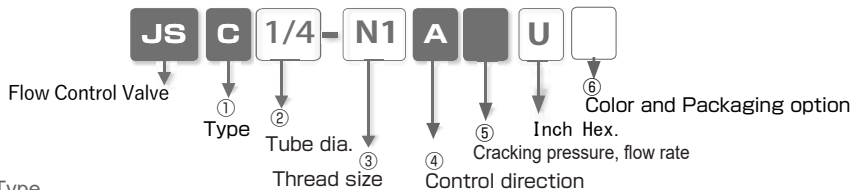


Model Designation (Example)



①. Type

Code	Type	Code	Type	Code	Type	Code	Type
C	Elbow / Banjo	S	Universal	MU	In-line Straight	M	Banjo Universal

②. Tubing outside dia.

Tube dia.	Inch size							Metric (mm)					
	Code	1/8	5/32	3/16	1/4	5/16	3/8	1/2	4	6	8	10	12
O.D.(mm)	ø3.2	ø3.97	ø4.76	ø6.35	ø7.94	ø9.53	ø12.7		ø4	ø6	ø8	ø10	ø12
O.D.(Inch)	ø1/8"	ø5/32"	ø3/16"	ø1/4"	ø5/16"	ø3/8"	ø1/2"						

③. Thread size (※ No code entry for In-line straight type (JSMU))

Thread size	Unified		Metric		National pipe tapered thread				Taper pipe thread				
	Code	U10	M3	M5	N0	N1	N2	N3	N4	01	02	03	04
Size	10-32UNF	M3×0.5	M5×0.8	1/16NPT	1/8NPT	1/4NPT	3/8NPT	1/2NPT	R1/8	R1/4	R3/8	R1/2	

※ The unit of wrench size is inch (the code suffix is "U").

※ R thread is same as BSPT

④. Control direction (※ No code entry for In-line straight type (JSMU))

Code	A	B
Control direction	Meter-out (Exhaust)	Meter-in (Supply)
	<p>■ Air from thread side is controlled. Air from tube side is not controlled and flows out from thread side.</p>	<p>■ Air from tube side is controlled. Air from thread side is not controlled and flows out from tube side.</p>
Identification	"A" is marked on the top of the knob. Locknut color: Silver	"B" is marked on the top of the knob. Locknut color: Black

⑤. Check valve specification(※ No code entry for In-line straight type (JSMU))

No code : Standard

K : Low cracking pressure type - Check seal cracking pressure: 2.4psi (0.02MPa), operating pressure range: 0.725~7.25psi (0.05~0.5MPa)

※ "K" is marked on the top of needle.

H : High-flow type comes with only meter-out (Exhaust) control(A).

L : Low-flow type

⑥. Color option, Packaging option

Code	Specification (color / Cleanroom)	Color combination		Remarks
		Release ring(※)	Resin Body Color	
No Code	Standard	Black	Black	
-C	Cleanroom package	Light-Blue	Light-Gray	optional selection
W	color: Light-Gray	Light-Gray	Light-Gray	optional selection
W-C	Light-Gray&Cleanroom	Light-Gray	Light-Gray	optional selection

※ 1. Release-ring color is white for inch-size products.

※ 2. Clean-room package is not available for Universal type (M).

※ 3. Ask us for the cleanroom package details for imperial sizes.

Specifications

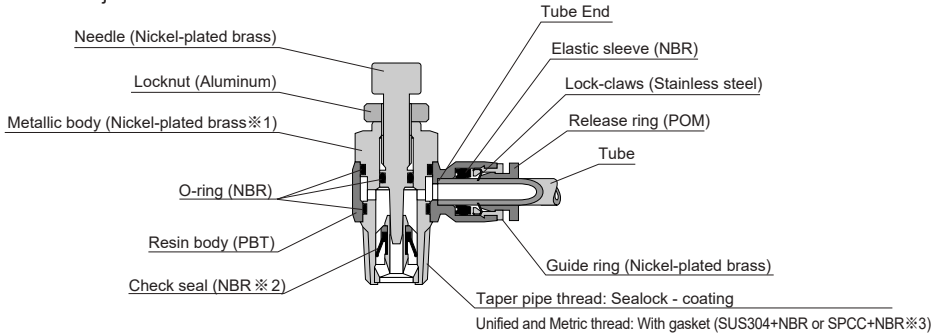
Type	Elbow · Universal · Banjo Universal	In-Line Straight
Fluid medium	Air	
Operating pressure range	14.5 ~ 130psi (0.1 ~ 0.9Mpa) H type: 14.5psi ~ 102psi (0.05 ~ 0.7MPa)	7.25 ~ 145psi (0.05 ~ 1.0 MPa)
Check valve cracking pressure	7.25psi (0.05MPa) K type : 2.4psi (0.02MPa)	0.725psi (0.005MPa)
Operating temp. range	32 ~ 140°F (0 ~ 60°C) (no freezing)	

