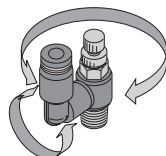
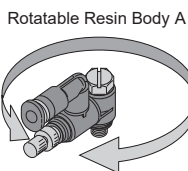


Push-In Type Flow Control Valve Flow Controller Series

- *Rotatable Resin Body (JSS Type)*

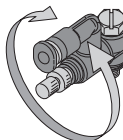


- *Rotatable Body A / B*
Direction and Fitting part.
Easy Tube Insertion /
Disconnection(JSM Type)

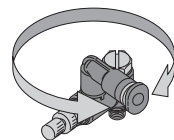


Rotatable Resin Body A

Rotatable Resin Body B



Rotatable Fitting

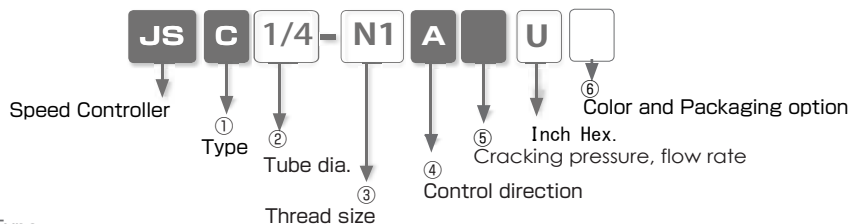


- *In-Line Union type has been renewed to Small union type.*
Achieved downsizing of Union type.

- *Optional Selection of Body Color (light-gray) and Clean-Room Package.*

Fluorine-based grease is used on O-ring for clean-room package.
Products are packed in a clean room equivalent to ISO class 6 after cleaning.

Model Designation (Example)



①. Type

Code	Type	Code	Type	Code	Type	Code	Type
C	Elbow	S	Free	MU	Small Union Straight	M	Universal

②. Tube dia.

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

③. Thread size (※ No code entry for Small union straight type (JSMU))

Thread size	Straight thread			Taper pipe thread								
Code	U10	M3	M5	N0	N1	N2	N3	N4	O1	O2	O3	O4
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 Small union straight type (JSMU))

Code	A	B
Control direction	<p>Meter-out</p> <p>■ Air from thread side is controlled. Air from tube side is not controlled and flows out from thread side.</p>	<p>Meter-in</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 Small union straight type (JSMU))

No code : Standard

K : Low cracking pressure type - Diaphragm 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 : Large-flow type comes with only meter-out 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).

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

Specifications

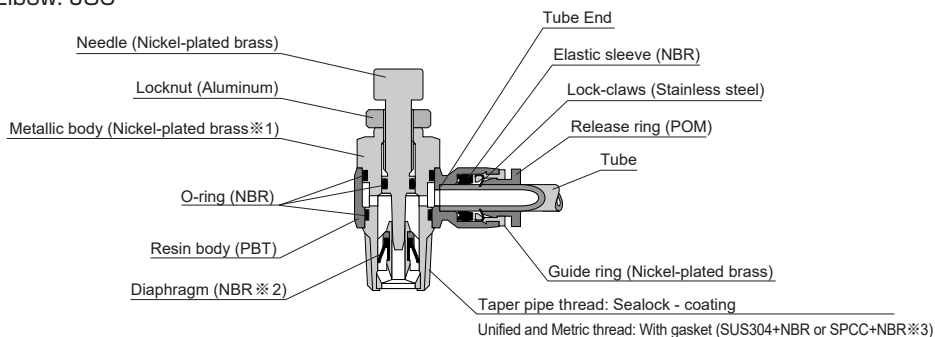
Type	Elbow · Free · Universal	Small Union Straight
Fluid medium	Air	
Operating pressure range	14.5 ~ 130psi (0.1 ~ 0.9Mpa) H type:14.5psi~102psi (0.05~0.7MPa)	7.25~145psi (0.05 ~ 1.0 MPa)
Check valve cracking pressure	7.25psi (0.05MPa) K type : 2.4psi (0.02MPa)	0.725psi (0.005MPa)
Operating temp. range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

Construction



Symbol

● Elbow: JSC

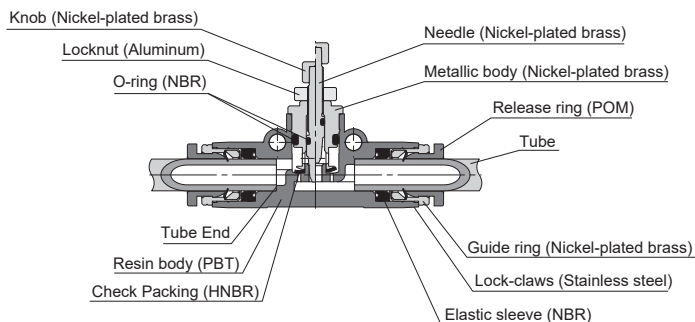


※1. Metallic body with M3 thread is made of special stainless steel (Austenite or ferritic stainless steel with SUS303 equivalent corrosivity)

※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	
 Elbow	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 Free	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	M3 × 0.5	●	●						●		
	M5 × 0.8		●	●					●		
	R1/8		●	●	●				●	●	
	R1/4			●	●	●			●	●	●
	R3/8				●	●	●		●	●	●
JSM Universal	R1/2					●					
	M5 × 0.8		●								

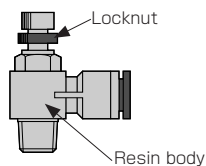
Type	Thread size	Tube O.D.									
		3	4	6	8	10	12	1/8	1/4	5/16	3/8
JSS Free	M3 × 0.5	●	●						●		
	M5 × 0.8		●	●					●		
	R1/8		●	●	●				●	●	
	R1/4			●	●	●			●	●	●
	R3/8				●	●	●		●	●	●
	R1/2					●					

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

Type	Tube O.D.									
	4	6	8	10	12	5/32	1/4	5/16	3/8	1/2
 Small Union Straight	●	●	●	●	●	●	●	●	●	●

❖ Ask us for 1/8" Union Straight

How to identify the series of Speed Controller



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.

❖ NPT, Unified thread models

JSC Elbow



MODEL	D	R
JSC1/8-U10□U□	1/8"	10-32UNF
JSC5/32-U10□U□	5/32"	10-32UNF
JSC5/32-N1□U□		NPT1/8
JSC3/16-U10□U□	3/16"	10-32UNF
JSC3/16-N1□U□		NPT1/8
JSC3/16-N2□U□		NPT1/4
JSC3/16-N3□U□		NPT3/8
JSC1/4-U10□U□	1/4"	10-32UNF
JSC1/4-N1□U□		NPT1/8
JSC1/4-N2□U□		NPT1/4
JSC1/4-N3□U□		NPT3/8
JSC5/16-N1□U□	5/16"	NPT1/8
JSC5/16-N2□U□		NPT1/4
JSC5/16-N3□U□		NPT3/8
JSC5/16-N4□U□		NPT1/2
JSC3/8-N2□U□	3/8"	NPT1/4
JSC3/8-N3□U□		NPT3/8
JSC3/8-N4□U□		NPT1/2
JSC1/2-N3□U□	1/2"	NPT3/8
JSC1/2-N4□U□		NPT1/2
JSC6-U10□U□	6mm	10-32UNF
JSC6-N1□U□		NPT1/8
JSC6-N2□U□		NPT1/4
JSC10-N2□U□	10mm	NPT1/4
JSC10-N3□U□		NPT3/8

Large-Flow model



MODEL	D	R
JSC1/4-N1AHU□	1/4"	NPT1/8
JSC1/4-N2AHU□		NPT1/4
JSC3/8-N2AHU□	3/8"	NPT1/4
JSC3/8-N3AHU□		NPT3/8

JSS Free



MODEL	D	R
JSS1/8-U10□(K)U□	1/8"	10-32UNF
JSS5/32-U10□(K)U□	5/32"	10-32UNF
JSS5/32-N1□(K)U□		NPT1/8
JSS3/16-U10□U□	3/16"	10-32UNF
JSS3/16-N1□U□		NPT1/8
JSS3/16-N2□U□		NPT1/4
JSS1/4-U10□(K)U□	1/4"	10-32UNF
JSS1/4-N1□(K)U□		NPT1/8
JSS1/4-N2□(K)U□		NPT1/4
JSS5/16-N1□U□	5/16"	NPT1/8
JSS5/16-N2□U□		NPT1/4
JSS5/16-N3□U□		NPT3/8
JSS3/8-N2□U□	3/8"	NPT1/4
JSS3/8-N3□U□		NPT3/8
JSS1/2-N3□U□	1/2"	NPT3/8
JSS1/2-N4□U□		NPT1/2

