5 x 0.8	8	21.5	18.5	10	3.4	10	3	10.5	2.8
GWL 4- 6-T		R1/8	8	23	26	13	8	10	3	15	3.7
GWL 4- 8-T		R1/4	10	24	30	15	11	10	3.5	18	3.7
GWL 6-M5-T	6	M5 x 0.8	8	22.5	18.5	10	3.4	12.5	3	10.5	3.4
GWL 6- 6-T		R1/8	8	24	26	13	8	12.5	3	15	7.5
GWL 6- 8-T		R1/4	10	25	30	15	11	12.5	3.5	18	8
GWL 6-10-T		R3/8	14	27.5	36.5	20	12	12.5	4	21.5	9
GWL 8- 6-T	8	R1/8	10	26.5	29	15	8	14.5	4	16	16.5
GWL 8- 8-T		R1/4	12	28	32	17.6	11	14.5	4	19	17
GWL 8-10-T		R3/8	14	29	36.5	20	12	14.5	4	21.5	19
GWL10- 8-T	10	R1/4	14	31.5	35.5	20	11	17.5	4	20.5	24
GWL10-10-T		R3/8	14	31.5	36.5	20	12	17.5	4	21.5	24
GWL10-15-T		R1/2	17	34	42.5	25	15	17.5	4	25.7	27
GWL12- 8-T	12	R1/4	17	35.5	38.5	25	11	20	4	21.7	32
GWL12-10-T		R3/8	17	35.5	39.5	25	12	20	4	22.7	32
GWL12-15-T		R1/2	17	35.5	42.5	25	15	20	4	25.7	32

Elbow

● GWL*-0

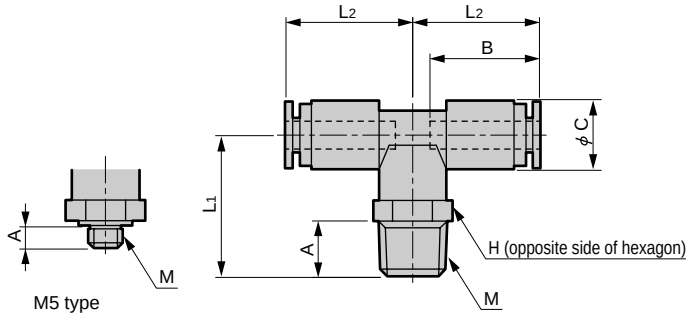


Model no.	Applicable tube O.D. φ	L	B	C	N	E	F	Min. bore size	Effective sectional area mm²
GWL 4-0	4	18.5	16	10	7.5	4.2	11	2.5	3
GWL 6-0	6	21	17.5	12.5	8.5	4.2	13.5	4	7.5
GWL 8-0	8	23.5	19	14.5	9.5	4.2	15.5	6	17
GWL10-0	10	27	21.5	17.5	11	4.2	18.5	8	25.5
GWL12-0	12	29.5	23	20	12	4.2	21	10	34
GWL16-0	16	37	28	26.5	12.5	4.2	28	13.2	80

Dimensions: Both push-in branch / D tee union / tee union / Y types tee union CAD

Both push-in branch

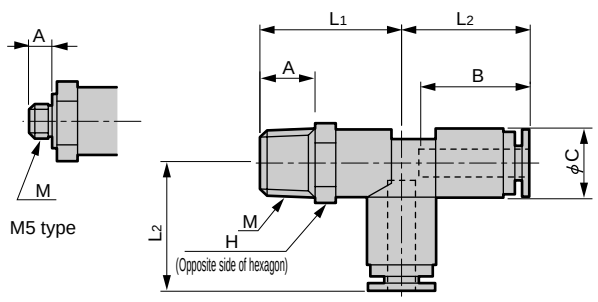
● GWT*-*



Model no.	Applicable tube O.D. φ	M	H	L1	L2	A	B	C	Min. bore size	Effective sectional area mm²
GWT 4-M5	4	M5 x 0.8	10	16.5	18.5	3.4	16	10	2.5	4.3
GWT 4- 6		R1/8	10	20.5	18.5	8	16	10	2.5	4.3
GWT 4- 8		R1/4	14	24	18.5	11	16	10	2.5	4.3
GWT 6-M5	6	M5 x 0.8	12	20	21	3.4	17.5	12.5	2.5	4.3
GWT 6- 6		R1/8	12	24	21	8	17.5	12.5	4	10.5
GWT 6- 8		R1/4	14	27.5	21	11	17.5	12.5	4	10.5
GWT 6-10		R3/8	17	29	21	12	17.5	12.5	4	10.5
GWT 8- 6	8	R1/8	14	25.5	23.5	8	19	14.5	6	23.5
GWT 8- 8		R1/4	14	28.5	23.5	11	19	14.5	6	23.5
GWT 8-10		R3/8	17	30	23.5	12	19	14.5	6	23.5
GWT10- 8	10	R1/4	17	31	27	11	21.5	17.5	8	33.5
GWT10-10		R3/8	17	32.5	27	12	21.5	17.5	8	33.5
GWT10-15		R1/2	22	35.5	27	15	21.5	17.5	8	33.5
GWT12- 8	12	R1/4	19	33	29.5	11	23	20	8.5	37
GWT12-10		R3/8	19	34.5	29.5	12	23	20	9	41
GWT12-15		R1/2	22	37.5	29.5	15	23	20	9	41

D type tee union

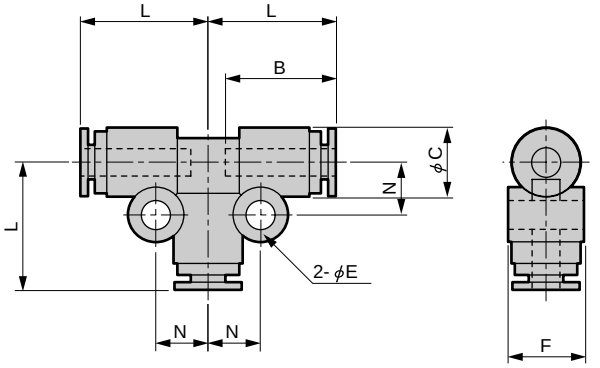
● GWT*-*-D



Model no.	Applicable tube O.D. φ	M	H	L1	L2	A	B	C	Min. hole dia.	Effective sect. area mm²
GWT 4-M5-D	4	M5 x 0.8	10	16.5	18.5	3.4	16	10	2.5	4.3
GWT 4- 6-D		R1/8	10	20.5	18.5	8	16	10	2.5	4.3
GWT 4- 8-D		R1/4	14	24	18.5	11	16	10	2.5	4.3
GWT 6-M5-D	6	M5 x 0.8	12	19.5	21	3.4	17.5	12.5	2.5	4.3
GWT 6- 6-D		R1/8	12	24	21	8	17.5	12.5	4	10.5
GWT 6- 8-D		R1/4	14	27.5	21	11	17.5	12.5	4	10.5
GWT 6-10-D		R3/8	17	29	21	12	17.5	12.5	4	10.5
GWT 8- 6-D	8	R1/8	14	25.5	23.5	8	19	14.5	6	23.5
GWT 8- 8-D		R1/4	14	28.5	23.5	11	19	14.5	6	23.5
GWT 8-10-D		R3/8	17	30	23.5	12	19	14.5	6	23.5
GWT10- 8-D	10	R1/4	17	31	27	11	21.5	17.5	8	33.5
GWT10-10-D		R3/8	17	32.5	27	12	21.5	17.5	8	33.5
GWT10-15-D		R1/2	22	35.5	27	15	21.5	17.5	8	33.5
GWT12- 8-D	12	R1/4	19	33	29.5	11	23	20	8.5	37
GWT12-10-D		R3/8	19	34.5	29.5	12	23	20	9	41
GWT12-15-D		R1/2	22	37.5	29.5	15	23	20	9	41

Tee union

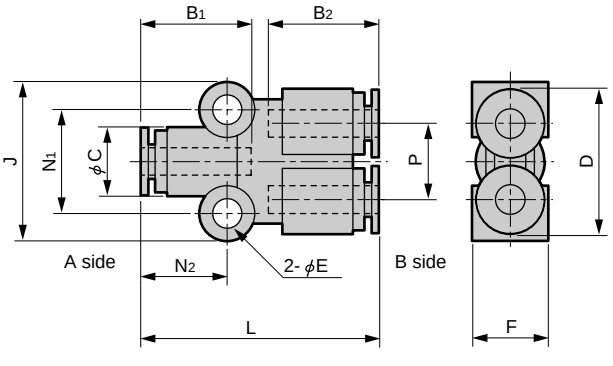
● GWT*-0



Model no.	Applicable tube O.D. φ	L	B	C	E	F	N	Min. bore size	Effective sectional area mm²
GWT 4-0	4	18.5	16	10	4.2	11	7.5	2.5	3.6
GWT 6-0	6	21	17.5	12.5	4.2	13.5	8.5	4	9.7
GWT 8-0	8	23.5	19	14.5	4.2	15.5	9.5	6	22
GWT10-0	10	27	21.5	17.5	4.2	18.5	11	8	30
GWT12-0	12	29.5	23	20	4.2	21	12	10	35.5

Y type tee union

● GWY*-0

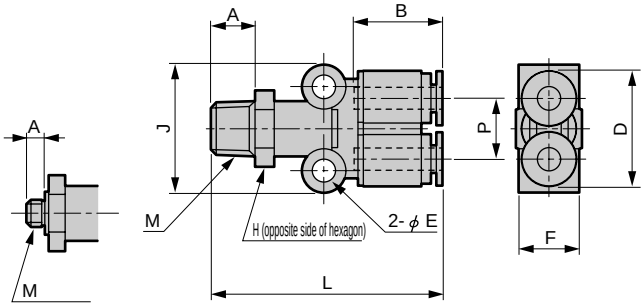


Model no.	Applicable tube O.D. φ		L	B1	B2	C	D	E	F	J	N1	N2	P	Effective sect. area mm²
	A side	B side												
GWY 44-0	4	4	34.5	16	16	10	21	4.2	11	23	15	12.5	11	3.6
GWY 66-0	6	6	37.5	17.5	17.5	12.5	26	4.2	13.5	25.5	17.5	14	13.5	10.5
GWY 88-0	8	8	40.5	19	19	14.5	30	4.2	15.5	27	19	15	15.5	23
GWY1010-0	10	10	48	21.5	21.5	17.5	36	4.2	18.5	30	22	18	18.5	38
GWY1212-0	12	12	53	23	23	20	41	4.2	21	32	24	19.5	21	50
GWY 64-0	6	4	37.5	17.5	16	12.5	26	4.2	13.5	25.5	17.5	14	13.5	5.4
GWY 86-0	8	6	40.5	19	17.5	14.5	30	4.2	15.5	27	19	15	15.5	14.3
GWY 108-0	10	8	48	21.5	19	17.5	36	4.2	18.5	30	22	18	18.5	21.1
GWY1210-0	12	10	53	23	21.5	20	41	4.2	21	32	24	19.5	21	35.5

Dimensions: Both ports Y tee union / cross shaped / 2 port turn elbow / tetrapod shaped (with R) CAD

Both ports Y tee union

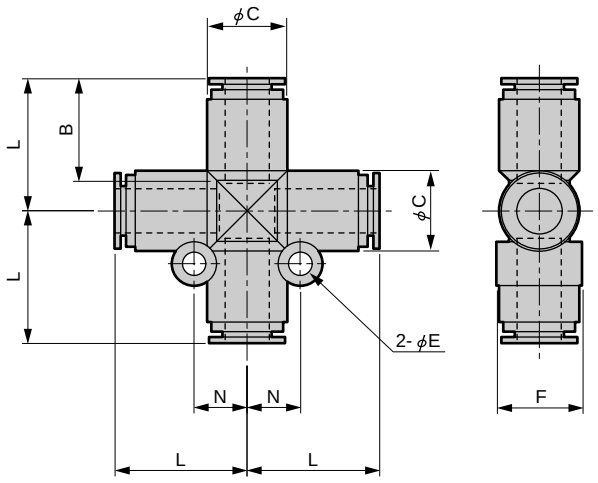
● GWY*-*



Model no.	Applicable tube O.D. ϕ	M	H	L	A	B	D	E	F	J	P	Effective sect. area mm²
GWY 4-M5	4	M5 x 0.8	12	38	3.4	16	21	4.2	11	23	11	4.5
GWY 4- 6		R1/8	12	42	8	16	21	4.2	11	23	11	5.5
GWY 4- 8		R1/4	14	45.5	11	16	21	4.2	11	23	11	5.5
GWY 6-M5	6	M5 x 0.8	14	41	3.4	17.5	26	4.2	13.5	25.5	13.5	4.5
GWY 6- 6		R1/8	14	46	8	17.5	26	4.2	13.5	25.5	13.5	17.5
GWY 6- 8		R1/4	14	49	11	17.5	26	4.2	13.5	25.5	13.5	17.5
GWY 6-10		R3/8	17	50.5	12	17.5	26	4.2	13.5	25.5	13.5	17.5
GWY 8- 6	8	R1/8	17	49	8	19	30	4.2	15.5	27	15.5	25.5
GWY 8- 8		R1/4	17	52	11	19	30	4.2	15.5	27	15.5	25.5
GWY 8-10		R3/8	17	53.5	12	19	30	4.2	15.5	27	15.5	25.5
GWY10- 8	10	R1/4	19	59.5	11	21.5	36	4.2	18.5	30	18.5	35
GWY10-10		R3/8	19	61	12	21.5	36	4.2	18.5	30	18.5	38.5
GWY10-15		R1/2	22	64	15	21.5	36	4.2	18.5	30	18.5	38
GWY12- 8	12	R1/4	22	64.5	11	23	41	4.2	21	32	21	37
GWY12-10		R3/8	22	66	12	23	41	4.2	21	32	21	37
GWY12-15		R1/2	22	69	15	23	41	4.2	21	32	21	40.5

Cross shaped

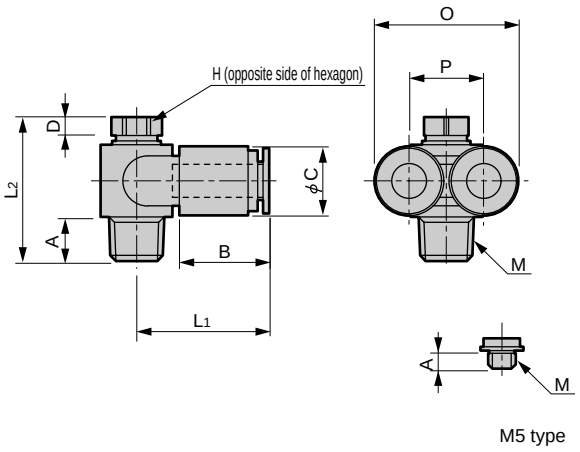
● GWCR*-0



Model no.	Applicable tube O.D. ϕ	L	B	C	E	F	N	Min. bore size	Effective sectional area mm²
GWCR 8-0	8	24	19	14.5	4.2	15.5	9.5	6	22
GWCR10-0	10	27.5	21.5	17.5	4.2	18.5	11	8	30.5
GWCR12-0	12	30	23	20	4.2	21	12	10	35.9