Construction



Symbol

● Elbow/Banjo : JSC

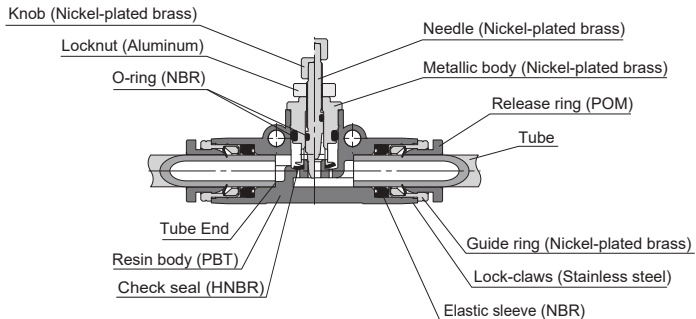


※1. Metallic body with M3 thread is made of special stainless steel (Austenite or ferritic stainless steel with SUS303 equivalent corrosivity)

※2. Low cracking pressure type : NBR

※3. Clean-room package type : POM

● In-Line : Union Straight : JSMU



Standard Size List

Connection: Thread ⇔ Tube

NPT, UNF thread

Type	Thread size	Tube O.D.							
		1/8	5/32	3/16	1/4	5/16	3/8	1/2	
JSC Elbow/Banjo	10-32UNF	●	●	●	●	●			
	1/8NPT		●	●	●	●	●		
	1/4NPT			●	●	●	●	●	
	3/8NPT			●	●	●	●	●	●
	1/2NPT				●	●	●	●	●

Type	Thread size	Tube O.D.							
		1/8	5/32	3/16	1/4	5/16	3/8	1/2	
JSS Universal	10-32UNF	●	●	●	●				
	1/8NPT		●	●	●	●			
	1/4NPT			●	●	●	●		
	3/8NPT			●	●	●	●	●	
	1/2NPT				●	●	●	●	●

Metric, R thread

Type	Thread size	Tube O.D.											
		3	4	6	8	10	12	1/8	1/4	5/16	3/8		
JSC Elbow/Banjo	M3 × 0.5	●	●								●		
	M5 × 0.8			●							●		
	R1/8			●	●						●	●	
	R1/4			●	●	●					●	●	●
	R3/8			●	●	●	●				●	●	●
R1/2				●	●	●	●				●	●	
JSM Banjo universal	M5 × 0.8		●										

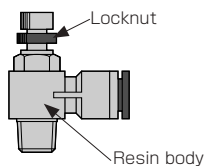
Type	Thread size	Tube O.D.												
		3	4	6	8	10	12	1/8	1/4	5/16	3/8			
JSS Universal	M3 × 0.5	●	●									●		
	M5 × 0.8			●								●		
	R1/8			●	●							●	●	
	R1/4			●	●	●						●	●	●
	R3/8			●	●	●	●					●	●	●
	R1/2				●	●	●	●					●	●

In-Line Connection: Tube ⇔ Tube (Equal dia.)

Type	Thread size	Tube O.D.											
		4	6	8	10	12	5/32	1/4	5/16	3/8	1/2		
JSMU In-line Straight		●	●	●	●	●	●	●	●	●	●	●	●

❖ Ask us for 1/8" In-line Union Straight

How to identify the series of Flow Control Valve



Series	Resin body color	Locknut color		Marking on needle	
		A type	B type	A type	B type
Standard	Black	Silver	Black	A (AK)	B (BK)
Clean-room package	Light-gray				
High-flow Series	Black	Blue	—	AG	—
Low-flow Series	Black	Silver	Black	AT	BT
SUS303 Series	Black	Silver	Black	A	B
PP Series	Semitransparent	Silver	Silver	A (AK)	B (BK)

※ 1. () is for low cracking pressure type.