Low Pressure Operating Type

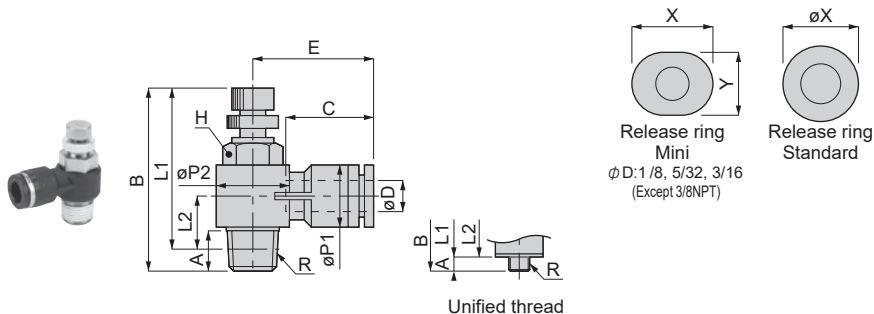


MODEL	D	R
JSC1/8-U10□KU□	1/8"	10-32UNF
JSC5/32-U10□KU□	5/32"	10-32UNF
JSC5/32-N1□KU□		NPT1/8
JSC1/4-U10□KU□	1/4"	10-32UNF
JSC1/4-N1□KU□		NPT1/8
JSC1/4-N2□KU□		NPT1/4

Connection: Thread ⇄ Tube

JSC
Elbow
NPT and UNF thread

RoHS compliant



Unit : mm

Model code	Tube O.D øD	R	A	B		L1		L2	øP1	øP2	Tube end C	E	Hex. (inch)	X (øX)	Y	Weight (g)	CAD file name
				max.	min.	max.	min.										
JSC1/8-U10④⑤⑥	1/8	10-32UNF	2.9	29.7	27	26.8	24.1	6.7	8	9.8	11	15.4	5/16	9.8	7.8	7.3	JSC1_8-U10_U
JSC5/32-U10④⑤⑥	5/32	10-32UNF	2.9	29.7	27	26.8	24.1	6.7	8	9.8	11	15.4	5/16	9.8	7.8	7.5	JSC5_32-U10_U
JSC5/32-N1④⑤⑥		1/8NPT	8	41.5	34.9	37.3	30.7	10.6		14.4		17.7	7/16			18	JSC5_32-N1_U
JSC3/16-U10④⑤⑥	3/16	10-32UNF	2.9	29.7	27	26.8	24.1	7.5	10.5	9.8	11.7	17.6	5/16	11.8	9.8	8	JSC3_16-U10_U
JSC3/16-N1④⑤⑥		1/8NPT	8	41.5	34.9	37.3	30.7	10.6		14.4		18.4	7/16			19	JSC3_16-N1_U
JSC3/16-N2④⑤⑥		1/4NPT	11.1	48.9	42.2	43.1	36.4	12.4		18.4		20.3	9/16			35	JSC3_16-N2_U
JSC3/16-N3④⑤⑥		3/8NPT	13.2	54.4	46.9	48.3	40.8	15.6		14.5	22	29.4	3/4			65	JSC3_16-N3_U
JSC1/4-U10④⑤⑥	1/4	10-32UNF	2.9	29.7	27	26.8	24.1	8.4	12.4	9.8	17	24	5/16	11.8	—	9.4	JSC1_4-U10_U
JSC1/4-N1④⑤⑥		1/8NPT	8	41.5	34.9	37.3	30.7	10.8		14.4		23.5	7/16			20	JSC1_4-N1_U
JSC1/4-N2④⑤⑥		1/4NPT	11.1	48.9	42.2	43.1	36.4	12.4		18.4		25.5	9/16			37	JSC1_4-N2_U
JSC1/4-N3④⑤⑥		3/8NPT	13.2	54.4	46.9	48.3	40.8	15.6		14.5	22	29	3/4			65	JSC1_4-N3_U
JSC5/16-N1④⑤⑥	5/16	1/8NPT	8	41.5	34.9	37.3	30.7	11.8	14.4	14.4	18.1	26.9	7/16	13.8	—	22	JSC5_16-N1_U
JSC5/16-N2④⑤⑥		1/4NPT	11.1	48.9	42.2	43.1	36.4	13.4		18.4		28.4	9/16			38	JSC5_16-N2_U
JSC5/16-N3④⑤⑥		3/8NPT	13.2	54.4	46.9	48.3	40.8	15.6		22		28.9	3/4			65	JSC5_16-N3_U
JSC5/16-N4④⑤⑥		1/2NPT	16	59.7	52.4	51.5	44.2	18		28		31	1			115	JSC5_16-N4_U
JSC3/8-N2④⑤⑥	3/8	1/4NPT	11.1	48.9	42.2	43.1	36.4	15	17.6	18.4	20.2	30.9	9/16	16.8	—	41	JSC3_8-N2_U
JSC3/8-N3④⑤⑥		3/8NPT	13.2	54.4	46.9	48.3	40.8	16.9		22		31.2	3/4			69	JSC3_8-N3_U
JSC3/8-N4④⑤⑥		1/2NPT	16	59.7	52.4	51.5	44.2	18		28		33.6	1			118	JSC3_8-N4_U
JSC1/2-N3④⑤⑥	1/2	3/8NPT	13.2	54.4	46.9	48.3	40.8	18.6	21	22	23.7	37.2	3/4	19.8	—	72	JSC1_2-N3_U
JSC1/2-N4④⑤⑥		1/2NPT	16	59.7	52.4	51.5	44.2	19.7		28		36.7	1			121	JSC1_2-N4_U

※ 1. ④ in model code : Replaced with "A" for Meter-out, "B" for Meter-in.

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

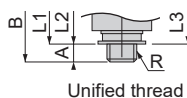
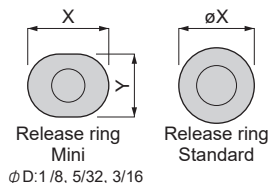
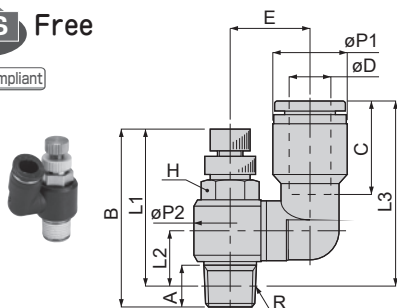
(No ⑥ in Model code indicates Low cracking pressure type is not available.)

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

※ 4. "L1" and "L2" are reference values for height dimensions after tightening a taper thread.

※ 5. Value in [] is for cleanroom packaging.

NPT and UNF thread



Unit : mm

Model code	Tube O.D. øD	R	A	B		L1		L2	L3	øP1	øP2	Tube and C	E	Hex. 5/16	X (øX)	Y	Weigh (g)	CAD file name
				max.	min.	max.	min.											
JSS1/8-U10③⑤⑥	1/8	10-32UNF	2.9	29.7	27	26.8	24.1	6.7	22.8	8	9.8	11	10	5/16	7.8	9.8	7.7	JSS1_8-U10_U
JSS5/32-U10③⑤⑥	5/32	10-32UNF	2.9	29.7	27	26.8	24.1	6.7	22.8	8	9.8	11	10	5/16	7.8	9.8	8	JSS5_32-U10_U
JSS5/32-N1③⑤⑥		1/8NPT	8	41.5	34.9	37.3	30.7	10.6	26.7		14.4		12.2	7/16			19	JSS5_32-N1_U
JSS3/16-U10③⑤⑥	3/16	10-32UNF	2.9	29.7	27	26.8	24.1	6.7	24.3	10.5	9.8		10.5	5/16	9.8	11.8	8.6	JSS3_16-U10_U
JSS3/16-N1③⑤⑥		1/8NPT	8	41.5	34.9	37.3	30.7	10.6	28.2		14.4	11.7	12.7	7/16			19	JSS3_16-N1_U
JSS3/16-N2③⑤⑥		1/4NPT	11.1	48.9	42.2	43.1	36.4	12.1	29.7		18.4		14.7	9/16			36	JSS3_16-N2_U
JSS1/4-U10③⑤⑥	1/4	10-32UNF	2.9	29.7	27	26.8	24.1	8.2	31.2	12.4	9.8		12.7	5/16	11.8	—	11	JSS1_4-U10_U
JSS1/4-N1③⑤⑥		1/8NPT	8	41.5	34.9	37.3	30.7	10.6	33.5		14.4	17	15.5	7/16			21	JSS1_4-N1_U
JSS1/4-N2③⑤⑥		1/4NPT	11.1	48.9	42.2	43.1	36.4	12.1	35.1		18.4		17.5	9/16			38	JSS1_4-N2_U
JSS5/16-N1③⑤⑥	5/16	1/8NPT	8	41.5	34.9	37.3	30.7	10.6	36.3	14.5	14.4		15.5	7/16	13.8	—	23	JSS5_16-N1_U
JSS5/16-N2③⑤⑥		1/4NPT	11.1	48.9	42.2	43.1	36.4	12.1	37.8		18.4	18.1	17.5	9/16			39	JSS5_16-N2_U
JSS5/16-N3④⑥		3/8NPT	13.2	54.4	46.9	48.3	40.8	11.9	43.6		22		20	3/4			67	JSS5_16-N3_U
JSS3/8-N2③⑤⑥	3/8	1/4NPT	11.1	48.9	42.2	43.1	36.4	12.1	41.1	17.5	18.4	20.2	18	9/16	16.8	—	42	JSS3_8-N2_U
JSS3/8-N3④⑥		3/8NPT	13.2	54.4	46.9	48.3	40.8	15.9	45.9		22		20.5	3/4			70	JSS3_8-N3_U
JSS1/2-N3④⑥	1/2	3/8NPT	13.2	54.4	46.9	48.3	40.8	15.9	49.9	21	22	23.7	21	3/4	19.8	—	73	JSS1_2-N3_U
JSS1/2-N4④⑥		1/2NPT	16	59.7	52.4	51.5	44.2	18.1	53.6		28		25	1			124	JSS1_2-N4_U

※ 1. ④ in model code : Replaced with "A" for Meter-out, "B" for Meter-in.