2 port turn elbow

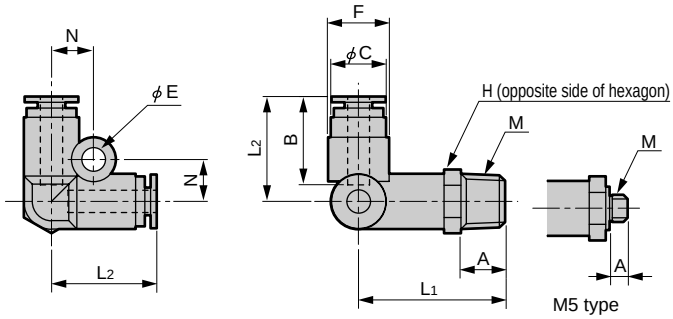
● GWL*-*-2T



Model no.	Applicable tube O.D. ϕ	M	H	L1	L2	A	B	C	D	O	P	Effective sect. area mm²
GWL 4-M5-2T	4	M5 x 0.8	8	21.5	18.5	3.4	16	10	3	21	11	3.6
GWL 6- 6-2T	6	R1/8	8	24	26	8	17.5	12.5	3	26	13.5	8.5
GWL 8- 8-2T	8	R1/4	12	28	32	11	19	14.5	4	30	15.5	19
GWL10-10-2T	10	R3/8	14	31.5	36.5	12	21.5	17.5	4	36	18.5	26
GWL12-15-2T	12	R1/2	17	35.5	42.5	15	23	20	4	41	21	34

Tetrapod shaped (with R)

● GWTR*-*

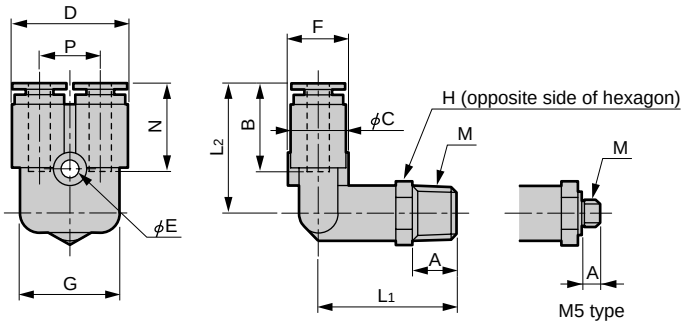


Model no.	Applicable tube O.D. ϕ	M	H	L1	L2	A	B	C	E	F	N	Min. hole dia.	Effective sect. area mm²
GWTR 4-M5	4	M5 x 0.8	10	22.5	19	3.4	16	10	4.2	11	7.5	2.5	4.3
GWTR 4- 6		R1/8	10	26.5	19	8	16	10	4.2	11	7.5	2.5	4.5
GWTR 4- 8		R1/4	14	30	19	11	16	10	4.2	11	7.5	2.5	4.5
GWTR 6-M5	6	M5 x 0.8	14	25	21.5	3.4	17.5	12.5	4.2	13.5	8.5	2.5	4.3
GWTR 6- 6		R1/8	14	30	21.5	8	17.5	12.5	4.2	13.5	8.5	4	10.5
GWTR 6- 8		R1/4	14	33	21.5	11	17.5	12.5	4.2	13.5	8.5	4	10.5
GWTR 6-10		R3/8	17	34.5	21.5	12	17.5	12.5	4.2	13.5	8.5	4	10.5
GWTR 8- 6	8	R1/8	17	32.5	24	8	19	14.5	4.2	15.5	9.5	6	23.5
GWTR 8- 8		R1/4	17	35.5	24	11	19	14.5	4.2	15.5	9.5	6	23.5
GWTR 8-10		R3/8	17	37	24	12	19	14.5	4.2	15.5	9.5	6	23.5
GWTR10- 8	10	R1/4	19	39.5	27.5	11	21.5	17.5	4.2	18.5	13	8	35.5
GWTR10-10		R3/8	19	41	27.5	12	21.5	17.5	4.2	18.5	13	8	35.5
GWTR10-15		R1/2	22	44	27.5	15	21.5	17.5	4.2	18.5	13	8	35.5
GWTR12- 8	12	R1/4	22	41.5	30	11	23	20	4.2	21	14	8.5	37.5
GWTR12-10		R3/8	22	43	30	12	23	20	4.2	21	14	8.5	37.5
GWTR12-15		R1/2	22	46	30	15	23	20	4.2	21	14	8.5	37.5

Dimensions: FY type (with R) / double Y type (with R) / terapod shaped / FY type CAD

FY type (with R)

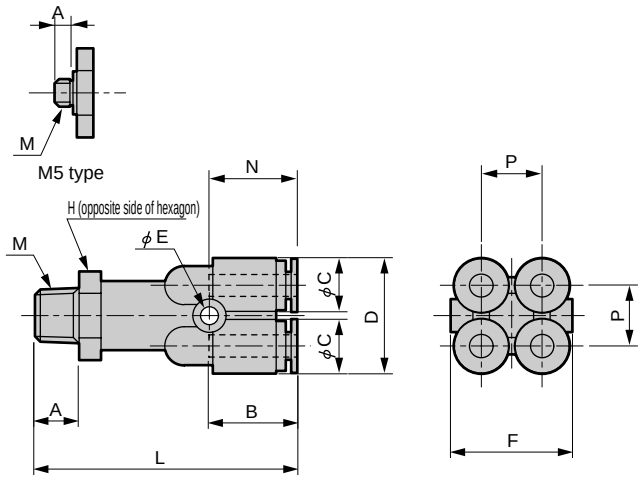
● GWFY*-*



Model no.	Applicable tube O.D. φ	M	H	L_1	L_2	A	B	C	D	E	F	G	N	P	Min. hole dia.	Effective sect. area mm²
GWFY 4-M5	4	M5 x 0.8	10	21	23.5	3.4	16	10	21	3.2	11	18	15.5	11	2.5	4.5
GWFY 4- 6		R1/8	10	25	23.5	8	16	10	21	3.2	11	18	15.5	11	2.5	4.6
GWFY 4- 8		R1/4	14	28.5	23.5	11	16	10	21	3.2	11	18	15.5	11	2.5	4.6
GWFY 6-M5	6	M5 x 0.8	14	23	27	3.4	17.5	12.5	26	4.2	13.5	22.5	17	13.5	2.5	4.5
GWFY 6- 6		R1/8	14	28	27	8	17.5	12.5	26	4.2	13.5	22.5	17	13.5	4	10.5
GWFY 6- 8		R1/4	14	31	27	11	17.5	12.5	26	4.2	13.5	22.5	17	13.5	4	10.5
GWFY 6-10		R3/8	17	32.5	27	12	17.5	12.5	26	4.2	13.5	22.5	17	13.5	4	10.5
GWFY 8- 6	8	R1/8	17	30.5	29	8	19	14.5	30	4.2	15.5	26.5	18	15.5	6	23
GWFY 8- 8		R1/4	17	33.5	29	11	19	14.5	30	4.2	15.5	26.5	18	15.5	6	23
GWFY 8-10		R3/8	17	35	29	12	19	14.5	30	4.2	15.5	26.5	18	15.5	6	23
GWFY10- 8	10	R1/4	19	37.5	33	11	21.5	17.5	36	4.2	18.5	31.5	20	18.5	8	34.4
GWFY10-10		R3/8	19	39	33	12	21.5	17.5	36	4.2	18.5	31.5	20	18.5	8	34.4
GWFY10-15		R1/2	22	42	33	15	21.5	17.5	36	4.2	18.5	32.5	20	18.5	8	34.4
GWFY12- 8	12	R1/4	22	39.5	35.5	11	23	20	41	4.2	21	37	21.5	21	8.5	37.5
GWFY12-10		R3/8	22	41	35.5	12	23	20	41	4.2	21	37	21.5	21	8.5	37.5
GWFY12-15		R1/2	22	44	35.5	15	23	20	41	4.2	21	37	21.5	21	8.5	37.5

Double Y type (with R)

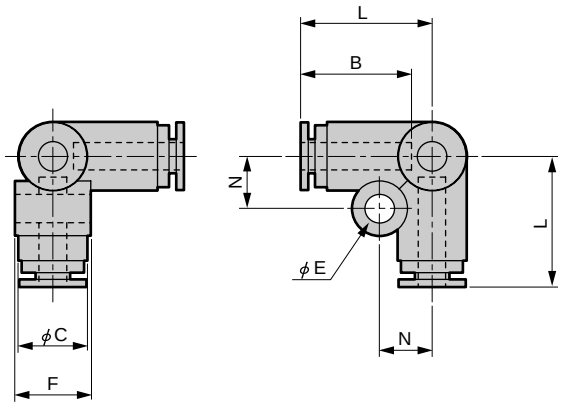
● GWWY*-*



Model no.	Applicable tube O.D. φ	M	H	L	A	B	C	D	E	F	N	P	Effective sect. area mm²
GWWY4-M5	4	M5 x 0.8	14	42.5	3.4	16	10	21	3.2	22	15.5	11	4.3
GWWY4- 6		R1/8	14	47.5	8	16	10	21	3.2	22	15.5	11	9.7
GWWY4- 8		R1/4	14	50.5	11	16	10	21	3.2	22	15.5	11	9.7
GWWY6-M5	6	M5 x 0.8	17	46.5	3.4	17.5	12.5	26	3.2	27	17	13.5	4.3
GWWY6- 6		R1/8	17	51.5	8	17.5	12.5	26	3.2	27	17	13.5	23
GWWY6- 8		R1/4	17	54.5	11	17.5	12.5	26	3.2	27	17	13.5	23
GWWY6-10		R3/8	17	56	12	17.5	12.5	26	3.2	27	17	13.5	23

Tetrapod shaped

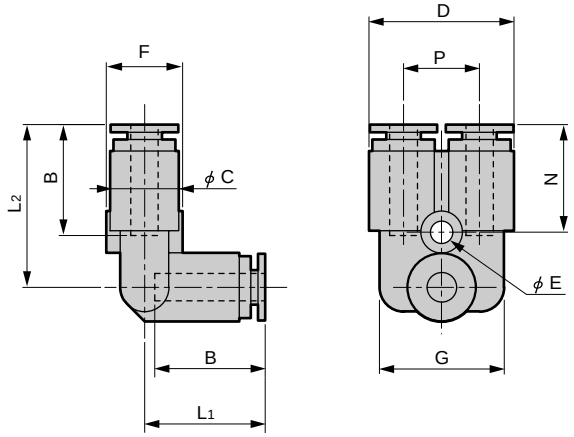
● GWTR*-0



Model no.	Applicable tube O.D. φ	L	B	C	E	F	N	Min. bore size	Effective sectional area mm²
GWTR 4-0	4	19	16	10	4.2	11	7.5	2.5	4
GWTR 6-0	6	21.5	17.5	12.5	4.2	13.5	8.5	4	9.5
GWTR 8-0	8	24	19	14.5	4.2	15.5	9.5	6	12.5
GWTR10-0	10	27.5	21.5	17.5	4.2	18.5	13	8	29.5
GWTR12-0	12	30	23	20	4.2	21	14	10	35.5

FY type

● GWFY*-0



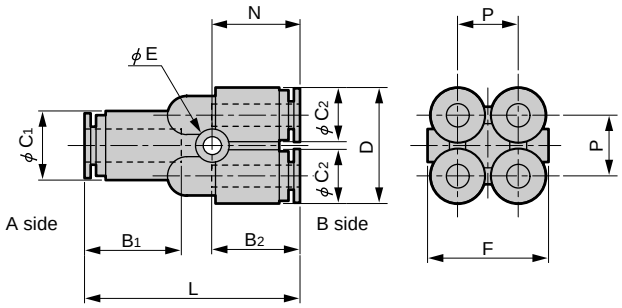
Model no.	Applicable tube O.D. φ	L_1	L_2	B	C	D	E	F	G	N	P	Min. hole dia.	Effective sect. area mm²
GWFY 4-0	4	17.5	23.5	16	10	21	3.2	11	18	15.5	11	2.5	4
GWFY 6-0	6	19.5	27	17.5	12.5	26	4.2	13.5	22.5	17	13.5	4	10
GWFY 8-0	8	22	29	19	14.5	30	4.2	15.5	26.5	18	15.5	6	21
GWFY10-0	10	25.5	33	21.5	17.5	36	4.2	18.5	31.5	20	18.5	8	29
GWFY12-0	12	28	35.5	23	20	41	4.2	21	37	21.5	21	10	35.5

Dimensions: Double Y / blanking plug / L plug / C types plug

CAD

Double Y type

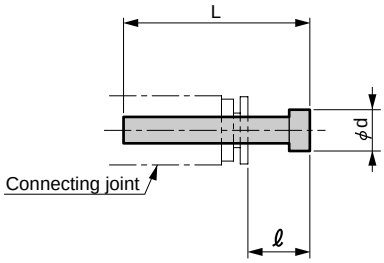
● GWWY*-0



Model no.	Applicable tube O.D. ϕ		L	B1	B2	C1	C2	D	E	F	N	P	Effective sect. area mm²
	A side	B side											
GWWY64-0	6	4	39	17.5	16	12.5	10	21	3.2	22	15.5	11	9
GWWY86-0	8	6	43	19	17.5	14.5	12.5	26	3.2	27	17	13.5	22

Blanking plug

● GWP*-B



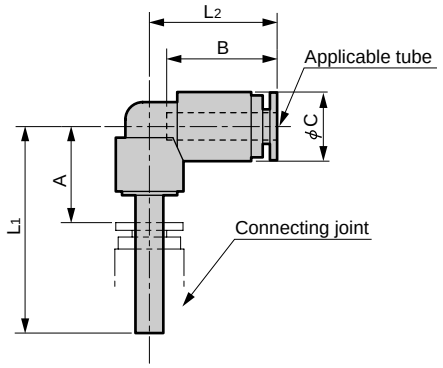
Material: Polyamide resin

Model no.	Joint port size ϕ	L	ℓ*	d
GWJP 3-B	3.2	23.5	11	5
GWP 4-B	4	27	11	6
GWP 6-B	6	29	11.5	8
GWP 8-B	8	33	14	10
GWP10-B	10	40	18.5	12
GWP12-B	12	43	20	14
GWP16-B	16	51	23	21

* For connecting joint, dimension of CKD (GW Series) are shown.

L type plug

● GWP*-L

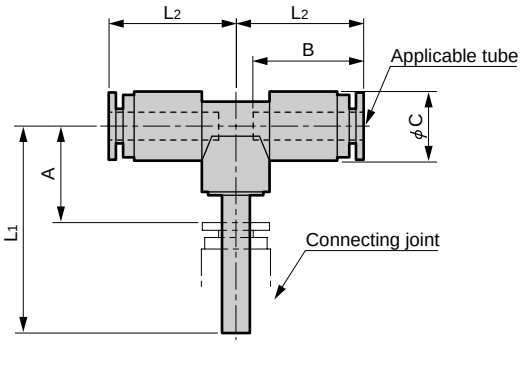


Model no.	Applicable tube O.D. ϕ	Joint port size ϕ	L1	L2	A*	B	C	Min. bore size	Effective sectional area mm²
GWP 44-L	4	4	30	18.5	14	16	10	1.7	2.1
GWP 46-L		6	31	18.5	13.5	16	10	1.7	2.1
GWP 48-L		8	32.5	18.5	13.5	16	10	1.7	2.1
GWP 66-L	6	6	34	21	16.5	17.5	12.5	3.4	6.7
GWP 68-L		8	35.5	21	16.5	17.5	12.5	3.4	6.7
GWP 610-L		10	38	21	16.5	17.5	12.5	3.4	6.7
GWP 88-L	8	8	36.5	23.5	17.5	19	14.5	5.4	16.6
GWP 810-L		10	39	23.5	17.5	19	14.5	5.4	16.6
GWP 812-L		12	40	23.5	17	19	14.5	5.4	16.6
GWP1010-L	10	10	41.5	27	20	21.5	17.5	6.8	24.7
GWP1012-L		12	42.5	27	19.5	21.5	17.5	6.8	24.7
GWP1212-L	12	12	44.5	29.5	21.5	23	20	8.8	34

* For connecting joint, dimension of CKD (GW Series) are shown.