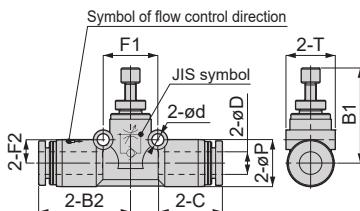
※ Ask for the imperial size clean-room package which may be different from the above spec.



In-Line Connection: Tube ↔ Tube (Equal dia.)

JSMU In-Line Straight

RoHS compliant



Symbol of flow control direction	Free Flow ←	Control Flow →
JIS symbol		

Unit : mm

Model code	Tube O.D. øD	B1		B2	øP	T	Tube end C	ød	F1	F2	Weight (g)	CAD file name
		max.	min.									
JSMU5/32 ^⑥	5/32"	21	18.6	21	10	10.5	14.9	3.2	12.7	4.8	8.9	JSMU5_32_
JSMU1/4 ^⑥	1/4"	25.4	21.6	24.4	12.5	13.1	17	3.2	14.8	6.2	14	JSMU1_4_
JSMU5/16 ^⑥	5/16"	28.5	24.9	28	14.8	15.4	18.1	3.2	18.2	7.2	25	JSMU5_16_
JSMU3/8 ^⑥	3/8"	32.6	28.9	31.8	18.2	19.7	20.2	4.2	22.2	8.7	46	JSMU3_8_
JSMU1/2 ^⑥	1/2"	35.2	31.5	37.2	21.2	22.7	23.7	4.2	25.7	10.2	65	JSMU1_2_
JSMU4 ^⑥	4	21	18.6	21	10	10.5	14.9	3.2	12.7	4.8	8.9	JSMU4_
JSMU6 ^⑥	6	25.4	21.6	24.4	12.5	13.1	17	3.2	14.8	6.2	14	JSMU6_
JSMU8 ^⑥	8	28.5	24.9	28	14.8	15.4	18.1	3.2	18.2	7.2	25	JSMU8_
JSMU10 ^⑥	10	32.6	28.9	31.8	18.2	19.7	20.2	4.2	22.2	8.7	46	JSMU10_
JSMU12 ^⑥	12	35.2	31.5	36.9	21.2	22.7	23.4	4.2	25.7	10.2	65	JSMU12_

Inch O.D. : 5/32", 1/4", 5/16", 3/8" and 1/2"

Metric O.D. : 4, 6, 8, 10 and 12 mm

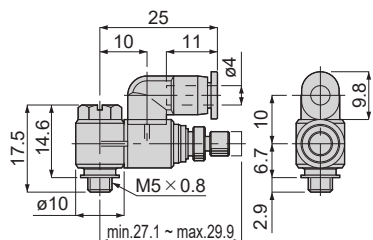
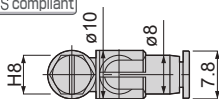
※. ^⑥ in model code : Replaced with "W" for Light-Gray, "-C" for Cleanroom package, and "W-C" for Cleanroom & Light-Gray.

※ Ask us for the price and availability of **JSMU1/8** (1/8" O.D. in-line straight).

Connection: Thread ↔ Tube

JSM Banjo Universal

RoHS compliant



Model code	Weight (g)	CAD file name
JSM4-M5 ^{④⑤⑥}	9.5(9.6)	JSM4-M5_

※ 1.Weight in () is for low cracking pressure type.

※ 2. ^④ in Model code / Replaced with "A" for Meter-out, "B" for Meter-in

※ 3. ^⑤ in Model code / Replaced with "K" for Low cracking pressure type.

(No ^⑤ in Model code indicates Low cracking pressure type is not available.)

※ 4.Weight in () is for low cracking pressure type.



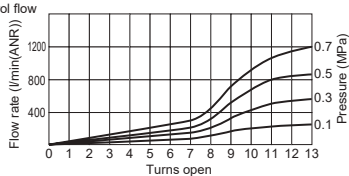
Flow Controller Series

Elbow/Banjo type / Universal type

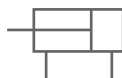
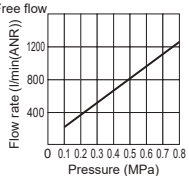
JSC 1/2-N3U
12-03

JSS 1/2-N3U
12-03

Control flow



Free flow

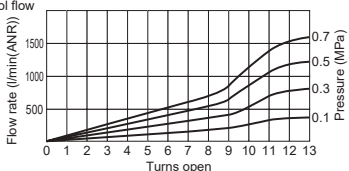


Cylinder tube I.D.