※ 2. 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.)

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

※ 4. "L1", "L2", "L3" are reference values for height dimensions after tightening a taper thread.

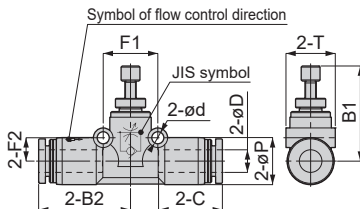
※ 5. Value in () is for cleanroom packaging.



■ In-Line Connection: Tube ⇄ Tube (Equal dia.)

JSMU Small Union Straight

RoHS compliant



Symbol of flow control direction	Symbol of flow control direction on resin body	
	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

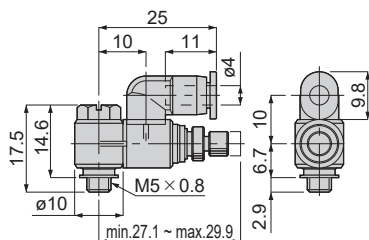
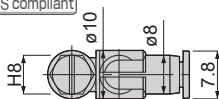
※. ⑥ in model code : Replaced with "W" for Light-Gray, "-C" for Cleanroom package, and "W-C" for Cleanroom & Light-Gray.

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

■ Connection: Thread ⇄ Tube

JSM 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.)

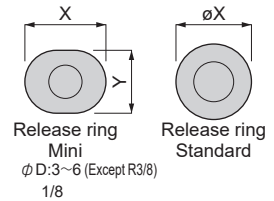
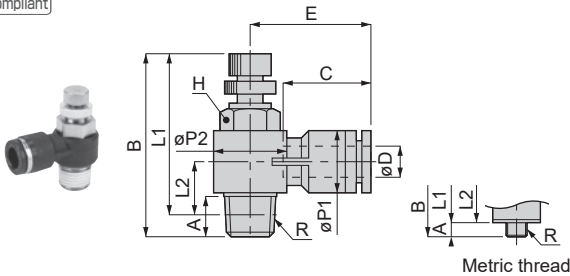
※ 4.Weight in () is for low cracking pressure type.



Metric thread

JSC Elbow

RoHS compliant



Metric thread

Unit : mm

Model code	Tube ØD øD	R	A	B		L1		L2	øP1	øP2	Tube end C	E	Hex.	X (αX)	Y	Weight (g)	CAD file name
				max.	min.	max.	min.										
JSC3-M3 ④⑤⑥	3	M3×0.5	2.5 [2.2]	29.2	26.5	26.7 [27]	24 [24.3]	6.6 [6.9]	8	9.8	11	15.4	8	9.8	7.8	6.6	JSC3-M3_ [C]
JSC3-M5 ④⑤⑥		M5×0.8	2.9 [3.2]	29.7	27	26.8 [26.5]	24.1 [23.8]	6.7 [6.4]								7.3	JSC3-M5_ [C]
JSC4-M3 ④⑤⑥	4	M3×0.5	2.5 [2.2]	29.2	26.5	26.7 [27]	24 [24.3]	6.6 [6.9]	8	9.8	11	15.4	8	9.8	7.8	6.6	JSC4-M3_ [C]
JSC4-M5 ④⑤⑥		M5×0.8	2.9 [3.2]	29.7	27	26.8 [26.5]	24.1 [23.8]	6.7 [6.4]								7.2	JSC4-M5_ [C]
JSC4-01 ④⑤⑥		R1/8	8	41.5	34.9	37.5	30.9	10.7		14.4		17.7	10			17	JSC4-01_
JSC6-M5 ④⑤⑥		M5×0.8	2.9 [3.2]	29.7	27	26.8 [26.5]	24.1 [23.8]	7.5 [7.2]		9.8		17.5	8			7.9	JSC6-M5_ [C]
JSC6-01 ④⑤⑥	6	R1/8	8	41.5	34.9	37.5	30.9	10.7	10.5	14.4	11.6	18.3	10	11.8	9.8	18	JSC6-01_
JSC6-02 ④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	11.9		18.4		20.2	14			35	JSC6-02_
JSC6-03 ④⑥		R3/8	13.2	54.4	46.9	48	40.5	15.4		14.4		22	17			29	19
JSC8-01 ④⑤⑥	8	R1/8	8	41.5	34.9	37.5	30.9	11.9	14.4	14.4	18.1	26.9	10	13.8	—	21	JSC8-01_
JSC8-02 ④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	13.2		18.4		28.4	14			38	JSC8-02_
JSC8-03 ④⑥		R3/8	13.2	54.4	46.9	48	40.5	15.4		22		28.9	19			65	JSC8-03_
JSC8-04 ④⑥		R1/2	16	59.7	52.4	51.5	44.2	18		28		31	24			101	JSC8-04_
JSC10-02 ④⑤⑥	10	R1/4	11.1	48.9	42.2	42.8	36.1	14.8	17.6	18.4	20.2	30.9	14	16.8	—	41	JSC10-02_
JSC10-03 ④⑥		R3/8	13.2	54.4	46.9	48	40.5	16.7		22		31.2	19			69	JSC10-03_
JSC10-04 ④⑥		R1/2	16	59.7	52.4	51.5	44.2	18		28		33.6	24			104	JSC10-04_
JSC12-03 ④⑥	12	R3/8	13.2	54.4	46.9	48	40.5	18.4	21	22	23.4	36.9	19	19.8	—	72	JSC12-03_
JSC12-04 ④⑥		R1/2	16	59.7	52.4	51.5	44.2	19.7		28		36.4	24			107	JSC12-04_
JSC1/8-M3 ④⑤⑥	1/8	M3×0.5	2.5 [2.2]	29.2	26.5	26.7 [27]	24 [24.3]	6.6 [6.9]	8	9.8	11	15.4	8	9.8	7.8	6.6	JSC1_8-M3_ [C]
JSC1/8-M5 ④⑤⑥		M5×0.8	2.9 [3.2]	29.7	27	26.8 [26.5]	24.1 [23.8]	6.7 [6.4]								7.3	JSC1_8-M5_ [C]
JSC1/4-M5 ④⑤⑥	1/4	M5×0.8	2.9 [3.2]	29.7	27	26.8 [26.5]	24.1 [23.8]	8.4 [8.1]	12.4	14.4	17	24	8	11.8	—	9.5	JSC1_4-M5_ [C]
JSC1/4-01 ④⑤⑥		R1/8	8	41.5	34.9	37.5	30.9	10.9				18.4	23.5			14	19
JSC1/4-02 ④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	12.2		18.4		25.5	14		36	JSC1_4-02_	
JSC5/16-01 ④⑤⑥	5/16	R1/8	8	41.5	34.9	37.5	30.9	11.9	14.4	14.4	18.1	26.9	10	13.8	—	21	JSC5_16-01_
JSC5/16-02 ④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	13.2		18.4		28.4	14			38	JSC5_16-02_
JSC5/16-03 ④⑥		R3/8	13.2	54.4	46.9	48	40.5	15.4		22		28.9	19		65	JSC5_16-03_	
JSC3/8-02 ④⑤⑥	3/8	R1/4	11.1	48.9	42.2	42.8	36.1	14.8	17.6	18.4	20.2	30.9	14	16.8	—	41	JSC3_8-02_
JSC3/8-03 ④⑥		R3/8	13.2	54.4	46.9	48	40.5	16.7		22		31.2	19			69	JSC3_8-03_

※ 1. ④ in model code : Replaced with "A" for Meter-out, "B" for Meter-in.

※ 2. 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.)

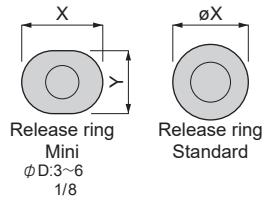
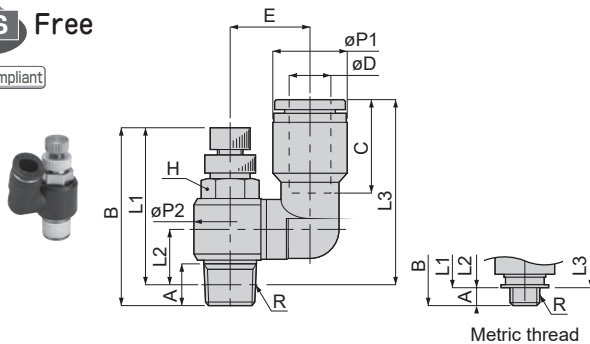
※ 3. ⑥ in model code : Replaced with "W" for Light-Gray, "-C" for Cleanroom package, and "W-C" for Cleanroom & Light-Gray.