C type plug

● GWP*-C



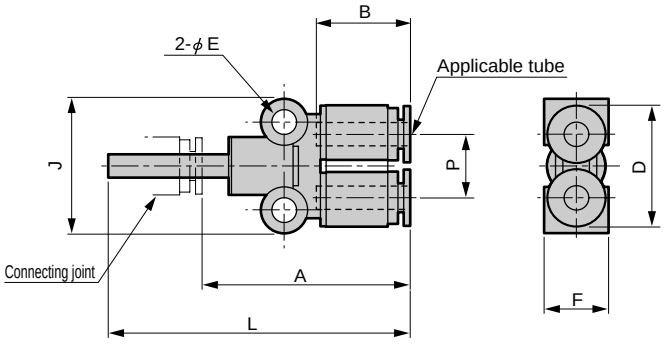
Model no.	Applicable tube O.D. ϕ	Joint port size ϕ	L1	L2	A*	B	C	Min. bore size	Effective sectional area mm²
GWP 44-C	4	4	30	18.5	14	16	10	1.7	2.4
GWP 46-C		6	31	18.5	13.5	16	10	1.7	2.4
GWP 48-C		8	32.5	18.5	13.5	16	10	1.7	2.4
GWP 66-C	6	6	34	21	16.5	17.5	12.5	3.4	7.3
GWP 68-C		8	35.5	21	16.5	17.5	12.5	3.4	7.3
GWP 610-C		10	38	21	16.5	17.5	12.5	3.4	7.3
GWP 88-C	8	8	36.5	23.5	17.5	19	14.5	5.4	19.3
GWP 810-C		10	39	23.5	17.5	19	14.5	5.4	19.3
GWP 812-C		12	40	23.5	17	19	14.5	5.4	19.3
GWP1010-C	10	10	41.5	27	20	21.5	17.5	6.8	28.6
GWP1012-C		12	42.5	27	19.5	21.5	17.5	6.8	28.6
GWP1212-C	12	12	44.5	29.5	21.5	23	20	8.8	35.5

* For connecting joint, dimension of CKD (GW Series) are shown.

Dimensions: Y type plug / cap / manifold (single with R) / manifold (single) CAD

Y type plug

● GWP*-Y

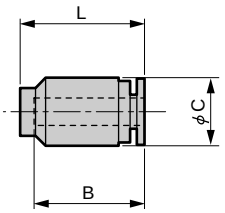


Model no.	Applicable tube O.D. ϕ	Joint port size ϕ	L	A*	B	D	E	F	J	P	Min. bore size	Effective sectional area mm²
GWP 44-Y	4	4	51.5	35.5	16	21	4.2	11	23	11	1.7	2.1
GWP 46-Y		6	52.5	35	16	21	4.2	11	23	11	2.5	5.8
GWP 48-Y		8	54	35	16	21	4.2	11	23	11	2.5	5.8
GWP 66-Y	6	6	55.5	38	17.5	26	4.2	13.5	25.5	13.5	3.9	9.1
GWP 68-Y		8	57	38	17.5	26	4.2	13.5	25.5	13.5	4	15.9
GWP 610-Y		10	59.5	38	17.5	26	4.2	13.5	25.5	13.5	4	15.9
GWP 88-Y	8	8	60	41	19	30	4.2	15.5	27	15.5	5.9	22.2
GWP 810-Y		10	62.5	41	19	30	4.2	15.5	27	15.5	6	24.9
GWP 812-Y		12	63.5	40.5	19	30	4.2	15.5	27	15.5	6	24.9
GWP1010-Y	10	10	70	48.5	21.5	36	4.2	18.5	30	18.5	6.8	28.2
GWP1012-Y		12	71	48	21.5	36	4.2	18.5	30	18.5	8	35.5
GWP1212-Y	12	12	76	53	23	41	4.2	21	32	21	8.8	36.3

* For connecting joint, dimension of CKD (GW Series) are shown.

Cap

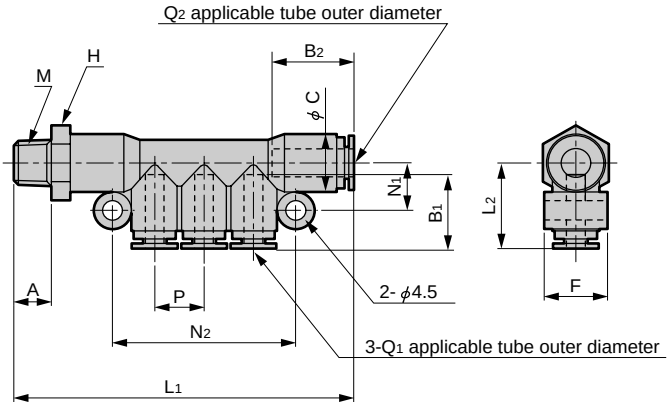
● GWC*



Model no.	Applicable tube O.D. ϕ	B	ϕC	L
GWC 4	4	16	10	18
GWC 6	6	17.5	12.5	19.5
GWC 8	8	19	14.5	21
GWC10	10	21.5	17.5	24
GWC12	12	23	20	26

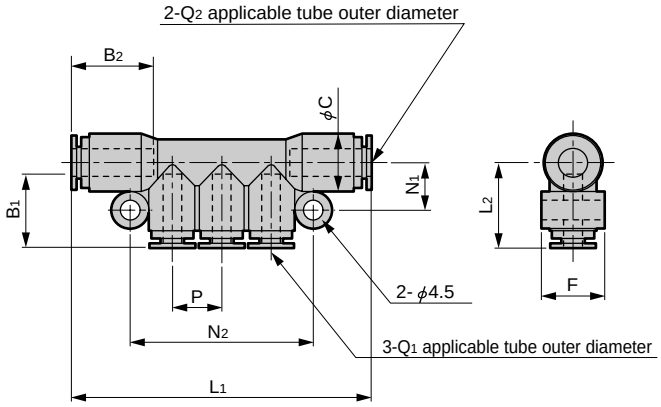
Manifold (single with R)

● GWMF*-*



Manifold (single solenoid)

● GWMF*-0



Model no.	* Q1	* Q2	M	H	L1	L2	A	B1	B2	C	F	N1	N2	P	Effective sect. area mm²
GWMF 46- 6	4	6	R1/8	14	72.5	18.5	8	16	17.5	12.5	13.5	10.5	39	10.5	8.3
GWMF 48- 8	4	8	R1/4	17	77.5	19.5	11	16	19	14.5	15.5	11.5	39	10.5	24.2
GWMF 68- 8	6	8	R1/4	17	84.5	21	11	17.5	19	14.5	15.5	11.5	46.5	13	24.2
GWMF610-10	6	10	R3/8	19	91.5	22	12	17.5	21.5	17.5	18.5	13	46.5	13	35.5
GWMF810-10	8	10	R3/8	19	97.5	23.5	12	19	21.5	17.5	18.5	13	52.5	15	35.5

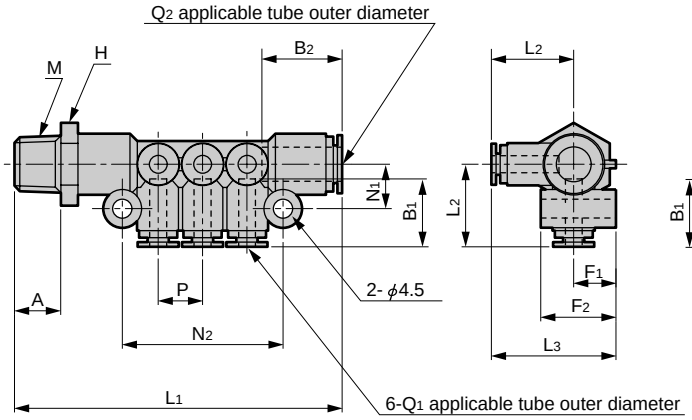
Model no.	* Q1	* Q2	L1	L2	B1	B2	C	F	N1	N2	P	Effective sect. area mm²
GWMF 46-0	4	6	64	18.5	16	18.5	12.5	13.5	10.5	39	10.5	7.9
GWMF 48-0	4	8	66	19.5	16	19.5	14.5	15.5	11.5	39	10.5	22
GWMF 68-0	6	8	73	21	17.5	21	14.5	15.5	11.5	46.5	13	22
GWMF610-0	6	10	78.5	22	17.5	22	17.5	18.5	13	46.5	13	30
GWMF810-0	8	10	84.5	23.5	19	23.5	17.5	18.5	13	52.5	15	30

* Applicable tube O.D. ϕ

Dimensions: Manifold (double with R) / manifold (double) / insert ring

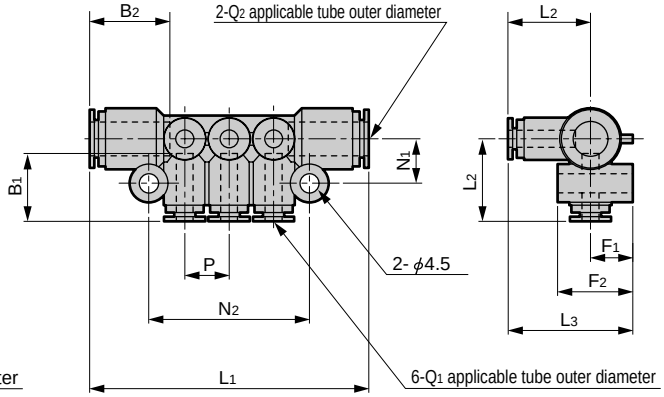
Manifold (double with R)

● GWMF*-*-W



Manifold (double solenoid)

● GWMF*-0-W



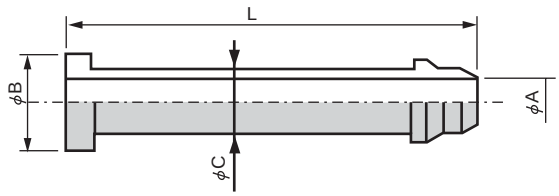
Model no.	Applicable tube O.D. φ		M	H	L1	L2	L3	A	B1	B2	F1	F2	N1	N2	P	Effective sect. area mm²
	Q1	Q2														
GWMF 48- 8-W	4	8	R1/4	17	77.5	19.5	29.5	11	16	19	10	17.5	10.5	38	10.5	24.3
GWMF 48-10-W	4	8	R3/8	17	79	19.5	29.5	12	16	19	10	17.5	10.5	38	10.5	23.5
GWMF610-10-W	6	10	R3/8	19	91.5	22	32	12	17.5	21.5	10	19.5	12	45	13	35.8
GWMF610-15-W	6	10	R1/2	19	94.5	22	32	15	17.5	21.5	10	19.5	12	45	13	35.8
GWMF812-10-W	8	12	R3/8	22	100	24.5	36	12	19	23	11.5	22	13	51	15	38.2
GWMF812-15-W	8	12	R1/2	22	103	24.5	36	15	19	23	11.5	22	13	51	15	38.2

Model no.	Applicable tube O.D. φ		L1	L2	L3	B1	B2	F1	F2	N1	N2	P	Effective sect. area mm²
	Q1	Q2											
GWMF4 8-0-W	4	8	66	19.5	29.5	16	19	10	17.5	10.5	38	10.5	22
GWMF610-0-W	6	10	78.5	22	32	17.5	21.5	10	19.5	12	45	13	30.4
GWMF812-0-W	8	12	87	24.5	36	19	23	11.5	22	13	51	15	36

Insert ring (tube U-92* / U-95*) (custom order)

● INS-U*-1

Material: Brass + electroless nickeling



● Tube U-92* / U-95*

Model no.	φA	φB	φC	L
INS-U32-1	1.1	2.2	1.7	12.7
INS-U04-1	1.1	3	1.8	17
INS-U06-1	3	5	3.8	18
INS-U08-1	4	7	4.8	21
INS-U10-1	5.5	9	6.3	23.5
INS-U12-1	7	11	7.8	25

* Tube NU is a custom order.

* Use insert ring if tube U-92*, U-95* or NU is used for a vacuum circuit.

GWJ Joint (mini-type)

Port size M3 to 1/8 (Rc or R)

RoHS CAD

● Small push-in joint with wide variation

Space saving type with smaller body. Dead space of pipe can be decreased dramatically.

■ Straight type

Single straight
GWJS*-*

Applicable tube O.D. ϕ
3.2
4
6

· Page: 964

Female straight
GWJS3-*-M

Applicable tube O.D. ϕ
3.2

· Page: 964

Bulk head
GWJS3-0-X

Applicable tube O.D. ϕ
3.2

· Page: 964

Straight
GWJS3-0

Applicable tube O.D. ϕ
3.2

· Page: 964

■ Elbow type

Different diameter straight
GWJS*-0

Applicable tube O.D. ϕ
3.2, 4
3.2, 6

· Page: 964

Single elbow
GWJL*-*

Applicable tube O.D. ϕ
3.2
4
6

· Page: 964

Long elbow
GWJL*-*-L

Applicable tube O.D. ϕ
3.2
4
6

· Page: 965

Elbow
GWJL3-0

Applicable tube O.D. ϕ
3.2

· Page: 965

■ Tee union type

Both push-in branch
GWJT3-*

Applicable tube O.D. ϕ
3.2

· Page: 965

D type tee union
GWJT3-*-D

Applicable tube O.D. ϕ
3.2

· Page: 965

Tee union
GWJT3-0

Applicable tube O.D. ϕ
3.2

· Page: 965

Y type tee union
GWJY*-0

Applicable tube O.D. ϕ
3.2, 3.2
3.2, 4

· Page: 965

■ Plug

Blanking plug
GWJP3-B

Applicable tube O.D. ϕ
3.2

· Page: 966

● Sales unit is 10 pieces/1 box.

Specifications

Descriptions	GWJ
Working fluid	Compressed air
Max. working pressure MPa	1.0
Working temperature ℃	-10 to 60 (no freezing)
Applicable tube	Soft nylon tube (model no. F-1532, F-1504, F-1506) Urethane tube (model no. U-9532, U-9504, U-9506, NU-04, NU-06) Note

Note: Refer to page 1012 for tube dimensions, ambient temperature and working pressure.

How to order

* Refer to model no. selections in dimensions (pages 964 to 966) for combination of model no.

GWJ S 3 - 6 - M
(A) (B) (C) (D)

(A) Shape	
S	Straight
L	Elbow
Y	Y type tee union
T	Tee union
P	Plug

(B) Applicable tube O.D.	
3	ϕ 3.2
4	ϕ 4
6	ϕ 6

(C) Port size	
M3	M3 x 0.5
M5	M5 x 0.8
6	R1/8
0	No thread
4P	Plug for ϕ 4
6P	Plug for ϕ 6
B	Blanking plug

(D) Other combinations	
L	Long
D	D type
X	Bulk head
M	Female type

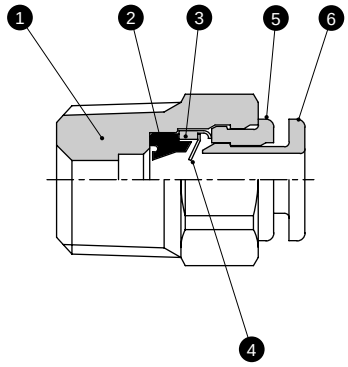
Note: Sales unit is 10 pieces/1 box.