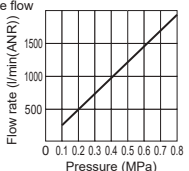
Max. \varnothing 63mm

JSC 5/16-N4U
8-04

Control flow



Free flow

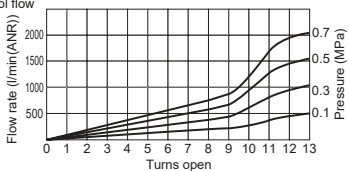


Cylinder tube I.D.

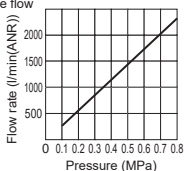
Max. \varnothing 80mm

JSC 3/8-N4U
10-04

Control flow



Free flow



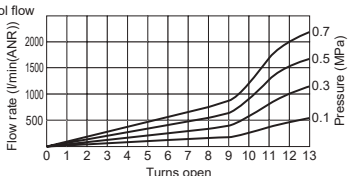
Cylinder tube I.D.

Max. \varnothing 100mm

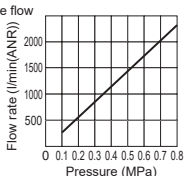
JSC 1/2-N4U
12-04

JSS 1/2-N4U
12-04

Control flow



Free flow



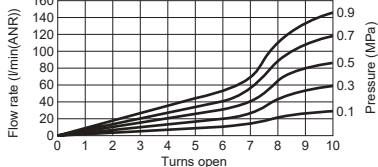
Cylinder tube I.D.

Max. \varnothing 100mm

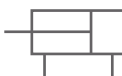
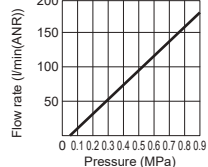
In-Line Straight type

JSMU 5/32
JSMU 4

Control flow



Free flow

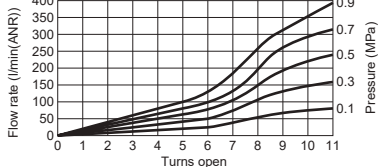


Cylinder tube I.D.

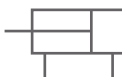
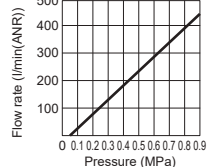
Max. \varnothing 20mm

JSMU 1/4
JSMU 6

Control flow



Free flow



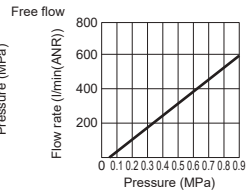
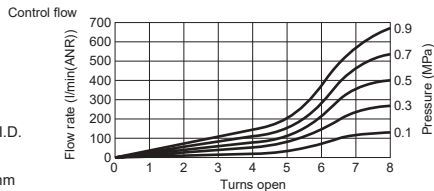
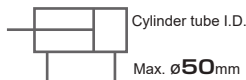
Cylinder tube I.D.

Max. \varnothing 32mm

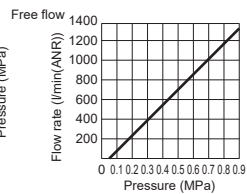
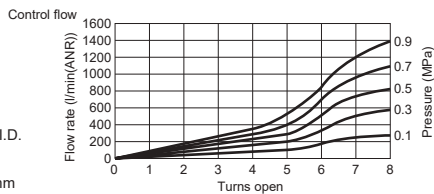
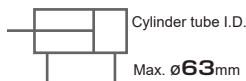


In-Line Straight type

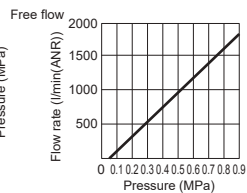
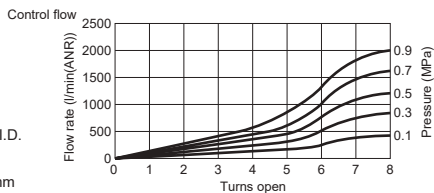
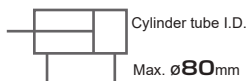
JSMU 5/16
JSMU 8