※ 4. "L1" and "L2" are reference values for height dimensions after tightening a taper thread.

※ 5. Value in [] is for cleanroom packaging.



Metric thread



Metric thread

Unit : mm

Model code	Tube O.D. øD	R	A	B		L1		L2	L3	øP1	øP2	Tube end C	E	Hex. Y	X (øX)	Y	Weigh (g)	CAD file name
				max.	min.	max.	min.											
JSS3-M3 ④⑤⑥	3	M3×0.5	2.5 [2.2]	29.2	26.5	26.7 [27]	24 [24.3]	6.6 [6.9]	22.7 [23]	8	9.8	11	10	8	7.8	9.8	7	JSS3-M3_[C]
JSS3-M5 ④⑤⑥		M5×0.8	2.9 [3.2]	29.7	27	26.8 [26.5]	24.1 [23.8]	6.7 [6.4]	22.8 [22.5]								7.7	JSS3-M5_[C]
JSS4-M3 ④⑤⑥	4	M3×0.5	2.5 [2.2]	29.2	26.5	26.7 [27]	24 [24.3]	6.6 [6.9]	22.7 [23]	8	9.8	11	10	8	7.8	9.8	6.5	JSS4-M3_[C]
JSS4-M5 ④⑤⑥		M5×0.8	2.9 [3.2]	29.7	27	26.8 [26.5]	24.1 [23.8]	6.7 [6.4]	22.8 [22.5]								7.7	JSS4-M5_[C]
JSS4-01 ④⑤⑥	6	R1/8	8	41.5	34.9	37.5	30.9	10.7	26.8	10.5	14.4	11.6	12.2	10	9.8	11.8	18	JSS4-01_
JSS6-M5 ④⑤⑥		M5×0.8	2.9 [3.2]	29.7	27	26.8 [26.5]	24.1 [23.8]	6.7 [6.4]	24.2 [23.9]								8.4	JSS6-M5_[C]
JSS6-01 ④⑤⑥	6	R1/8	8	41.5	34.9	37.5	30.9	10.7	28.2	14.4	18.4	18.1	12.7	10	9.8	11.8	18	JSS6-01_
JSS6-02 ④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	11.9	29.4								35	JSS6-02_
JSS8-01 ④⑤⑥	8	R1/8	8	41.5	34.9	37.5	30.9	10.7	36.4	14.4	18.4	18.1	15.5	10	13.8	—	22	JSS8-01_
JSS8-02 ④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	11.9	37.6								39	JSS8-02_
JSS8-03 ④⑥	10	R3/8	13.2	54.4	46.9	48	40.5	15.6	43.3	22	22	20.2	20	19	16.8	—	68	JSS8-03_
JSS10-02 ④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	11.9	40.9								42	JSS10-02_
JSS10-03 ④⑥	12	R3/8	13.2	54.4	46.9	48	40.5	15.6	45.6	17.5	22	23.4	20.5	19	19.8	—	71	JSS10-03_
JSS12-03 ④⑥		R3/8	13.2	54.4	46.9	48	40.5	15.6	49.3								74	JSS12-03_
JSS12-04 ④⑥	1/8	R1/2	16	59.7	52.4	51.5	44.2	18	53.2	8	9.8	11	10	8	7.8	9.8	110	JSS12-04_
JSS1/8-M3 ④⑤⑥		M3×0.5	2.5 [2.2]	29.2	26.5	26.7 [27]	24 [24.3]	6.6 [6.9]	22.7 [23]								7	JSS1/8-M3_[C]
JSS1/8-M5 ④⑤⑥	1/4	M5×0.8	2.9 [3.2]	29.7	27	26.8 [26.5]	24.1 [23.8]	6.7 [6.4]	22.8 [22.5]	12.4	14.4	17	15.5	10	11.8	—	7.7	JSS1/8-M5_[C]
JSS1/4-M5 ④⑤⑥		M5×0.8	2.9 [3.2]	29.7	27	26.8 [26.5]	24.1 [23.8]	8.2 [7.9]	31.2 [30.9]								11	JSS1/4-M5_[C]
JSS1/4-01 ④⑤⑥	5/16	R1/8	8	41.5	34.9	37.5	30.9	10.7	33.7	14.5	18.4	18.1	17.5	14	13.8	—	20	JSS1/4-01_
JSS1/4-02 ④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	11.9	34.8								37	JSS1/4-02_
JSS5/16-01 ④⑤⑥	3/8	R1/8	8	41.5	34.9	37.5	30.9	10.7	36.4	17.5	18.4	20.2	15.5	10	16.8	—	22	JSS5/16-01_
JSS5/16-02 ④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	11.9	37.6								39	JSS5/16-02_
JSS5/16-03 ④⑥	3/8	R3/8	13.2	54.4	46.9	48	40.5	15.6	43.3	22	22	20.2	20	19	16.8	—	68	JSS5/16-03_
JSS3/8-02 ④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	11.9	40.9								42	JSS3/8-02_
JSS3/8-03 ④⑥	3/8	R3/8	13.2	54.4	46.9	48	40.5	15.6	45.6	22	22	20.2	20.5	19	16.8	—	70	JSS3/8-03_

※ 1. ④ in model code : Replaced with "A" for Meter-out, "B" for Meter-in.

※ 2. 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.)

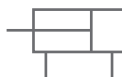
※ 3. ⑥ in model code : Replaced with "W" for Light-Gray, "-C" for Cleanroom package, and "W-C" for Cleanroom & Light-Gray.

※ 4. "L1", "L2", "L3" are reference values for height dimensions after tightening a taper thread.

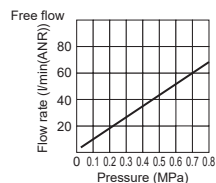
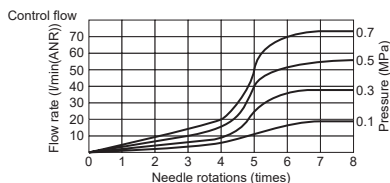
※ 5. Value in () is for cleanroom packaging.

JSC 3-M3K
3-M3
1/8-M3K
1/8-M3

JSS 3-M3K
3-M3
1/8-M3K
1/8-M3

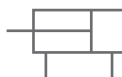


Cylinder tube I.D.
Max. $\phi 16$ mm

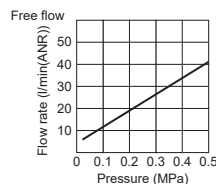
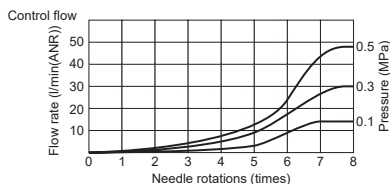


JSC 4-M3K

JSS 4-M3K



Cylinder tube I.D.
Max. $\phi 16$ mm

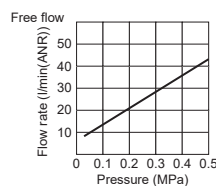
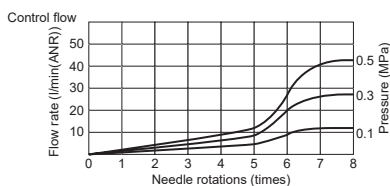


JSC 1/8-U10KU
3-M5K
4-M5K
6-M5K
1/8-M5K

JSS 1/8-U10KU
3-M5K
4-M5K
6-M5K
1/8-M5K

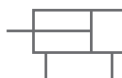


Cylinder tube I.D.
Max. $\phi 16$ mm

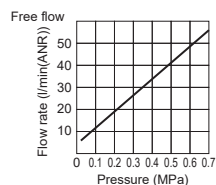
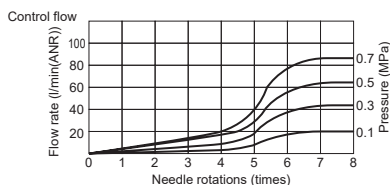


JSC 4-M3

JSS 4-M3



Cylinder tube I.D.
Max. $\phi 16$ mm

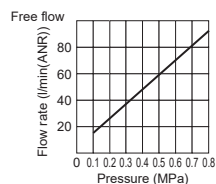
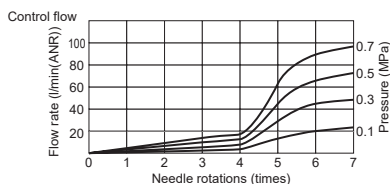