Clean room specifications (catalog No. CB-033SA)

GWJ - ····· - P7*

GWJ - ····· - P80

Internal structure and main parts list



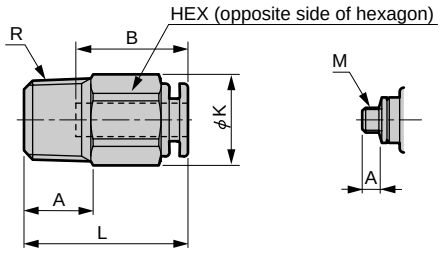
No.	Name	Material
1	Body *1	Brass (electroless nickeling treatment)
		PBT
2	Packing seal	Nitrile rubber
3	Holder	Brass (electroless nickeling treatment)
4	Chuck	Stainless steel
5	Outer ring	Metal type ¦ polyacetal
		Resin type ¦ brass (electroless nickeling treatment)
6	Push ring	Polyacetal

*1: The body of the single-ended straight, female straight, and bulkhead is brass (electroless nickel plated).

Dimensions: Single straight / female straight / bulk head / straight / different diameter straight / single elbow

Single straight

● GWJS*-*

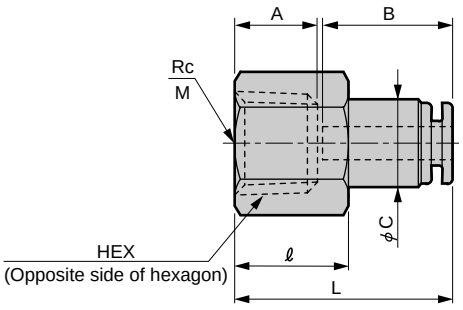


* dimension is for model with punched hexagon hole.

Model no.	Applicable tube O.D. ϕ	R M	HEX	K	L	A	B	Min. hole diameter	Effective sect. area mm²
GWJS3-M3	3.2	M3 x 0.5	8	8.8	17	2.4	12.5	1.2	0.9
GWJS3-M5		M5 x 0.8	8	8.8	18	3.4	12.5	2.5	2.5
GWJS3- 6		1/8	10	11	16.5	8	12.5	2.5 *	2.5
GWJS4-M3	4	M3 x 0.5	10	11	18	2.4	13.5	1.2	0.9
GWJS4-M5		M5 x 0.8	10	11	19	3.4	13.5	2.5	4
GWJS4- 6		1/8	10	11	20	8	13.5	2.5 *	4
GWJS6-M5	6	M5 x 0.8	11	12.1	20	3.4	14.5	2.5	4
GWJS6- 6		1/8	11	12.1	21.5	8	14.5	4 *	11

Female straight

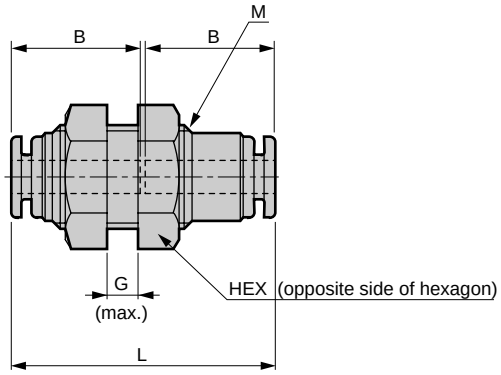
● GWJS3-*-M



Model no.	Applicable tube O.D. ϕ	Rc M	HEX	L	A	B	C	ℓ	Min. hole diameter	Effective sect. area mm²
GWJS3-M3-M	3.2	M3 x 0.5	8	17.5	4	12.5	7.8	7.0	2.5	2.5
GWJS3-M5-M		M5 x 0.8	8	18.5	5	12.5	7.8	8.0	2.5	2.5
GWJS3-6-M		1/8	12	21.5	8	12.5	8.5	11.0	2.5	2.5

Bulk head

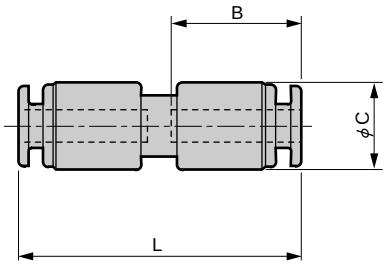
● GWJS3-0-X



Model no.	Applicable tube O.D. ϕ	L	B	HEX	Min. hole diameter	M	Panel thickness / G	Panel hole diameter	Effective sect. area mm²
GWJS3-0-X	3.2	26.5	12.5	12	2.5	M10 x 1.0	5	10.5	2.5

Straight

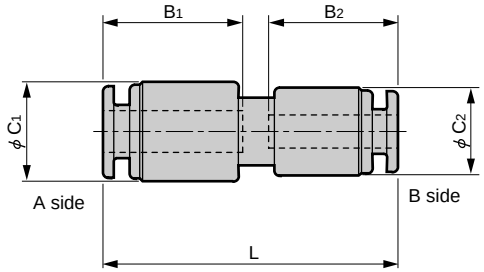
● GWJS3-0



Model no.	Applicable tube O.D. ϕ	L	B	C	Min. hole diameter	Effective sect. area mm²
GWJS3-0	3.2	27.5	12.5	8.5	2.2	2.5

Different diameter straight

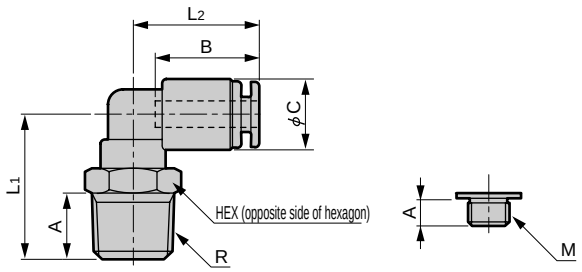
● GWJS*-0



Model no.	Applicable tube O.D. ϕ		L	B1	B2	C1	C2	Min. hole diameter	Effective sect. area mm²
	A side	B side							
GWJS34-0	4	3.2	28.5	13.5	12.5	9.6	8.5	2.2	2.5
GWJS36-0	6	3.2	28.5	14.5	12.5	11.8	8.8	2.2	2.5

Single elbow

● GWJL*-*

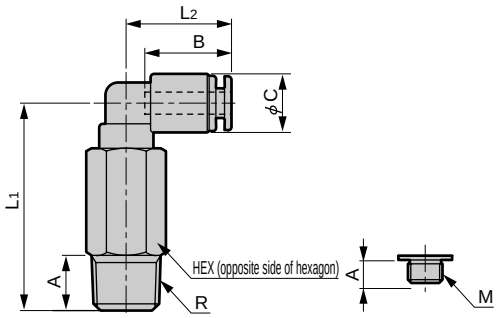


Model no.	Applicable tube O.D. ϕ	R M	HEX	L1	L2	A	B	C	Min. hole diameter	Effective sect. area mm²
GWJL3-M3	3.2	M3 x 0.5	8	13	15.5	2.4	12.5	8.5	1.2	0.8
GWJL3-M5		M5 x 0.8	8	13	15.5	3.4	12.5	8.5	2.2	2.5
GWJL3- 6		1/8	10	17.5	15.5	8	12.5	8.5	2.2	2.3
GWJL4-M3	4	M3 x 0.5	8	13	16.5	2.4	13.5	9.6	1.2	0.8
GWJL4-M5		M5 x 0.8	8	13	16.5	3.4	13.5	9.6	2.5	3
GWJL4- 6		1/8	10	17.5	16.5	8	13.5	9.6	2.5	3
GWJL6-M5	6	M5 x 0.8	10	15.5	18.5	3.4	14.5	11.8	2.5	3.5
GWJL6- 6		1/8	10	18.5	18.5	8	14.5	11.8	4	9.5

Dimensions: Long elbow / elbow / both push-in branch / D tee union / tee union / Y type tee union

Long elbow

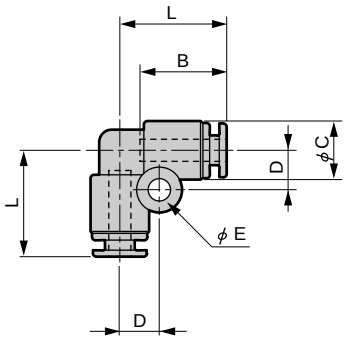
● GWJL*-*-L



Model no.	Applicable tube O.D.φ	R M	HEX	L1	L2	A	B	C	Min. hole diameter	Effective sect. area mm²
GWJL3-M3-L	3.2	M3 x 0.5	8	25.5	15.5	2.4	12.5	8.5	1.2	0.8
GWJL3-M5-L		M5 x 0.8	8	25.5	15.5	3.4	12.5	8.5	2.2	2.3
GWJL3- 6-L		1/8	10	30	15.5	8	12.5	8.5	2.2	2.3
GWJL4-M5-L	4	M5 x 0.8	8	25.5	16.5	3.4	13.5	9.6	2.5	3
GWJL4- 6-L		1/8	10	30	16.5	8	13.5	9.6	2.5	3
GWJL6-M5-L	6	M5 x 0.8	10	30.5	18.5	3.4	14.5	11.8	2.5	3.5
GWJL6- 6-L		1/8	10	33.5	18.5	8	14.5	11.8	4	8.5

Elbow

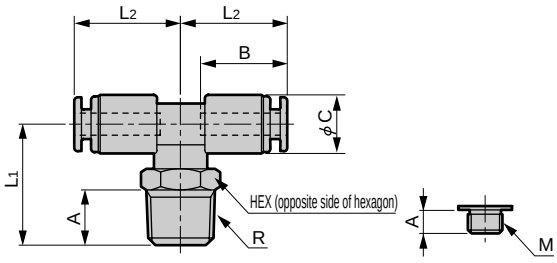
● GWJL3-0



Model no.	Applicable tube O.D.φ	L	B	C	D	E	Min. hole diameter	Effective sect. area mm²
GWJL3-0	3.2	15.5	12.5	8.5	5.7	3.2	2.2	2.3

Both push-in branch

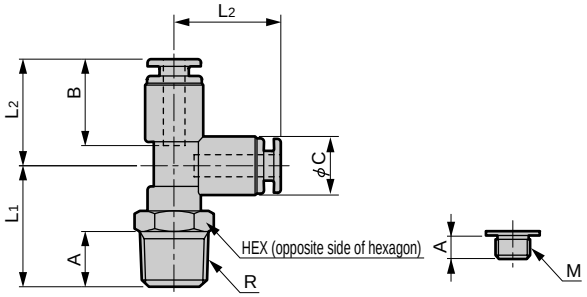
● GWJT3-*



Model no.	Applicable tube O.D.φ	R M	HEX	L1	L2	A	B	C	Min. hole diameter	Effective sect. area mm²
GWJT3-M3	3.2	M3 x 0.5	8	13	15.5	2.4	12.5	8.5	1.2	0.9
GWJT3-M5		M5 x 0.8	8	13	15.5	3.4	12.5	8.5	2.2	2.7
GWJT3-6		1/8	10	17.5	15.5	8	12.5	8.5	2.2	2.7

D type tee union

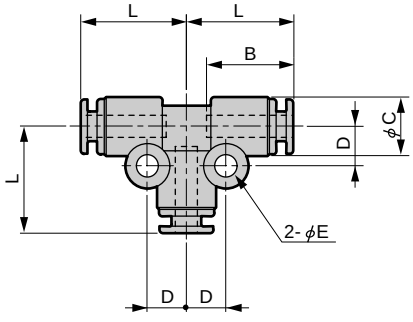
● GWJT3-*-D



Model no.	Applicable tube O.D.φ	R M	HEX	L1	L2	A	B	C	Min. hole diameter	Effective sect. area mm²
GWJT3-M3-D	3.2	M3 x 0.5	8	13	15.5	2.4	12.5	8.5	1.2	0.9
GWJT3-M5-D		M5 x 0.8	8	13	15.5	3.4	12.5	8.5	2.2	2.7
GWJT3-6-D		1/8	10	17.5	15.5	8	12.5	8.5	2.2	2.7

Tee union

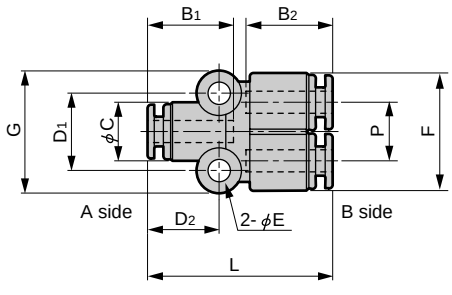
● GWJT3-0



Model no.	Applicable tube O.D.φ	L	B	C	D	E	Min. hole diameter	Effective sect. area mm²
GWJT3-0	3.2	15.5	12.5	8.5	5.7	3.2	2.2	2.7

Y type tee union

● GWJY*-0



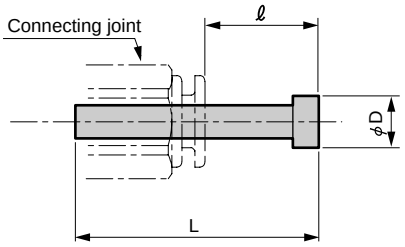
Model no.	Applicable tube O.D.φ		L	B1	B2	C	D1	D2	E	F	P	G	Effective sect. area mm²
	A side	B side											
GWJY33-0	3.2	3.2	27	12.5	12.5	8.5	11.2	10.5	3.2	17	8.5	17.7	2.7
GWJY43-0	4	3.2	28.5	13.5	12.5	9.6	12.2	12	3.2	17	8.5	18.7	2.7

Dimensions: Blanking plug

CAD

Blanking plug

- GWJP3-B
- GWP*-B



Material: Polyamide

Model no.	Joint port size ϕ	L	ℓ *	D
GWJP3-B	3.2	23.5	11	5
GWP 4-B	4	27	11	6
GWP 6-B	6	29	11.5	8

* Dimension of CKD connecting joints (GW and GWJ series) are shown.

ZW Joint Stainless steel series

Port size M5 to R1/2

Single straight
ZW-S*-*

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 971

Single elbow
ZW-L*-*

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 971

Elbow
ZW-L*-0

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 971

Tee union
ZW-T*-0

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 971

Straight
ZW-S*-0

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 971

· Sales unit is 1 piece per bag.

Flame resistant resin & stainless steel Joint ZW Series

Highly efficient, clean-feeling white body

Port size: M5 to R1/2

Applicable bore size: ϕ 4 to ϕ 12

- Compact size saves space.
- Smooth insertion and accurate sealing.
- Flame-resistant resin incorporated for white body and push ring. (Equivalent to UL94 standards V-O)
- Stainless steel incorporated for all metal parts.

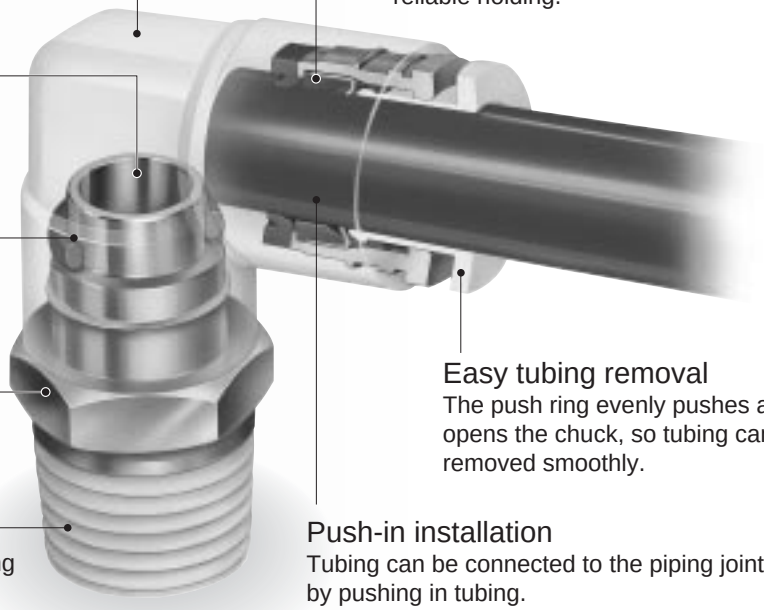
White flame-resistant resin body
Flame-resistant PBT (UL94 Standards V-0 or equivalent) used as standard for a white body blending in with any work environment.