JSMU 3/8
JSMU 10

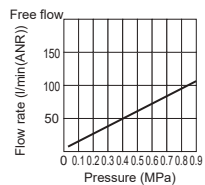
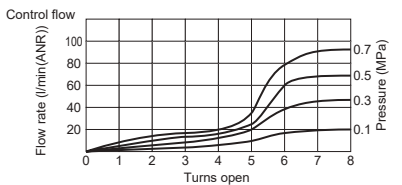
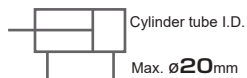


JSMU 1/2
JSMU 12

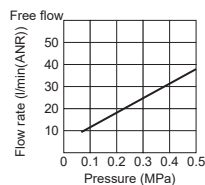
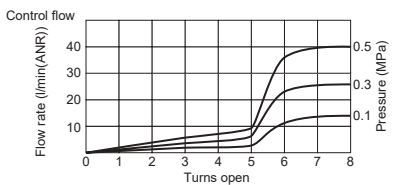
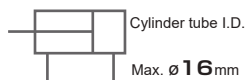


Banjo Universal type

JSM 4-M5



JSM 4-M5K

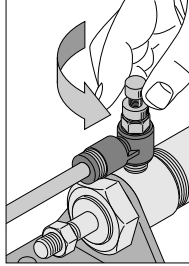


■ How to adjust the speed

1. Speed adjustment of actuators

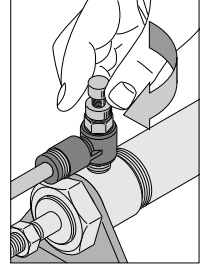
① Increasing speed

Turn the needle in the counterclockwise direction from a fully closed state. The more the needle is opened, the faster the actuator moves. Make sure to tighten the locknut at the desired speed. The speed setting can be changed without tightening the locknut.



② Reducing speed

Turn the needle in the clockwise direction when the speed is too fast. Make sure to tighten the locknut at the desired speed. The speed setting can be changed without tightening the locknut.

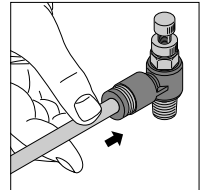


2. How to insert and disconnect

1. How to insert and disconnect tubings

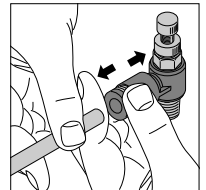
① Tubing insertion

Insert a tubing into Push-In Fitting up to the tube end. Lock-claws bite the tubing and grab it automatically, then the elastic sleeve seals around the tubing. Refer to "2. Instructions for Tubing Insertion" under "Common Safety Instructions for Fittings" .



② Tubing disconnection

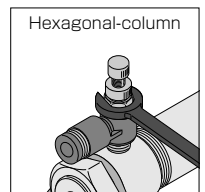
The tubing is disconnected by pushing release-ring to release Lock-claws. Make sure to stop air supply before the tube disconnection.



2. How to tighten thread

① Tightening thread

Use a wrench to tighten a hexagonal-column. Refer to "Table: Recommended tightening torque" under "2. Instructions for Installing Controllers" in "Common Safety Instructions for Controllers".



Common Safety Instructions for Controllers

Before selecting or using PISCO products, read the following instructions. Read the detailed instructions for individual series as well as the instructions below.

Warning

1. Some products have an air direction to control. Make sure to distinguish the direction by marking on the products. Installing the product with the wrong direction may cause personal injury or property damage.
2. Avoid any load on PISCO products such as a tensile strength, twisting, bending, dropping and excessive impacts. These may cause damage to the products.
3. Locknut needs to be tightened by hand. Do not use any tool. Using tools to tighten the locknut may cause damage to the products. Also, inadequate tightening may loosen the locknut and the initial setting can be changed.
4. Use clean air to supply. Dusts and sludge may result in the change of the initial setting.

Special Options

Characteristics

● *Color option*

Light-gray color option for resin body and release-ring.

● *Seal rubber material option*

Seal Rubber Selection: FKM or EPDM.

● *Oil-free option*

Suitable for Oil-free Environment.

● *Release-ring color option*

Changeable to Red Color

● *Non-purple option*

Suppress CU ion and F ion.

- * Note: With this option, Check Valve and Stop Fitting, etc. do not have marking on the brass parts. Be careful when piping.