JSC 1/8-U10U
3/16-U10U
1/4-U10U
6-U10U
3-M5
4-M5
6-M5
1/8-M5
3/16-M5
1/4-M5

JSS 1/8-U10U
3/16-U10U
1/4-U10U
3-M5
4-M5
6-M5
1/8-M5



Cylinder tube I.D.
Max. $\phi 20$ mm

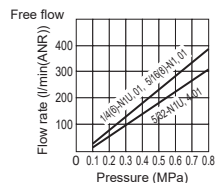
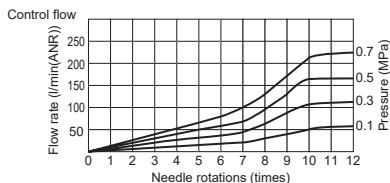


JSC 5/32-N1U
3/16-N1U
1/4-N1U
5/16-N1U
6-N1U
4-01
6-01
8-01
1/4-01
5/16-01

JSS 5/32-N1U
3/16-N1U
1/4-N1U
5/16-N1U
4-01
6-01
8-01
1/4-01
5/16-01



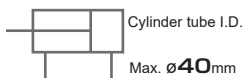
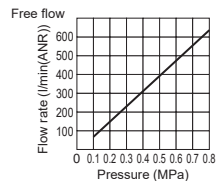
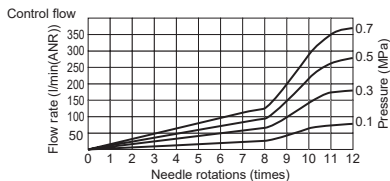
Cylinder tube I.D.
Max. $\phi 32$ mm





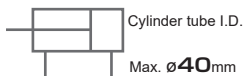
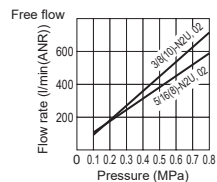
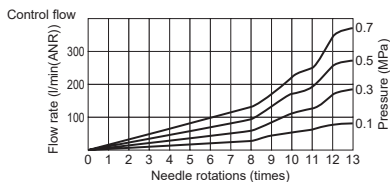
JSC 1/4-N2U
3/16-N2U
6-N2U
6-02
1/4-02

JSS 1/4-N2U
3/16-N2U
6-02
1/4-02

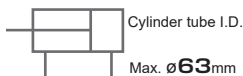
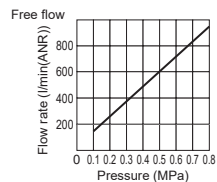
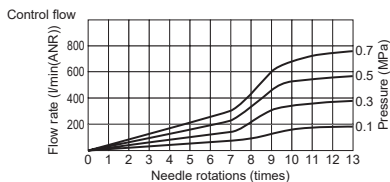


JSC 5/16-N2U
3/8-N2U
10-N2U
8-02
10-02
5/16-02
3/8-02

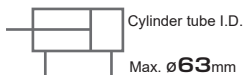
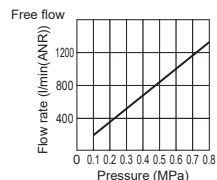
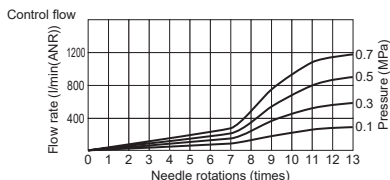
JSS 5/16-N2U
3/8-N2U
8-02
10-02
5/16-02
3/8-02



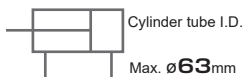
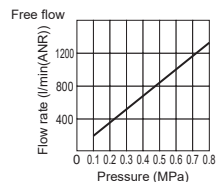
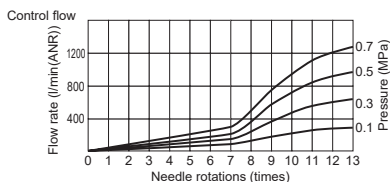
JSC 1/4-N3U
3/16-N3U
6-N3U
6-03



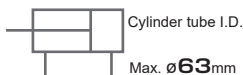
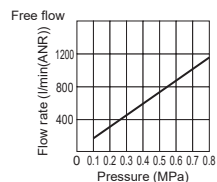
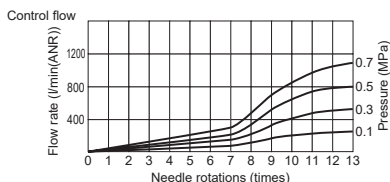
JSC 5/16-N3U
8-03
5/16-03



JSC 3/8-N3U
10-N3U
10-03
3/8-03



JSS 5/16-N3U
3/8-N3U
8-03
10-03
5/16-03
3/8-03

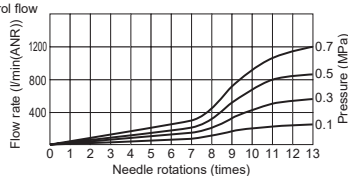




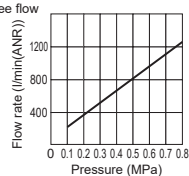
JSC 1/2-N3U
12-03

JSS 1/2-N3U
12-03

Control flow



Free flow

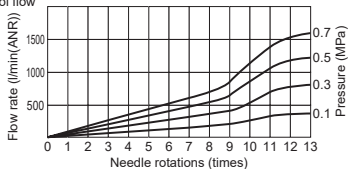


Cylinder tube I.D.

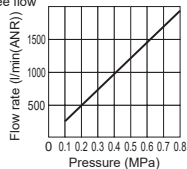
Max. $\phi 63$ mm

JSC 5/16-N4U
8-04

Control flow



Free flow

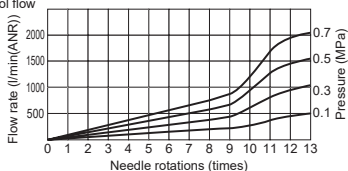


Cylinder tube I.D.

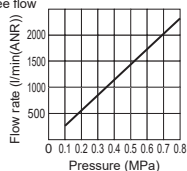
Max. $\phi 80$ mm

JSC 3/8-N4U
10-04

Control flow



Free flow



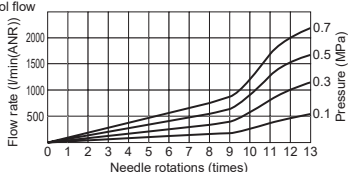
Cylinder tube I.D.

Max. $\phi 100$ mm

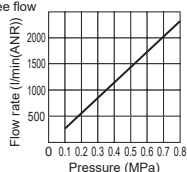
JSC 1/2-N4U
12-04

JSS 1/2-N4U
12-04

Control flow



Free flow



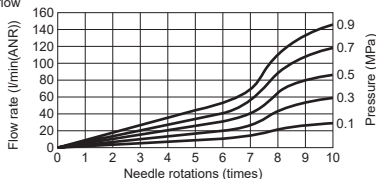
Cylinder tube I.D.

Max. $\phi 100$ mm

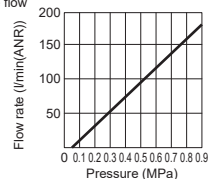
Small Union Straight Type

JSMU 5/32
JSMU 4

Control flow



Free flow

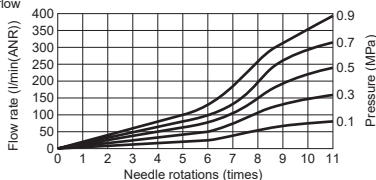


Cylinder tube I.D.

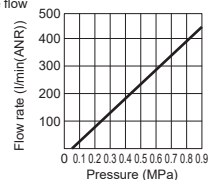
Max. $\phi 20$ mm

JSMU 1/4
JSMU 6

Control flow



Free flow



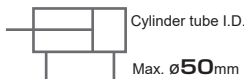
Cylinder tube I.D.