Full flow rate
By eliminating sections narrower than the tubing's bore, a flow equivalent to the tubing's bore can be passed.

Easy piping work
The section of the pipe connected with the body rotates freely, so piping removal can be set freely.

Standard stainless steel
As a standard, all metal parts are made of stainless steel to increase corrosion resistance and appearance.

Sealing agent applied on threads
Teflon resin is coated on threads, eliminating the need to wind sealing tape.
The even seal prevents leaks, etc.



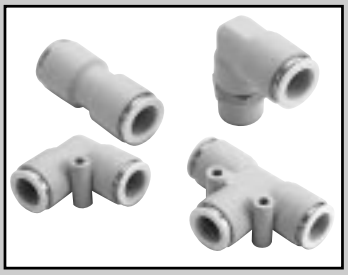
Secure tubing holding
Chuck fitting acts in the direction that the tubing dislocates, ensuring highly reliable holding.

Easy tubing removal
The push ring evenly pushes and opens the chuck, so tubing can be removed smoothly.

Push-in installation
Tubing can be connected to the piping joint just by pushing in tubing.
V-shape packing with outstanding accuracy is used for the seal.

ZW Series

Flame resistant resin & stainless steel Joint



Joint Stainless steel series

ZW Series

- Port size: M5 to R1/2
- Applicable tube: ϕ 4 to ϕ 12

RoHS

Specifications

Descriptions	ZW
Working fluid	Compressed air
Max. working pressure MPa	1.0
Negative pressure kPa	-100 Note 2
Working temperature ℃	-10 to 60 (no freezing)
Applicable tube	Soft nylon tube (F-15**)
	Urethane tube (U-92**, U-95**, NU-**) Note 1

Note 1: Refer to page 1012 for tube dimensions, ambient temperature and working pressure.
Note 2: Use an insert ring when using urethane tubing (U-92**, U-95**, NU-**) under vacuum pressure.
(This is a customized order. Contact CKD for details.)

How to order

* Refer to model no. sections on dimensions page (page 917) for combination of model no.

ZW - L 6 - 8 - ( )
A B C D

A Shape	
S	Straight
L	Elbow
T	Tee union

* Consult with CKD for other models.

B Applicable tube O.D.	
4	ϕ4
6	ϕ6
8	ϕ8
10	ϕ10
12	ϕ12

C Port size	
M5	M5 x 0.8
6	R1/8
8	R1/4
10	R3/8
15	R1/2
0	No thread

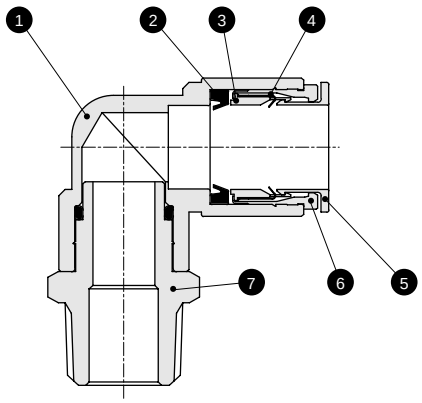
D Option	
Blank	None
P11	Ozone proof

Note: Sales unit is 1 piece per bag.

Clean room specifications (catalog No. CB-033SA)

ZW - ..... - P80

Internal structure and main parts list



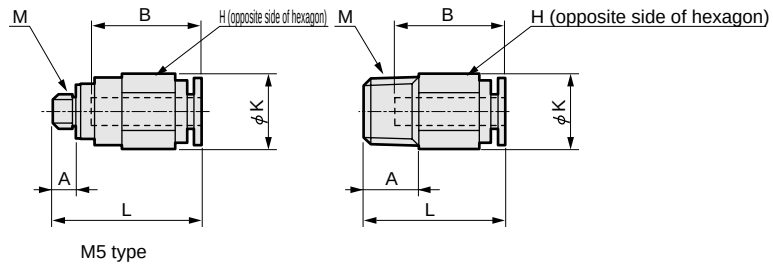
No.	Parts name	Material
1	Body *1	Stainless steel (SUS304)
		PBT (flame resistance resin *2)
2	Packing seal	Nitrile rubber
3	Chuck holder	Polyacetal
4	Chuck	Stainless steel (SUS301)
5	Push ring	PBT (UL94V-O or equivalent)
6	Outer ring	Stainless steel (SUS304)
7	Drive nipple	Stainless steel (SUS304)

*1: The single-ended straight body is stainless steel (SUS304).
*2: Equivalent to UL94 standards
Note: For the stainless steel series, the (5) push ring color is identified with pure white.

Dimensions

Single straight

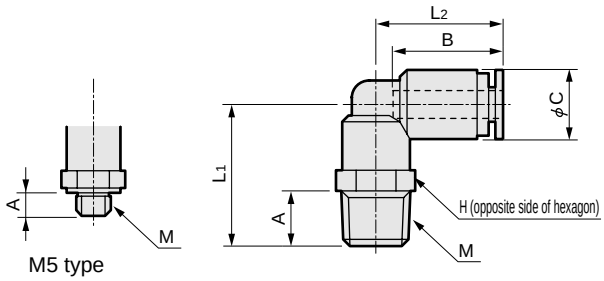
● ZW-S*-*



Model no.	Applicable tube O.D. ϕ	M	H	K	L	A	B	Min. bore size	Effective sectional area mm²
ZW-S 4-M5	4	M5 x 0.8	10	11	21.5	4	16	2.5	4
ZW-S 4- 6		R1/8	10	11	20.5	8	16	2.5	4
ZW-S 4- 8		R1/4	14	15	19.5	11	16	2.5	4
ZW-S 6-M5	6	M5 x 0.8	12	13	23	4	17.5	2.5	4.4
ZW-S 6- 6		R1/8	12	13	23	8	17.5	4	10.3
ZW-S 6- 8		R1/4	14	15	23.5	11	17.5	4	10.3
ZW-S 6-10		R3/8	17	19.6	21.5	12	17.5	4	10.3
ZW-S 8- 6	8	R1/8	14	15.8	28	8	19	5	17.5
ZW-S 8- 8		R1/4	14	15.8	27	11	19	6	22.4
ZW-S 8-10		R3/8	17	19.6	22.5	12	19	6	22.4
ZW-S10- 8	10	R1/4	17	19.6	32.5	11	21.5	8	30.5
ZW-S10-10		R3/8	17	19.6	28.5	12	21.5	8	30.5
ZW-S10-15		R1/2	22	24	26.5	15	21.5	8	30.5
ZW-S12-10	12	R3/8	19	21	30.5	12	23	10	40
ZW-S12-15		R1/2	22	24	29.5	15	23	10	40

Single elbow

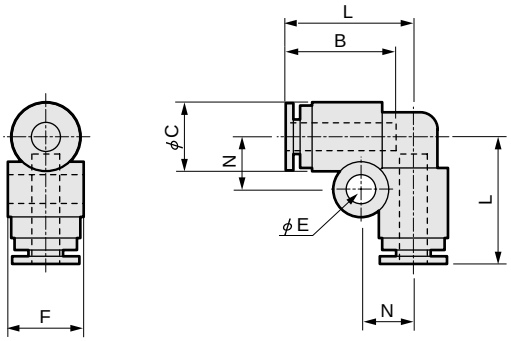
● ZW-L*-*



Model no.	Applicable tube O.D. ϕ	M	H	L1	L2	A	B	C	Min. bore size	Effective sectional area mm²
ZW-L 4-M5	4	M5 x 0.8	8	15	18	4	16	10	2.5	3.2
ZW-L 4- 6		R1/8	10	20.5	18.5	8	16	10	2.5	3.2
ZW-L 4- 8		R1/4	14	24	18.5	11	16	10	2.5	3.2
ZW-L 6-M5	6	M5 x 0.8	10	15	20	4	17.5	12.5	2.5	4.2
ZW-L 6- 6		R1/8	12	24	21	8	17.5	12.5	4	8
ZW-L 6- 8		R1/4	14	27.5	21	11	17.5	12.5	4	8
ZW-L 6-10		R3/8	17	29	21	12	17.5	12.5	4	8
ZW-L 8- 6	8	R1/8	14	25.5	23.5	8	19	14.5	6	18
ZW-L 8- 8		R1/4	14	28.5	23.5	11	19	14.5	6	18
ZW-L 8-10		R3/8	17	30	23.5	12	19	14.5	6	18
ZW-L10- 8	10	R1/4	17	31	27	11	21.5	17.5	8	27
ZW-L10-10		R3/8	17	32.5	27	12	21.5	17.5	8	27
ZW-L10-15		R1/2	22	35.5	27	15	21.5	17.5	8	27
ZW-L12-10	12	R3/8	19	34.5	29.5	12	23	20	9	35
ZW-L12-15		R1/2	22	37.5	29.5	15	23	20	9	35.5

Elbow

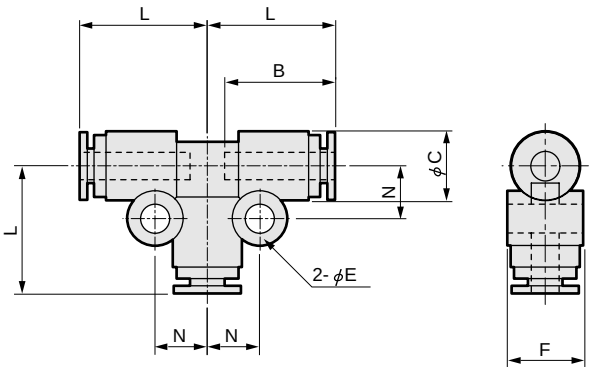
● ZW-L*-*-0



Model no.	Applicable tube O.D. ϕ	L	B	C	N	E	F	Min. bore size	Effective sectional area mm²
ZW-L 4-0	4	18.5	16	10	7.5	4.2	11	2.5	3
ZW-L 6-0	6	21	17.5	12.5	8.5	4.2	13.5	4	7.5
ZW-L 8-0	8	23.5	19	14.5	9.5	4.2	15.5	6	17
ZW-L10-0	10	27	21.5	17.5	11	4.2	18.5	8	25.5
ZW-L12-0	12	29.5	23	20	12	4.2	21	10	34

Tee union

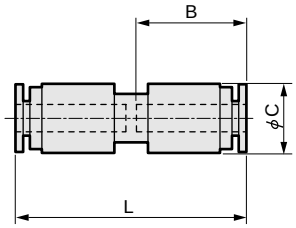
● ZW-T*-0



Model no.	Applicable tube O.D. ϕ	L	B	C	E	F	N	Min. bore size	Effective sectional area mm²
ZW-T 4-0	4	18.5	16	10	4.2	11	7.5	2.5	3.6
ZW-T 6-0	6	21	17.5	12.5	4.2	13.5	8.5	4	9.7
ZW-T 8-0	8	23.5	19	14.5	4.2	15.5	9.5	6	22
ZW-T10-0	10	27	21.5	17.5	4.2	18.5	11	8	30
ZW-T12-0	12	29.5	23	20	4.2	21	12	10	35.5

Straight

● ZW-S*-0



Model no.	Applicable tube O.D. ϕ	L	B	C	Min. bore size	Effective sectional area mm²
ZW-S 4-0	4	33.5	16	10	2.5	4
ZW-S 6-0	6	36.5	17.5	12.5	4	10
ZW-S 8-0	8	39.5	19	14.5	6	22
ZW-S10-0	10	45	21.5	17.5	8	30
ZW-S12-0	12	47.5	23	20	10	35

ZJ

Female joint Stainless steel series

Port size R1/8 to R1/2

Single straight
ZJ-S*-*

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 975

Single elbow
ZJ-L*-*

Applicable tube O.D. ϕ
4
6
8
10
12

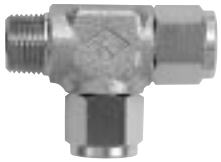
· Page: 975

Both push-in branch
ZJ-T*-*

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 976

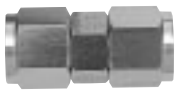
D type tee union
ZJ-T*-*-D



Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 976

Straight
ZJ-S*-0



Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 977

Tee union
ZJ-T*-0

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 977

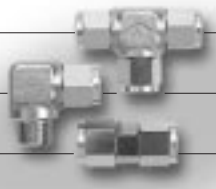
Sleeve integrated nut
ZJ-N *

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 977

· Sales unit is 1 piece per bag.

Stainless steel, tightening type tightening joint ZJ Series

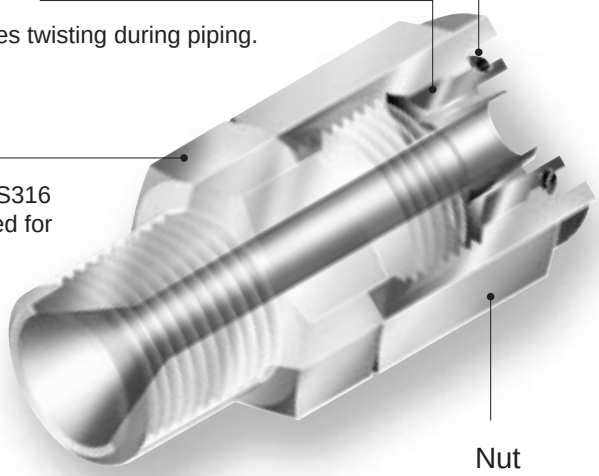


High sealing performance; repeated use possible.

Piping size: R1/8 to R1/2

Applicable bore size: ϕ 4 to ϕ 12

- Easy Fit mechanism (integrated nut and sleeve) improves work efficiency.
- Original sleeve eliminates tubing twisting during piping.
- Sleeve need not be replaced even when using repeatedly.
- Smooth inner bore surface.
- Ample size variations fit various tubing.
- All oil is washed and removed.



Stop ring
Resolves trouble such as lost sleeves and incorrect installation direction.

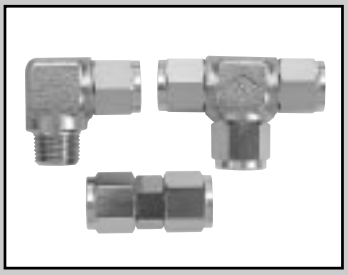
Sleeve
Eliminates twisting during piping.

Body
High corrosion resistant SUS316 stainless steel is incorporated for body, nut, and sleeve.

Nut
Structure integrated with sleeve shortens installation and removal work.

ZJ Series

Stainless steel, tightening type female joint



Female joint Stainless steel series

ZJ Series

- Port size: R1/8 to R1/2
- Applicable tube: φ 4 to φ 12

RoHS

Specifications

Descriptions	Descriptions
Working fluid	Compressed air, inert gas
Working pressure MPa	1.0 or less
Negative pressure kPa	-100
Working temperature ℃	-10 to 60
Applicable tube Note 1	Urethane tube (U-92**, U-95**, NU-**)
	Eco-flex tube (ecos-*, ecoh-* x *)

Note 1: Refer to page 1012 for details on tube.

How to order

* Refer to model no. sections on dimensions page for combination of model no.

ZJ - T (A) 06 (B) 04 (C) - O (D) - D (E)

A Shape	
S	Straight
L	Elbow
T	Tee union
N	Sleeve integrated nut

B Applicable tube O.D.	
04	φ4
06	φ6
08	φ8
10	φ10
12	φ12

C Applicable tube bore size	
25	φ2.5
04	φ4
05	φ5
06	φ6
65	φ6.5
75	φ7.5
08	φ8
09	φ9
10	φ10

D Port size	
6	R1/8
8	R1/4
10	R3/8
15	R1/2
0	Without screw

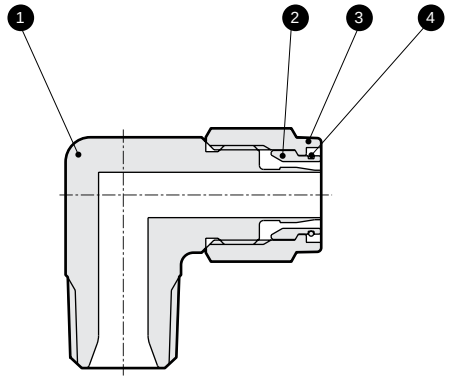
E Other combinations	
D	D type

Clean room specifications (catalog No. CB-033SA)

Note: Sales unit is 1 piece unit.

ZJ - ..... - P90

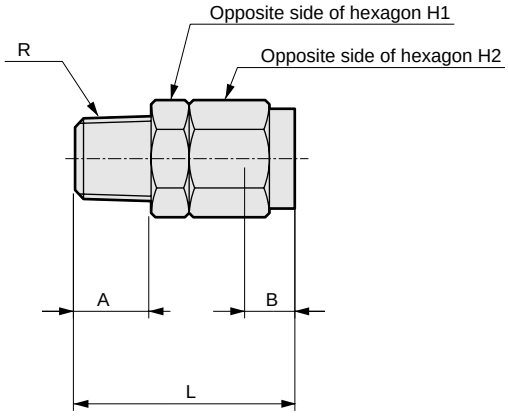
Internal structure and main parts list



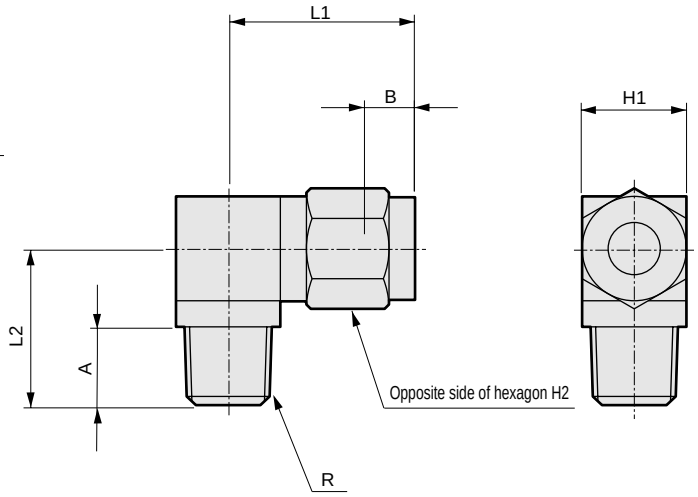
No.	Parts name	Material
1	Body	Stainless steel (SUS316)
2	Sleeve	Stainless steel (SUS316)
3	Nut	Stainless steel (SUS316) (electroless nickeling treatment)
4	Stop ring	Stainless steel (SUS304)

Dimensions

Single straight
● ZJ-S**-*



Single elbow
● ZJ-L**-*



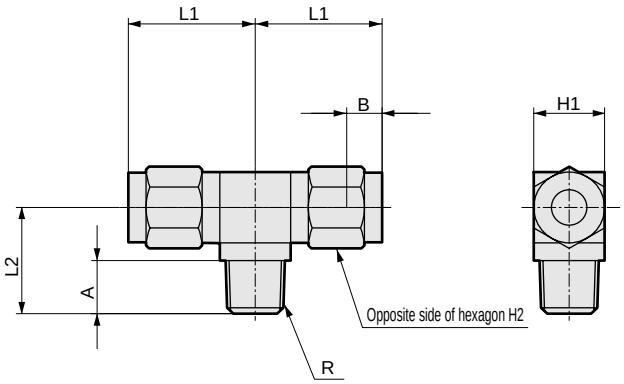
Model no.	Applicable tube O.D. ϕ	R	L	A	B	Min. bore size	H1	H2
ZJ-S0425- 6	4	1/8	24	9	6	1.9	10	10
ZJ-S0425- 8		1/4	26	11	6	1.9	14	10
ZJ-S0604- 6	6	1/8	26	9	7	3.4	12	12
ZJ-S0604- 8		1/4	28.5	11	7	3.4	14	12
ZJ-S0604-10		3/8	30	12	7	3.4	17	12
ZJ-S0805- 6	8	1/8	28	9	7.5	4.4	14	14
ZJ-S0806- 6		1/8	28	9	7.5	5.4	14	14
ZJ-S0805- 8		1/4	30	11	7.5	4.4	14	14
ZJ-S0806- 8		1/4	30	11	7.5	5.4	14	14
ZJ-S0805-10		3/8	31	12	7.5	4.4	17	14
ZJ-S0806-10		3/8	31	12	7.5	5.4	17	14
ZJ-S1065- 8	10	1/4	32	11	8	5.9	17	17
ZJ-S1075- 8		1/4	32	11	8	6.9	17	17
ZJ-S1008- 8		1/4	32	11	8	7.4	17	17
ZJ-S1065-10		3/8	33	12	8	5.9	17	17
ZJ-S1075-10		3/8	33	12	8	6.9	17	17
ZJ-S1008-10		3/8	33	12	8	7.4	17	17
ZJ-S1065-15		1/2	36	15	8	5.9	22	17
ZJ-S1075-15		1/2	36	15	8	6.9	22	17
ZJ-S1008-15		1/2	36	15	8	7.4	22	17
ZJ-S1208- 8	12	1/4	34	11	9.5	7.2	17	19
ZJ-S1209- 8		1/4	34	11	9.5	7.9	17	19
ZJ-S1210- 8		1/4	34	11	9.5	7.9	17	19
ZJ-S1208-10		3/8	35	12	9.5	7.2	17	19
ZJ-S1209-10		3/8	35	12	9.5	8.2	17	19
ZJ-S1210-10		3/8	35	12	9.5	9.2	17	19
ZJ-S1208-15		1/2	38	15	9.5	7.2	22	19
ZJ-S1209-15		1/2	38	15	9.5	8.2	22	19
ZJ-S1210-15		1/2	38	15	9.5	9.2	22	19

Model no.	Applicable tube O.D. ϕ	R	L1	L2	A	B	Min. bore size	H1	H2
ZJ-L0425- 6	4	1/8	20	18	9	6	1.9	12	10
ZJ-L0425- 8		1/4	21	21	11	6	1.9	14	10
ZJ-L0604- 6	6	1/8	21.5	18	9	7	3.4	12	12
ZJ-L0604- 8		1/4	22.5	21	11	7	3.4	14	12
ZJ-L0604-10		3/8	23.5	23	12	7	3.4	17	12
ZJ-L0805- 6	8	1/8	24	19	9	7.5	4.4	14	14
ZJ-L0806- 6		1/8	24	19	9	7.5	5.4	14	14
ZJ-L0805- 8		1/4	24	21	11	7.5	4.4	14	14
ZJ-L0806- 8		1/4	24	21	11	7.5	5.4	14	14
ZJ-L0805-10		3/8	25	23	12	7.5	4.4	17	14
ZJ-L0806-10		3/8	25	23	12	7.5	5.4	17	14
ZJ-L1065- 8	10	1/4	26.5	22	11	8	5.9	17	17
ZJ-L1075- 8		1/4	26.5	22	11	8	6.9	17	17
ZJ-L1008- 8		1/4	26.5	22	11	8	7.4	17	17
ZJ-L1065-10		3/8	26.5	23	12	8	5.9	17	17
ZJ-L1075-10		3/8	26.5	23	12	8	6.9	17	17
ZJ-L1008-10		3/8	26.5	23	12	8	7.4	17	17
ZJ-L1065-15		1/2	28.5	29	15	8	5.9	22	17
ZJ-L1075-15		1/2	28.5	29	15	8	6.9	22	17
ZJ-L1008-15		1/2	28.5	29	15	8	7.4	22	17
ZJ-L1208- 8	12	1/4	27.5	23	11	9.5	7.2	17	19
ZJ-L1209- 8		1/4	27.5	23	11	9.5	7.9	17	19
ZJ-S1210- 8		1/4	27.5	23	11	9.5	7.9	17	19
ZJ-L1208-10		3/8	30	27	12	9.5	7.2	22	19
ZJ-L1209-10		3/8	30	27	12	9.5	8.2	22	19
ZJ-L1210-10		3/8	30	27	12	9.5	9.2	22	19
ZJ-L1208-15		1/2	30	30	15	9.5	7.2	22	19
ZJ-L1209-15		1/2	30	30	15	9.5	8.2	22	19
ZJ-L1210-15		1/2	30	30	15	9.5	9.2	22	19

Dimensions

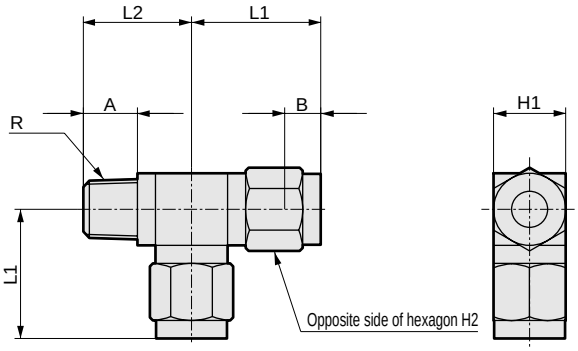
Both push-in branch

● ZJ-T**-*



D type tee union

● ZJ-T**-*-D



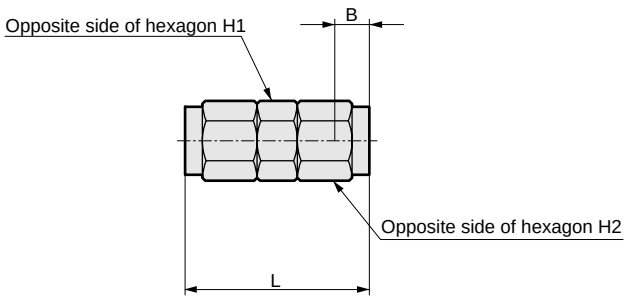
Model no.	Applicable tube O.D. ϕ	R	L1	L2	A	B	Min. bore size	H1	H2
ZJ-T0425- 6	4	1/8	20	18	9	6	1.9	12	10
ZJ-T0425- 8		1/4	21	21	11	6	1.9	14	10
ZJ-T0604- 6	6	1/8	21.5	18	9	7	3.4	12	12
ZJ-T0604- 8		1/4	22.5	21	11	7	3.4	14	12
ZJ-T0604-10		3/8	23.5	23	12	7	3.4	17	12
ZJ-T0805- 6	8	1/8	23.5	19	9	7.5	4.4	14	14
ZJ-T0806- 6		1/8	23.5	19	9	7.5	5.4	14	14
ZJ-T0805- 8		1/4	23.5	21	11	7.5	4.4	14	14
ZJ-T0806- 8		1/4	23.5	21	11	7.5	5.4	14	14
ZJ-T0805-10		3/8	25	23	12	7.5	4.4	17	14
ZJ-T0806-10		3/8	25	23	12	7.5	5.4	17	14
ZJ-T1065- 8	10	1/4	28.5	25	11	8	5.9	22	17
ZJ-T1075- 8		1/4	28.5	25	11	8	6.9	22	17
ZJ-T1008- 8		1/4	28.5	25	11	8	7.4	22	17
ZJ-T1065-10		3/8	28.5	26	12	8	5.9	22	17
ZJ-T1075-10		3/8	28.5	26	12	8	6.9	22	17
ZJ-T1008-10		3/8	28.5	26	12	8	7.4	22	17
ZJ-T1065-15		1/2	28.5	29	15	8	5.9	22	17
ZJ-T1075-15		1/2	28.5	29	15	8	6.9	22	17
ZJ-T1008-15		1/2	28.5	29	15	8	7.4	22	17
ZJ-T1208- 8	12	1/4	30	26	11	9.5	7.2	22	19
ZJ-T1209- 8		1/4	30	26	11	9.5	7.9	22	19
ZJ-T1210- 8		1/4	30	26	11	9.5	7.9	22	19
ZJ-T1208-10		3/8	30	27	12	9.5	7.2	22	19
ZJ-T1209-10		3/8	30	27	12	9.5	8.2	22	19
ZJ-T1210-10		3/8	30	27	12	9.5	9.2	22	19
ZJ-T1208-15		1/2	30	30	15	9.5	7.2	22	19
ZJ-T1209-15		1/2	30	30	15	9.5	8.2	22	19
ZJ-T1210-15		1/2	30	30	15	9.5	9.2	22	19

Model no.	Applicable tube O.D. ϕ	R	L1	L2	A	B	Min. bore size	H1	H2
ZJ-T0425- 6-D	4	1/8	20	18	9	6	1.9	12	10
ZJ-T0425- 8-D		1/4	21	21	11	6	1.9	14	10
ZJ-T0604- 6-D	6	1/8	21.5	18	9	7	3.4	12	12
ZJ-T0604- 8-D		1/4	22.5	21	11	7	3.4	14	12
ZJ-T0604-10-D		3/8	23.5	23	12	7	3.4	17	12
ZJ-T0805- 6-D	8	1/8	23.5	19	9	7.5	4.4	14	14
ZJ-T0806- 6-D		1/8	23.5	19	9	7.5	5.4	14	14
ZJ-T0805- 8-D		1/4	23.5	21	11	7.5	4.4	14	14
ZJ-T0806- 8-D		1/4	23.5	21	11	7.5	5.4	14	14
ZJ-T0805-10-D		3/8	25	23	12	7.5	4.4	17	14
ZJ-T0806-10-D		3/8	25	23	12	7.5	5.4	17	14
ZJ-T1065- 8-D	10	1/4	28.5	25	11	8	5.9	22	17
ZJ-T1075- 8-D		1/4	28.5	25	11	8	6.9	22	17
ZJ-T1008- 8-D		1/4	28.5	25	11	8	7.4	22	17
ZJ-T1065-10-D		3/8	28.5	26	12	8	5.9	22	17
ZJ-T1075-10-D		3/8	28.5	26	12	8	6.9	22	17
ZJ-T1008-10-D		3/8	28.5	26	12	8	7.4	22	17
ZJ-T1065-15-D		1/2	28.5	29	15	8	5.9	22	17
ZJ-T1075-15-D		1/2	28.5	29	15	8	6.9	22	17
ZJ-T1008-15-D		1/2	28.5	29	15	8	7.4	22	17
ZJ-T1208- 8-D	12	1/4	30	26	11	9.5	7.2	22	19
ZJ-T1209- 8-D		1/4	30	26	11	9.5	7.9	22	19
ZJ-T1210- 8-D		1/4	30	26	11	9.5	7.9	22	19
ZJ-T1208-10-D		3/8	30	27	12	9.5	7.2	22	19
ZJ-T1209-10-D		3/8	30	27	12	9.5	8.2	22	19
ZJ-T1210-10-D		3/8	30	27	12	9.5	9.2	22	19
ZJ-T1208-15-D		1/2	30	30	15	9.5	7.2	22	19
ZJ-T1209-15-D		1/2	30	30	15	9.5	8.2	22	19
ZJ-T1210-15-D		1/2	30	30	15	9.5	9.2	22	19

Dimensions

Straight

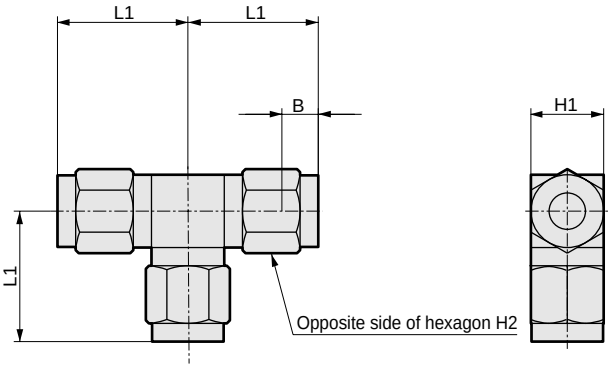
● ZJ-S**-0



Model no.	Applicable tube O.D. ϕ	L	B	Min. bore size	H1	H2
ZJ-S0425-0	4	28	6	1.9	10	10
ZJ-S0604-0	6	32	7	3.2	12	12
ZJ-S0805-0	8	36	7.5	4.2	14	14
ZJ-S0806-0		36	7.5	5.2	14	14
ZJ-S1065-0	10	40	8	5.9	17	17
ZJ-S1075-0		40	8	6.9	17	17
ZJ-S1008-0		40	8	7.4	17	17
ZJ-S1208-0	12	44	9.5	7.2	17	19
ZJ-S1209-0		44	9.5	8.2	17	19
ZJ-S1210-0		44	9.5	9.2	17	19

Tee union

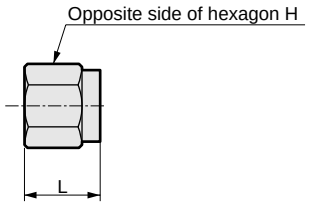
● ZJ-T**-0



Model no.	Applicable tube O.D. ϕ	L1	B	Min. bore size	H1	H2
ZJ-T0425-0	4	20	6	1.9	12	10
ZJ-T0604-0	6	21.5	7	3.4	12	12
ZJ-T0805-0	8	23.5	7.5	4.4	14	14
ZJ-T0806-0		28.5	7.5	5.4	14	14
ZJ-T1065-0	10	28.5	8	5.9	22	17
ZJ-T1075-0		28.5	8	6.9	22	17
ZJ-T1008-0		28.5	8	7.4	22	17
ZJ-T1208-0	12	30	9.5	7.2	22	19
ZJ-T1209-0		30	9.5	8.2	22	19
ZJ-T1210-0		30	9.5	9.2	22	19

Sleeve integrated nut

● ZJ-N *



Model no.	Applicable tube O.D. ϕ	L	H2
ZJ-N04	ϕ 4	11	10
ZJ-N06	ϕ 6	12.5	12
ZJ-N08	ϕ 8	14	14
ZJ-N10	ϕ 10	15.5	17
ZJ-N12	ϕ 12	17	19

MJ/JL

Female joint / joint

Port size 1/8 to 1/2 (Rc or R)

CAD

● Stable and secure piping due to double chuck. This is an excellent tightening joint with high reliability.