Max. $\phi 32$ mm

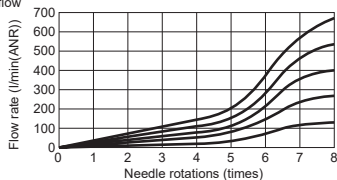


Small Union Straight Type

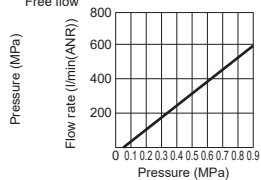
JSMU 5/16
JSMU 8



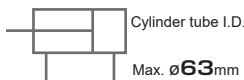
Control flow



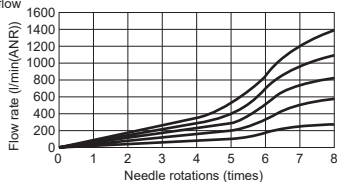
Free flow



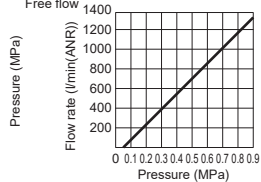
JSMU 3/8
JSMU 10



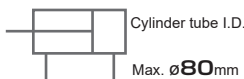
Control flow



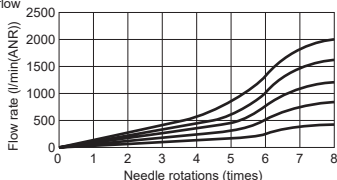
Free flow



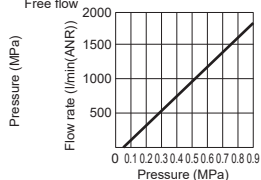
JSMU 1/2
JSMU 12



Control flow

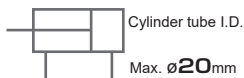


Free flow

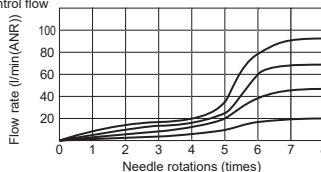


Universal type

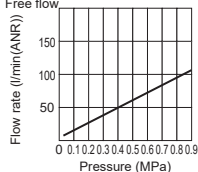
JSM 4-M5



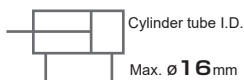
Control flow



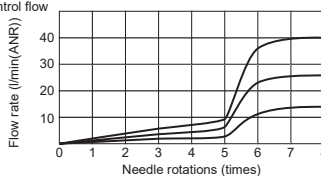
Free flow



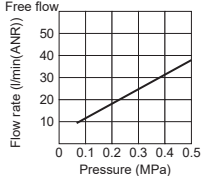
JSM 4-M5K



Control flow



Free flow



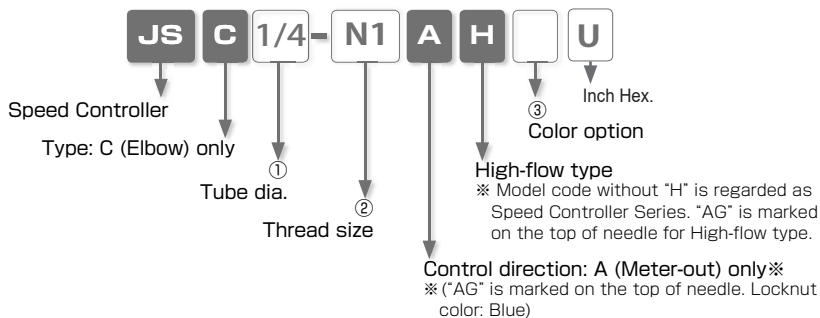


Flow Control Valve for High Speed Cylinder **High Flow**

- *Speed Control Valve for Actuator.*
 - *Larger Flow Capacity*
 - *Suitable for High Speed Cylinder.*
 - *Optional Selection of Body Color (light-gray).*
-

High Flow

Model Designation (Example)



① Tube dia.

Tube dia.	Inch size			
Code	1/4	3/8		
Size (inch)	1/4	3/8		

Tube dia.	mm size			
Code	6	8	10	12
Size (mm)	ø6	ø8	ø10	ø12

② Thread size

Thread size	NPT thread		
Code	N1	N2	N3
Size	1/8NPT	1/4NPT	3/8NPT

Thread size	Taper pipe thread			
Code	01	02	03	04
Size	R1/8	R1/4	R3/8	R1/2

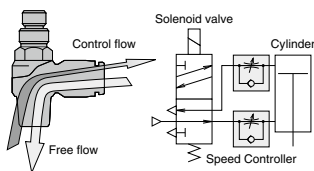
③ Color option

No code : Standard

W : Light-gray

※ Meter-out

■ Air from thread side is controlled. Air from tube side is not controlled and flows out from thread side.



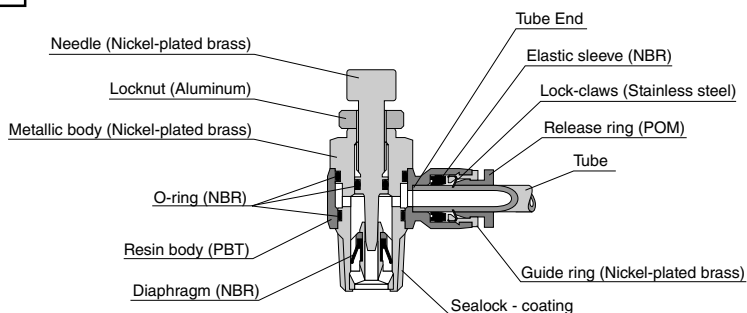
Specifications

Fluid medium	Air
Operating pressure range	14.5 ~ 102psi (0.1 ~ 0.7Mpa)
Check valve cracking pressure	7.25psi (0.05MPa)
Operating temp. range	32 ~ 140°F (5 ~ 60°C) (no freezing)

Construction (Elbow: JSC)

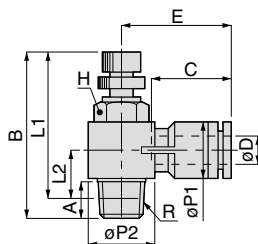


Symbol



JSC-H Elbow

RoHS compliant



Unit : mm

Model code	Tube O.D. øD	R	A	B		L1		L2	øP1	øP2	Tube end C	E	Hex. H	Weight (g)	CAD file name
				max.	min.	max.	min.								
JSC1/4-N1AHU	1/4	1/8NPT	8.5	42.5	37.5	38.5	33.5	12.5	12.5	15.4	17	24.2	13	24	JSC1_4-N1AHU
JSC1/4-N2AHU		1/4NPT	11.6	50.8	44.8	44.7	38.7	14.1		19.6		26.8	17	43	JSC1_4-N2AHU
JSC3/8-N2AHU	3/8	1/4NPT	11.6	50.8	44.8	44.7	38.7	15.6	18	19.6	20.2	30.5	17	48	JSC3_8-N2AHU
JSC3/8-N3AHU		3/8NPT	12.6	54.3	48.7	47.9	42.3	16.3		24.4		32.5	21	75	JSC3_8-N3AHU
JSC6-01AH□	6	R1/8	8.5	42.5	37.5	38.5	33.5	12.5	12.5	15.4	17	24.2	13	24	JSC6-01_H
JSC6-02AH□		R1/4	11.6	50.8	44.8	44.7	38.7	14.1		19.6		26.8	17	43	JSC6-02_H
JSC8-01AH□	8	R1/8	8.5	42.5	37.5	38.5	33.5	12.8	14.5	15.4	18.1	26.2	13	26	JSC8-01_H
JSC8-02AH□		R1/4	11.6	50.8	44.8	44.7	38.7	14.1		19.6		28.2	17	45	JSC8-02_H
JSC8-03AH□	10	R3/8	12.6	54.3	48.7	47.9	42.3	16.3	18	24.4	20.2	30.2	21	72	JSC8-03_H
JSC10-02AH□		R1/4	11.6	50.8	44.8	44.7	38.7	15.6		19.6		30.5	17	48	JSC10-02_H
JSC10-03AH□	12	R3/8	12.6	54.3	48.7	47.9	42.3	17.8	21	24.4	23.4	35.2	21	78	JSC10-03_H
JSC12-03AH□		R1/2	13.6	60.8	54.7	52.6	46.5	17.1		30		38.2	24	118	JSC12-04_H

※ 1. "L1" and "L2" are reference values for height dimensions after tightening taper thread.

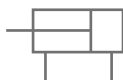
※ 2. □ in Model code / Replaced with "W" for Light-gray color.



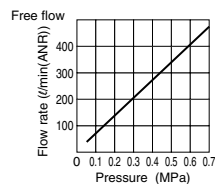
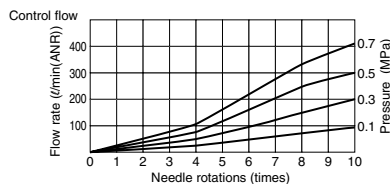
Flow characteristic

Elbow High Flow type

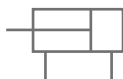
JSC 1/4-N1AHU
6-01AH
8-01AH



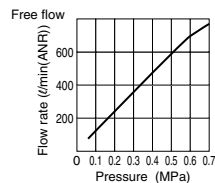
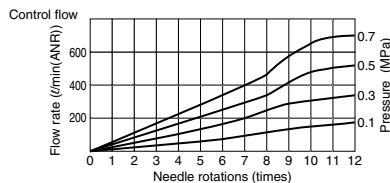
Cylinder tube I.D.

Max. \varnothing 40mm

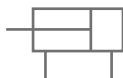
JSC 1/4-N2AHU
6-02AH



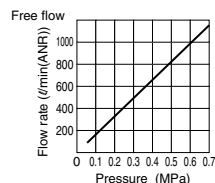
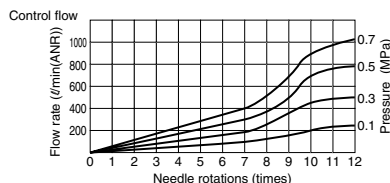
Cylinder tube I.D.

Max. \varnothing 50mm

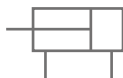
JSC 3/8-N2AHU
8-02AH
10-02AH



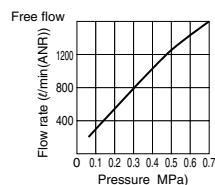
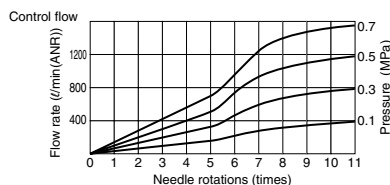
Cylinder tube I.D.