AOI Co, Ltd.

Female joint MJ Series

■ Straight type

Single straight MJS*-*

Applicable tube O.D. ϕ
4
6
8
10
12
15

· Page: 980

Straight MJS*-0

Applicable tube O.D. ϕ
4
6
8
10
12
15

· Page: 980

Female, straight MJS*-*-M

Applicable tube O.D. ϕ
4
6
8
10
12
15

· Page: 980

Bulk head MJS*-0-X

Applicable tube O.D. ϕ
4
6
8
10
12
15

· Page: 980

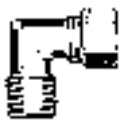
Bulk head female MJS*-*-E

Applicable tube O.D. ϕ
4
6
8
10

· Page: 981

■ Elbow type

Single elbow MJL*-*



Applicable tube O.D. ϕ
4
6
8
10
12
15

· Page: 981

Elbow MJL*-0

Applicable tube O.D. ϕ
4
6
8
10
12
15

· Page: 981

Female, elbow MJL*-*-M

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 981

Turn elbow MJL*-*-T

Applicable tube O.D. ϕ
4
6
8
10
12
15

· Page: 982

■ Tee union type

Both push-in branch MJT*-*

Applicable tube O.D. ϕ
4
6
8
10
12
15

· Page: 982

D type tee union MJT*-*-D

Applicable tube O.D. ϕ
4
6
8
10
12
15

· Page: 982

Tee union MJT*-0

Applicable tube O.D. ϕ
4
6
8
10
12
15

· Page: 982

Female, tee union MJT*-*-M

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 983

Sleeve MJN*-0

Applicable tube O.D. ϕ
4
6
8
10
12
15

· Page: 983

Insert ring MJU*-0

Applicable tube O.D. ϕ
4
6
8
10
12

· Page: 983

Joint

Elbow/JL

Port size R, Rc
1/8
1/4
3/8
1/2

· Page: 984

● Sales unit is 10 pieces/1 bag.

Specifications

Descriptions	MJ
Working fluid	Compressed air
Max. working pressure MPa	1.0
Working temperature ℃	-10 to 60 (no freezing)
Applicable tube	Soft nylon tube (F - 15**), urethane tube (U - 95**) Note Coiling tube (KX - 12**)

Note 1: Refer to page 1012 for tube dimensions, ambient temperature and working pressure.

How to order

MJ S 4 – 6 – M

* Refer to model no. sections on dimensions page for combination of model no.

Ⓐ Shape

Ⓐ Shape	
S	Straight
L	Elbow
T	Tee union
N	Sleep
U	Insert ring

Ⓑ Applicable tube O.D.

Ⓑ Applicable tube O.D.	
4	ϕ 4
6	ϕ 6
8	ϕ 8
10	ϕ 10
12	ϕ 12
15	ϕ 15

Ⓒ Port size

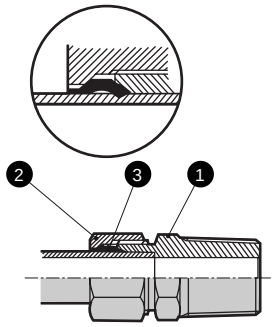
Ⓒ Port size	
6	R1/8
8	R1/4
10	R3/8
15	R1/2
0	Without screw

Ⓓ Other combinations

Ⓓ Other combinations	
D	D type
E	Bulk head female
M	Female
T	Turn
X	Bulk head

Note: Sales unit is 10 pieces/1 bag.

Internal structure and parts list

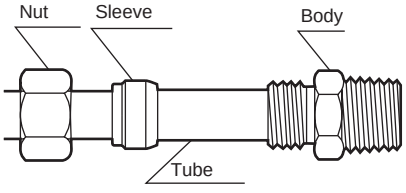


No.	Part name	Material
1	Body	Brass
2	Nut	Brass
3	Sleep	Brass

Safety Precautions

- If urethane or soft nylon tube is used in high working temperature, use insert ring (Refer to page 983). If an insert ring is not used, tube may come off from a joint.
- For copper tube, use a tube with class 1/2H (heat treatment) or less and tube wall thickness 1mm or less.
- If a tube is used where a tube moves frequently, troubles may occur. So, avoid use in such place.

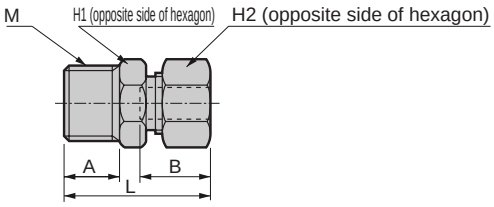
Mounting and removal



(1) Couple the nut and sleeve plastic tube or cupper tube as shown in the figure, insert the tube until hitting the joint (tube end), then tighten the nut by hand.
(2) Tighten the nut by spanner, etc. Applicable tightening turn is 1 3/4 for plastic tube, while 1 1/4 to 1 1/2 for copper tube (1/2H and wall thickness 1mm).
(3) Cut tube as right angle as possible, please eliminate burr and foreign matter, etc.
(4) For temporally tightening, turn should be 1/4 turn less than applicable tightening turn, while to tighten securely, tighten 1/4 turn more. For retightening, also 1/4 turn more.

Dimensions: Single straight, straight, female straight, bulk head CAD

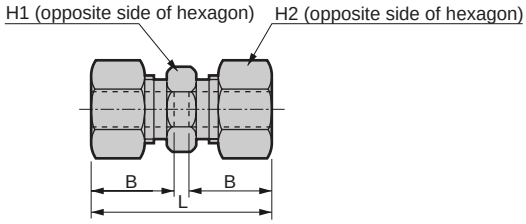
● Single straight MJS *-*



* L and B dimensions show rough dimensions before fixing nut.

Model no.	Applicable tube O.D. ϕ	M	H_1	H_2	L	A	B	Min. bore size	Effective sectional area (mm^2)
MJS4-6	4	R1/8	10	10	22.5	8	11	3	4.1
MJS4-8	4	R1/4	14	10	26	11	11	3	3.9
MJS6-6	6	R1/8	10	12	23.5	8	11.5	4.5	7.9
MJS6-8	6	R1/4	14	12	27	11	11.5	4.5	7.8
MJS6-10	6	R3/8	17	12	28.5	12	11.5	4.5	7.9
MJS8-6	8	R1/8	12	14	25.5	8	13	6	19.5
MJS8-8	8	R1/4	14	14	28.5	11	13	6	20.1
MJS8-10	8	R3/8	17	14	30	12	13	6	19.5
MJS10-8	10	R1/4	14	17	30.5	11	14.5	8	36.1
MJS10-10	10	R3/8	17	17	31.5	12	14.5	8	36.1
MJS10-15	10	R1/2	22	17	34.5	15	14.5	8	36.1
MJS12-8	12	R1/4	16	19	32	11	16	9	57.8
MJS12-10	12	R3/8	17	19	33	12	16	10	55.5
MJS12-15	12	R1/2	22	19	36	15	16	10	57.8
MJS15-10	15	R3/8	20	23	37	12	19	12	113.3
MJS15-15	15	R1/2	23	23	40	15	19	12	115.2

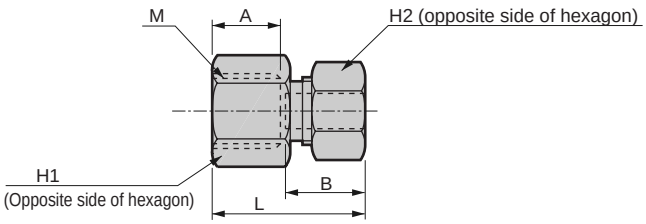
● Straight MJS*-0



* L and B dimensions show rough dimensions before fixing nut.

Model no.	Applicable tube O.D. ϕ	H_1	H_2	L	B	Min. bore size	Effective sectional area (mm^2)
MJS4-0	4	8	10	25.5	11	3	4.3
MJS6-0	6	10	12	27.5	11.5	4.5	8.1
MJS8-0	8	12	14	31	13	6	25.2
MJS10-0	10	14	17	34	14.5	8	43.2
MJS12-0	12	16	19	37	16	10	68.6
MJS15-0	15	20	23	44	19	12	106.0

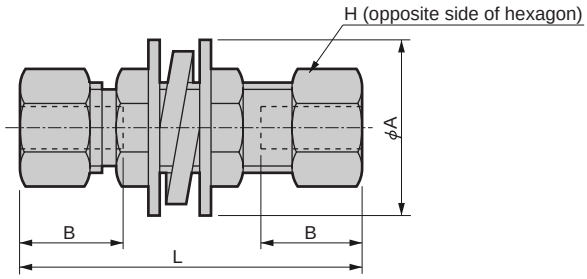
● Female, straight MJS*-*- M



* L and B dimensions show rough dimensions before fixing nut.

Model no.	Applicable tube O.D. ϕ	M	H_1	H_2	L	A	B	Min. bore size	Effective sectional area (mm^2)
MJS4-6-M	4	Rc1/8	13	10	20	8	11	3	4.0
MJS4-8-M	4	Rc1/4	17	10	23	11	11	3	4.8
MJS6-6-M	6	Rc1/8	13	12	21	8	11.5	4.5	8.1
MJS6-8-M	6	Rc1/4	17	12	24	11	11.5	4.5	8.6
MJS6-10-M	6	Rc3/8	20	12	25	12	11.5	4.5	14.4
MJS8-6-M	8	Rc1/8	13	14	22.5	8	13	6	15.1
MJS8-8-M	8	Rc1/4	17	14	25.5	11	13	6	20.1
MJS8-10-M	8	Rc3/8	20	14	26.5	12	13	6	25.1
MJS10-8-M	10	Rc1/4	17	17	27	11	14.5	8	36.1
MJS10-10-M	10	Rc3/8	20	17	28	12	14.5	8	34.4
MJS10-15-M	10	Rc1/2	26	17	31	15	14.5	8	34.4
MJS12-8-M	12	Rc1/4	17	19	28.5	11	16	10	55.2
MJS12-10-M	12	Rc3/8	20	19	29.5	12	16	10	55.5
MJS12-15-M	12	Rc1/2	26	19	33	15	16	10	55.5
MJS15-10-M	15	Rc3/8	20	23	33	12	19	12	73.7
MJS15-15-M	15	Rc1/2	26	23	36	15	19	12	103.3

● BULK HEAD MJS*-0 X

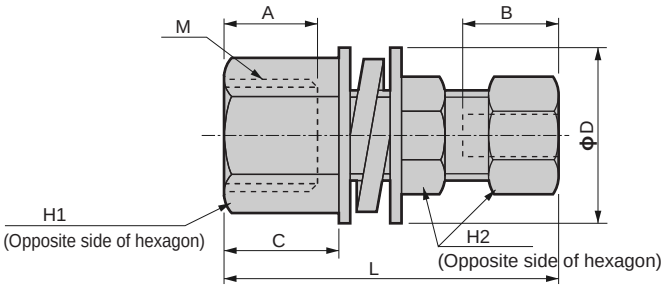


* L and B dimensions show rough dimensions before fixing nut. Mounting plate thickness 4mm or less

Model no.	Applicable tube O.D. ϕ	H	L	B	Installation hole diameter	Min. bore size	Effective sectional area (mm^2)	A
MJS4-0-X	4	10	39	11	9	3	3.9	18
MJS6-0-X	6	12	43	11.5	11	4.5	7.7	22
MJS8-0-X	8	14	47	13	13	6	25.9	24
MJS10-0-X	10	17	51	14.5	15	8	41.1	28
MJS12-0-X	12	19	54	16	17	10	67.6	32
MJS15-0-X	15	23	63	19	21	12	97.0	40

Dimensions: Bulk head female, single elbow, female, elbow, elbow

● Bulk head female MJS*-*- E

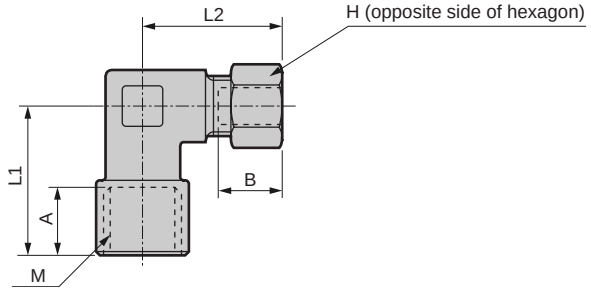


* L and B dimensions show rough dimensions before fixing nut. Mounting plate thickness 4mm or less

	Model no.	Applicable tube O.D.ϕ	M	H_1	H_2	L	A	B	C	Installation hole diameter	Min. bore size	Effective sectional area (mm²)	D
*	MJS4-6-E	4	Rc1/8	12	10	34	8	11	9.5	9	3	5.2	18
	MJS6-8-E	6	Rc1/4	17	12	40	11	11.5	13	11	4.5	13.2	22
	MJS8-8-E	8	Rc1/4	17	14	42.5	11	13	13	13	6	25.6	24
*	MJS10-10-E	10	Rc3/8	20	17	45.5	12	14.5	14	15	8	40.1	28

Model No. with "*" is available as custom order. Consult with CKD.

● Female, elbow MJL*-*-M

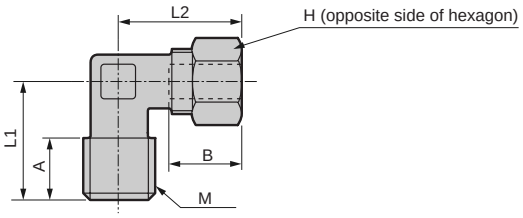


* L2 and B dimensions show rough dimensions before fixing nut.

	Model no.	Applicable tube O.D.ϕ	M	H	L_1	L_2	A	B	Min. bore size	Effective sectional area (mm²)
*	MJL4-6-M	4	Rc1/8	10	18.5	20	8	11	3	4.1
*	MJL4-8-M	4	Rc1/4	10	24	22.5	11	11	3	4.7
	MJL6-6-M	6	Rc1/8	12	18.5	20.5	8	11.5	4.5	9.4
	MJL6-8-M	6	Rc1/4	12	24	23.5	11	11.5	4.5	12.8
*	MJL6-10-M	6	Rc3/8	12	27	25.5	12	11.5	4.5	13.6
*	MJL8-6-M	8	Rc1/8	14	19.5	23	8	13	6	13.6
	MJL8-8-M	8	Rc1/4	14	24	25	11	13	6	21.0
*	MJL8-10-M	8	Rc3/8	14	27	27	12	13	6	22.8
*	MJL10-8-M	10	Rc1/4	17	24	26.5	11	14.5	8	29.3
*	MJL10-10-M	10	Rc3/8	17	27	28.5	12	14.5	8	35.7
*	MJL12-8-M	12	Rc1/4	19	25	29	11	16	10	29.3
*	MJL12-10-M	12	Rc3/8	19	27	29	12	16	10	51.4

Model No. with "*" is available as custom order. Consult with CKD.

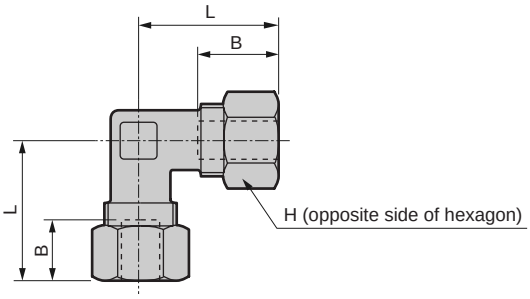
● Single elbow MJL*-*



* L2 and B dimensions show rough dimensions before fixing nut.

Model no.	Applicable tube O.D.ϕ	M	H	L_1	L_2	A	B	Min. bore size	Effective sectional area (mm²)
MJL4-6	4	R1/8	10	17	20	8	11	3	3.7
MJL4-8	4	R1/4	10	20	20	11	11	3	4.0
MJL6-6	6	R1/8	12	17	20.5	8	11.5	4.5	7.8
MJL6-8	6	R1/4	12	20	20.5	11	11.5	4.5	7.8
MJL6-10	6	R3/8	12	24	23.5	12	11.5	4.5	8.1
MJL8-6	8	R1/8	14	18	23	8	13	6	18.1
MJL8-8	8	R1/4	14	21	23	11	13	6	16.8
MJL8-10	8	R3/8	14	24	25	12	13	6	18.5
MJL10-8	10	R1/4	17	23	26.5	11	14.5	8	31.4
MJL10-10	10	R3/8	17	24	26.5	12	14.5	8	31.4
MJL10-15	10	R1/2	17	28	28.5	15	14.5	8	32.8
MJL12-8	12	R1/4	19	24	29	11	16	9	46.6
MJL12-10	12	R3/8	19	25	29	12	16	10	48.1
MJL12-15	12	R1/2	19	28	29	15	16	10	49.8
MJL15-10	15	R3/8	23	26	34	12	19	12	88.3
MJL15-15	15	R1/2	23	29	34	15	19	12	92.2

● Elbow MJL*-0

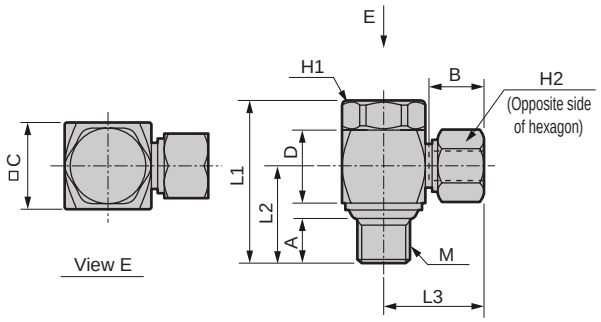


* L and B dimensions show rough dimensions before fixing nut.

Model no.	Applicable tube O.D.ϕ	H	L	B	Min. bore size	Effective sectional area (mm²)
MJL4-0	4	10	20	11	3	3.6
MJL6-0	6	12	20.5	11.5	4.5	9.4
MJL8-0	8	14	23	13	6	20.7
MJL10-0	10	17	26.5	14.5	8	33.1
MJL12-0	12	19	29	16	10	49.5
MJL15-0	15	23	34	19	12	85.4

Dimensions: Turn elbow, both push-in branch, D type tee union, tee union CAD

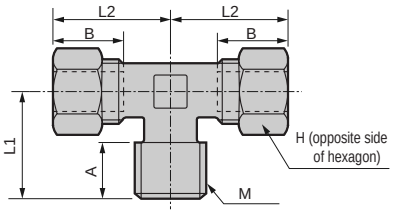
● Turn elbow MJL*-*- T



* L3 and B dimensions show rough dimensions before fixing nut.

Model no.	Applicable tube O.D.φ	M	H1	H2	L1	L2	L3	A	B	C	D	Effective sectional area (mm²)
MJL4-6-T	4	R1/8	14	10	29.5	17.6	18	8	11	15	13.5	3.9
MJL6-6-T	6	R1/8	14	12	29.5	17.6	19	8	11.5	15	13.5	8.3
MJL6-8-T	6	R1/4	19	12	36.5	22.1	21.5	11	11.5	20	16.5	9.7
MJL8-6-T	8	R1/8	14	14	29.5	17.6	20.5	8	13	15	13.5	13.7
MJL8-8-T	8	R1/4	19	14	36.5	22.1	23	11	13	20	16.5	18.0
MJL10-8-T	10	R1/4	19	17	36.5	22.1	24.5	11	14.5	20	16.5	27.4
MJL10-10-T	10	R3/8	22	17	42	25	26.5	12	14.5	24	20	33.9
MJL12-10-T	12	R3/8	22	19	42	25	28	12	16	24	20	42.4
MJL12-15-T	12	R1/2	24	19	52.5	32	29.5	15	16	27	27	45.5
MJL15-15-T	15	R1/2	24	23	52.5	32	32.5	15	19	27	27	64.5

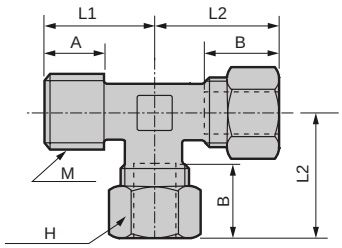
● Both push-in branch MJT*-*



* L2 and B dimensions show rough dimensions before fixing nut.

Model no.	Applicable tube O.D.φ	M	H	L1	L2	A	B	Min. bore size	Effective sectional area (mm²)
MJT4-6	4	R1/8	10	17	20	8	11	3	6.7
MJT4-8	4	R1/4	10	20	20	11	11	3	6.6
MJT6-6	6	R1/8	12	17	20.5	8	11.5	4.5	12.4
MJT6-8	6	R1/4	12	20	20.5	11	11.5	4.5	14.4
MJT6-10	6	R3/8	12	24	23.5	12	11.5	4.5	15.0
MJT8-6	8	R1/8	14	18	23	8	13	6	27.8
MJT8-8	8	R1/4	14	21	23	11	13	6	28.9
MJT8-10	8	R3/8	14	24	25	12	13	6	32.8
MJT10-8	10	R1/4	17	23	26.5	11	14.5	8	46.6
MJT10-10	10	R3/8	17	24	26.5	12	14.5	8	46.6
MJT10-15	10	R1/2	17	28	28.5	15	14.5	8	66.2
MJT12-8	12	R1/4	19	24	29	11	16	10	61.1
MJT12-10	12	R3/8	19	25	29	12	16	10	80.5
MJT12-15	12	R1/2	19	28	29	15	16	10	76.0
MJT15-10	15	R3/8	23	26	34	12	19	12	105.4
MJT15-15	15	R1/2	23	29	34	15	19	12	105.4

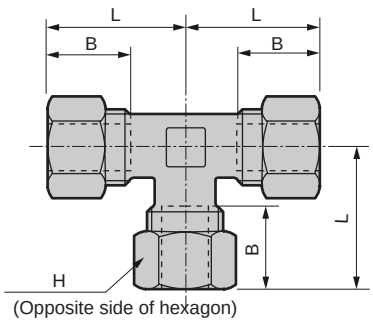
● D type tee union MJT*-*-D



* L2 and B dimensions show rough dimensions before fixing nut.

Mod	Applicable tube O.D.φ	M	H	L1	L2	A	B	Min. bore size	Effective sectional area (mm²)
MJT4-6-D	4	R1/8	10	17	20	8	11	3	7.6
MJT4-8-D	4	R1/4	10	20	20	11	11	3	7.8
MJT6-6-D	6	R1/8	12	17	20.5	8	11.5	4.5	13.1
MJT6-8-D	6	R1/4	12	20	20.5	11	11.5	4.5	15.7
MJT6-10-D	6	R3/8	12	24	23.5	12	11.5	4.5	14.4
MJT8-6-D	8	R1/8	14	18	23	8	13	6	27.3
MJT8-8-D	8	R1/4	14	21	23	11	13	6	28.9
MJT8-10-D	8	R3/8	14	24	25	12	13	6	36.1
MJT10-8-D	10	R1/4	17	23	26.5	11	14.5	8	48.1
MJT10-10-D	10	R3/8	17	24	26.5	12	14.5	8	49.8
MJT10-15-D	10	R1/2	17	28	28.5	15	14.5	8	68.1
MJT12-8-D	12	R1/4	19	24	29	11	16	10	65.6
MJT12-10-D	12	R3/8	19	25	29	12	16	10	76.0
MJT12-15-D	12	R1/2	19	28	29	15	16	10	80.3
MJT15-10-D	15	R3/8	23	26	34	12	19	12	110.4
MJT15-15-D	15	R1/2	23	29	34	15	19	12	110.4

● Tee union MJT*-0

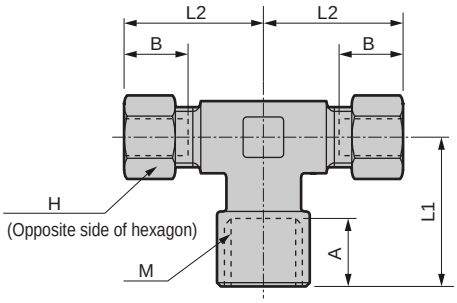


* L and B dimensions show rough dimensions before fixing nut.

Model no.	Applicable tube O.D.φ	H	L	B	Min. bore size	Effective sectional area (mm²)
MJT4-0	4	10	20	11	3	4.4
MJT6-0	6	12	20.5	11.5	4.5	7.2
MJT8-0	8	14	23	13	6	19.0
MJT10-0	10	17	26.5	14.5	8	36.1
MJT12-0	12	19	29	16	10	52.6
MJT15-0	15	23	34	19	12	100.8

Dimensions: Female tee union, sleeve, insert ring

● Female tee union MJT*-*-M CAD

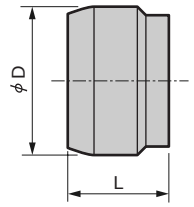


* L2 and B dimensions show rough dimensions before fixing nut.

	Model no.	Applicable tube O.D.ϕ	M	H	L1	L2	A	B	Min. bore size	Effective sectional area (mm^2)
*	MJT4-6-M	4	Rc1/8	10	18.5	20	8	11	3	7.6
*	MJT4-8-M	4	Rc1/4	10	24	22.5	11	11	3	8.6
	MJT6-6-M	6	Rc1/8	12	18.5	20.5	8	11.5	4.5	13.9
	MJT6-8-M	6	Rc1/4	12	24	23.5	11	11.5	4.5	22.9
*	MJT6-10-M	6	Rc3/8	12	27	25.5	12	11.5	4.5	24.3
*	MJT8-6-M	8	Rc1/8	14	19.5	23	8	13	6	14.3
	MJT8-8-M	8	Rc1/4	14	24	25	11	13	6	29.2
*	MJT8-10-M	8	Rc3/8	14	27	27	12	13	6	40.0
*	MJT10-8-M	10	Rc1/4	17	24	26.5	11	14.5	8	29.2
*	MJT10-10-M	10	Rc3/8	17	27	28.5	12	14.5	8	53.7
*	MJT12-8-M	12	Rc1/4	19	26	29	11	16	10	29.5
*	MJT12-10-M	12	Rc3/8	19	27	29	12	16	10	63.8

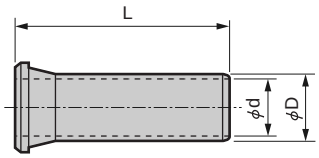
Model No. with "*" is available as custom order. Consult with CKD.

● Sleeve MJN*-0
Material C3604BD



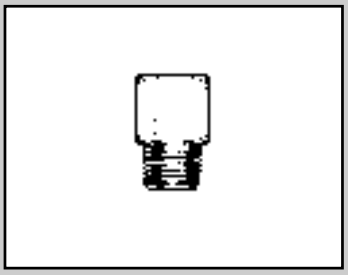
Model no.	Applicable tube O.D.ϕ	ϕD	L
MJN4-0	4	6	6
MJN6-0	6	8	6
MJN8-0	8	10	7
MJN10-0	10	12	8
MJN12-0	12	14	8.5
MJN15-0	15	18	10.5

● Insert ring MJU*-O
Material C3604BD



Installation procedures
Insert the tube into the cap nut and the sleeve in this turn, then insert the insert ring into the root of tube. Insert the tube into the joint until it stops, then couple the cap nut and the joint.

Model no.	L	ϕ D	ϕ d (Bore size)	Conformity tube
MJU4-0	12	1.8	1.1	U-9504
MJU6-0	15	3.6	2.8	U-9506
MJU8-0	16	4.8	4	U-9508
MJU10-0	17	6.3	5.5	U-9510
MJU12-0	18	7.8	7	U-9512
MJF4-0	12	2.3	1.5	F-1504
MJF6-0	15	3.8	3	F-1506
MJF8-0	16	5.6	4.5	F-1508
MJF10-0	17	7.1	6.2	F-1510
MJF12-0	18	8.8	8	F-1512
MJF15-0	20	11.3	10.3	F-1515



Joint

JL Series

● Port size: 1/8 to 1/2

CAD

AOI Co, Ltd.

How to order

JL – **8** – **6**

Elbow joint

Ⓐ Male port size

Ⓑ Female port size

Ⓐ Male port size	
6	R1/8
8	R1/4
10	R3/8
15	R1/2

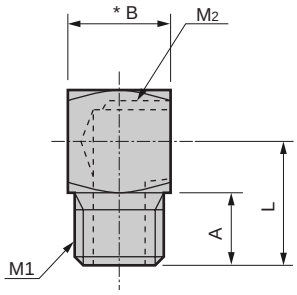
Ⓑ Female port size	
6	Rc1/8

No symbol when male and female have the same diameter.

Note: Sales unit is 10 pieces/1 bag.

Dimensions CAD

● Elbow joint/JL



Material C3604BD

For model with * mark, consult with CKD for delivery lead time.

Model no.	M1	M2	L	A	B	Min. bore size
JL-6	R1/8	Rc1/8	15	8	14	6
JL-8-6	R1/4	Rc1/8	18	11	14	8
JL-8	R1/4	Rc1/4	19	11	16	8
JL-10	R3/8	Rc3/8	22	12	20	10
JL-15 *	R1/2	Rc1/2	27.5	15	25	13