Max. \varnothing 63mm

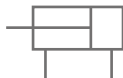
JSC 8-03AH



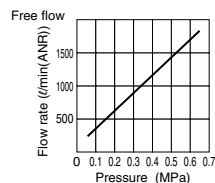
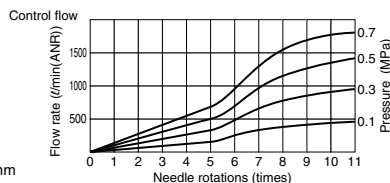
Cylinder tube I.D.

Max. \varnothing 80mm

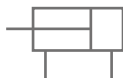
JSC 3/8-N3AHU
10-03AH
12-03AH



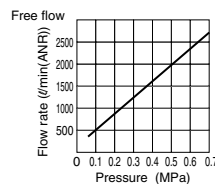
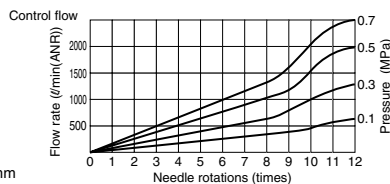
Cylinder tube I.D.

Max. \varnothing 100mm

JSC 12-04AH



Cylinder tube I.D.

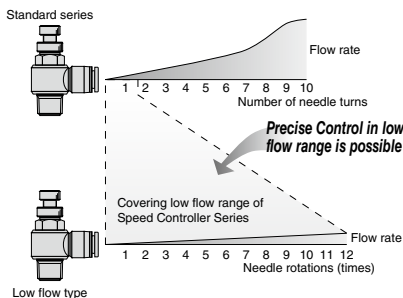
Max. \varnothing 100mm



Flow Control Valve for Low Speed Cylinder

Low Flow

- *Suitable for Low Speed Cylinder.*
- *Precise Control for Low Speed Cylinder.*

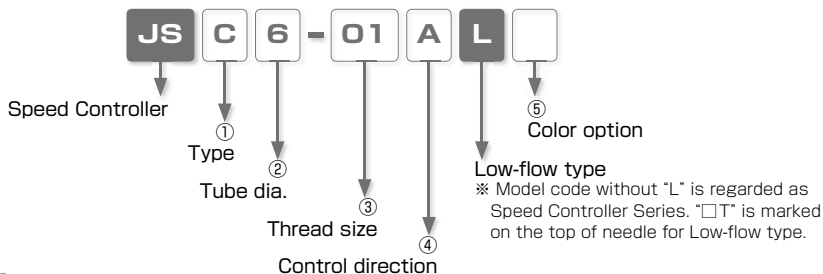


- *Same Free Flow as Speed Controller Series. High Speed Returning Stroke of Cylinder.*
- *Newly Added Small Size Elbow and Union Straight of $\varnothing 1.8$ and $\varnothing 3$ mm.*
- *Optional Selection of Body Color (light-gray).*



Low Flow

■ Model Designation (Example)



① Type

Code	Type	Code	Type	Code	Type
C	Elbow	S	Free	U	Union Straight

② Tube dia.

Tube dia.	Size					
Code	180	3	4	6	8	10
mm size	ø1.8	ø3	ø4	ø6	ø8	ø10

※ Only ø18mm and ø3mm are available for Union Straight type only.

③ Thread size(※ No code for Union Straight)

Thread size	Metric thread(mm)		Taper pipe thread	
Code	M3	M5	01	02
Size	M3 × 0.5	M5 × 0.8	R1/8	R1/4

※ M3 thread is not available for Free type.

④ Control direction (※ No code for Union Straight)

Code	A	B
Control direction	Meter-out	Meter-in
	<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	*"AT" is marked on the top of needle. Locknut color: Silver	*"BT" is marked on the top of needle. Locknut color: Black

⑤ Color option

No code : Standard

W : Light-gray

■ Specifications

Fluid medium	Air
Operating pressure range	0.1 ~ 0.9MPa
Check valve cracking pressure	0.05MPa
Operating temp. range	0~60℃ (No freezing)

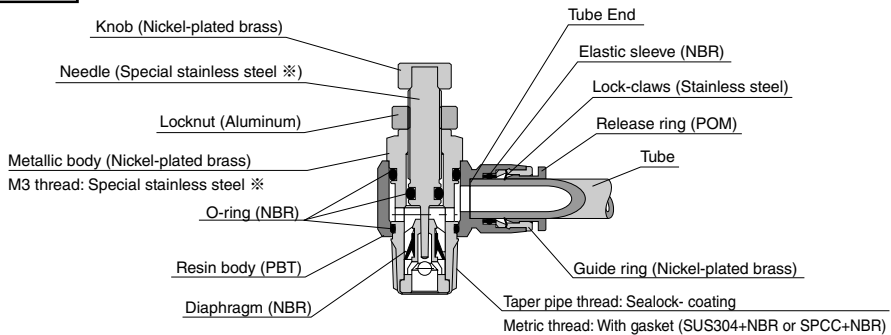
■ Control Flow Rate

Thread size (code)	M3 × 0.5 (M3)		M5 × 0.8 (M5)			R1/8 (01)	R1/4 (02)
Tube dia. (mm)	ø1.8, ø3	ø4	ø1.8	ø3	ø4, ø6	ø4, ø6, ø8, ø10	ø6, ø8, ø10
Flow rate (l/min(ANR))	20	35	20	35	6.5	13	41
Effective area (mm ²)	0.3	0.5	0.3	0.5	0.1	0.2	0.6
Needle rotations (times)	10	10	10	10	10	10	12
Primary pressure (MPa)	0.5	0.5	0.5	0.5	0.5	0.5	0.5

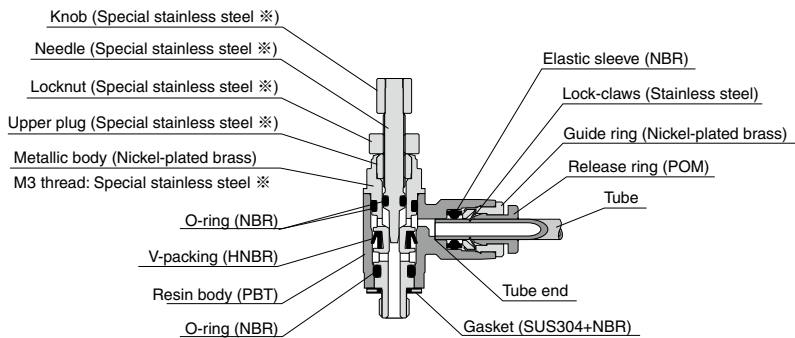
■ Construction (Elbow: JSC)



Symbol



■ Construction (Small sized Elbow: JSC)



※ Equivalent Corrosion Resistance to SUS303

■ Standard Size List

Connection: Thread \Leftrightarrow Tube

Type	Thread size	Tube O.D.					
		1.8	3	4	6	8	10
JSC-1 Elbow	M3 × 0.5						
	M5 × 0.8	●	●	●	●		
	R1/8			●	●	●	
	R1/4				●	●	●

Type	Thread size	Tube O.D.					
		1.8	3	4	6	8	10
JSS-L Free	M3 × 0.5	●	●	●	●	●	●
	M5 × 0.8	●	●	●	●	●	●
	R1/8			●		●	
	R1/4				●	●	●

Connection: Tube \Leftrightarrow Tube (Equal dia.)

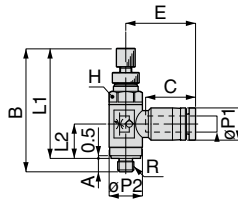
Type	Tube O.D.	
	1.8	3
JSU-L Union Straight	●	●



Low Flow

JSC-L Small Sized Elbow

RoHS compliant



Unit : mm

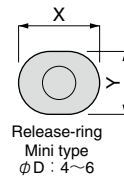
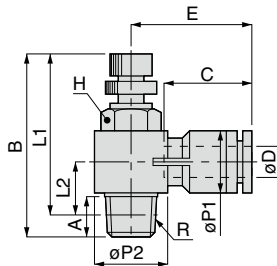
Model code	Tube O.D. øD	R	A	B		L1		L2	øP1	øP2	Tube end C	E	Hex. H	X	Y	Weight (g)	CAD file name
				max.	min.	max.	min.										
JSC180-M3④L⑤	1.8	M3×0.5	2.5	25.7	23	23.2	20.5	6.4	6	6.2	8.4	12.5	5.5	—	—	2.7	JSC180-M3_L
JSC180-M5④L⑤		M5×0.8	3	27.2	24.5	24.2	21.5			8.8		13.5	8			5.1	JSC180-M5_L
JSC3-M3④L⑤	3	M3×0.5	2.5	25.7	23	23.2	20.5	6.4	6	6.2	9.3	13	5.5	7	6	2.7	JSC3-M3_L
JSC3-M5④L⑤		M5×0.8	3	27.2	24.5	24.2	21.5			8.8		14	8			5.7	JSC3-M5_L
JSC4-M3④L⑤	4	M3×0.5	2.5	25.7	23	23.2	20.5	6	8	6.2	11	14.7	5.5	9.8	7.8	3.1	JSC4-M3_L

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

※ 2. ⑤ in Model code / Replaced with " W" for Light-gray color

JSC-L Elbow

RoHS compliant



Unit : mm

Model code	Tube O.D. øD	R	A	B		L1		L2	øP1	øP2	Tube end C	E	Hex. H	X (øX)	Y	Weight (g)	CAD file name
				max.	min.	max.	min.										
JSC4-M5④L⑤	4	M5×0.8	2.9	33.4	29.9	30.5	27	6.7	8	9.8	11	15.4	8	9.8	7.8	7.2	JSC4-M5_L
JSC4-01④L⑤		R1/8	8	41	35.9	37	31.9					17.7	10			17	JSC4-01_L
JSC6-M5④L⑤	6	M5×0.8	2.9	33.4	29.9	30.5	27	7.5	10.5	14.4	11.6	17.5	8	11.8	9.8	7.8	JSC6-M5_L
JSC6-01④L⑤		R1/8	8	41	35.9	37	31.9					18.3	10			18	JSC6-01_L
JSC6-02④L⑤	8	R1/4	11.1	48.7	42.6	42.6	36.5	11.9	14.4	18.4	18.1	20.2	14	13.8	—	35	JSC6-02_L
JSC8-01④L⑤		R1/8	8	41	35.9	37	31.9					26.9	10			21	JSC8-01_L
JSC8-02④L⑤		R1/4	11.1	48.7	42.6	42.6	36.5					28.4	14			38	JSC8-02_L
JSC10-02④L⑤	10	R1/4	11.1	48.7	42.6	42.6	36.5	14.8	17.6	18.4	20.2	30.9	14	16.8	—	41	JSC10-02_L

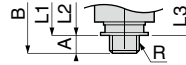
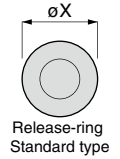
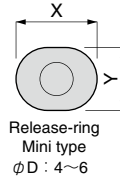
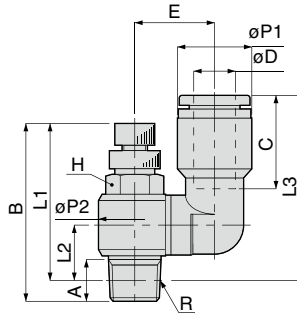
※ 1. "L1" and "L2" are reference values for height dimensions after tightening taper thread.

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

※ 3. ⑤ in Model code / Replaced with " W" for Light-gray color

JSS-L Free

RoHS compliant



Metric thread type

Unit : mm

Model code	Tube O.D. φD	R	A	B		L1		L2	L3	φP1	φP2	Tube end C	E	Hex. H	X (φX)	Y	Weight (g)	CAD file name
				max.	min.	max.	min.											
JSS4-M5 ④L ⑤	4	M5×0.8	2.9	33.4	29.9	30.5	27	6.7	22.8	8	9.8	11	10	8	9.8	7.8	7.6	JSS4-M5_L
JSS4-01 ④L ⑤		R1/8	8	41	35.9	37	31.9	10.7	26.8		14.4		12.2	10			17	JSS4-01_L
JSS6-M5 ④L ⑤	6	M5×0.8	2.9	33.4	29.9	30.5	27	6.7	24.2	10.5	9.8		10.5	8	11.8	9.8	8.4	JSS6-M5_L
JSS6-01 ④L ⑤		R1/8	8	41	35.9	37	31.9	10.7	28.2		14.4	11.6	12.7	10			18	JSS6-01_L
JSS6-02 ④L ⑤	8	R1/4	11.1	48.7	42.6	42.6	36.5	11.9	29.4	14.5	18.4		14.7	14	13.8	—	36	JSS6-02_L
JSS8-01 ④L ⑤		R1/8	8	41	35.9	37	31.9	10.7	36.4		14.4	18.1	15.5	10			22	JSS8-01_L
JSS8-02 ④L ⑤		R1/4	11.1	48.7	42.6	42.6	36.5	11.9	37.6		18.4		17.5	14			39	JSS8-02_L
JSS10-02 ④L ⑤		R1/4	11.1	48.7	42.6	42.6	36.5	11.9	40.9		18.4	20.2	18	14			42	JSS10-02_L

※ 1. "L1", "L2" and "L3" are reference values for height dimensions after tightening taper thread.

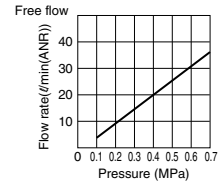
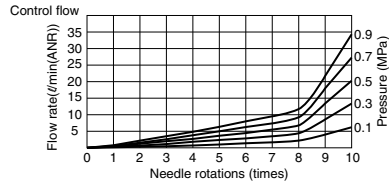
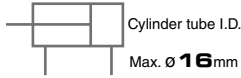
※ 2. ④ in Model code / Replaced with " A " for Meter-out, " B " for Meter-in

※ 3. ⑤ in Model code / Replaced with " W " for Light-gray color

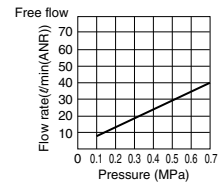
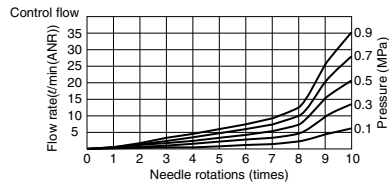
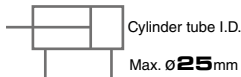
Flow characteristic

Small Sized Elbow

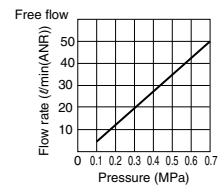
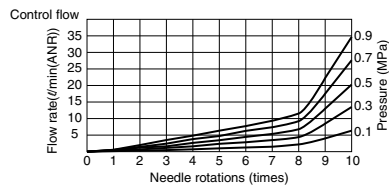
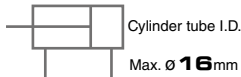
JSC180-M3 L



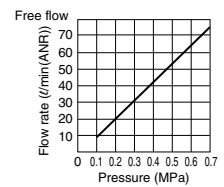
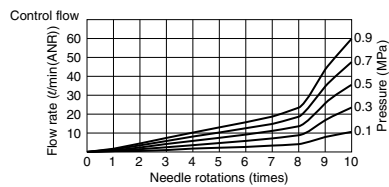
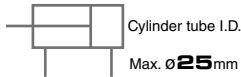
JSC180-M5 L



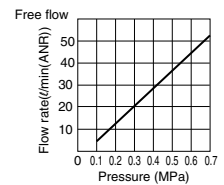
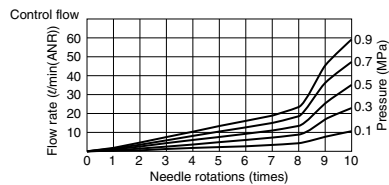
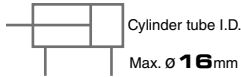
JSC3-M3 L



JSC3-M5 L



JSC4-M3 L





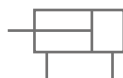
Controller Series

Speed Controller Low Flow

Elbow / Free

JSC 4-M5 L
6-M5 L

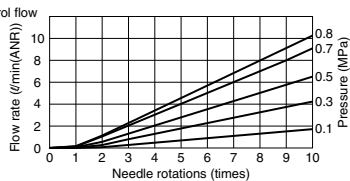
JSS 4-M5 L
6-M5 L



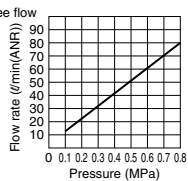
Cylinder tube I.D.

Max. Ø20mm

Control flow

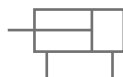


Free flow



JSC 4-01 L
6-01 L
8-01 L

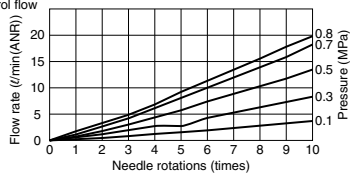
JSS 4-01 L
6-01 L
8-01 L



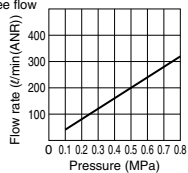
Cylinder tube I.D.

Max. Ø25mm

Control flow

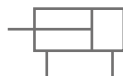


Free flow



JSC 6-02 L
8-02 L
10-02 L

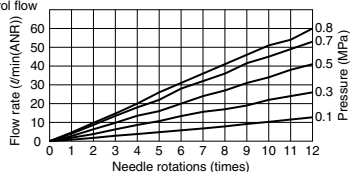
JSS 6-02 L
8-02 L
10-02 L



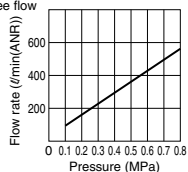
Cylinder tube I.D.

Max. Ø50mm

Control flow



Free flow



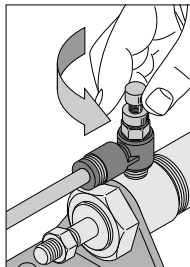
Union Straight

How to adjust the speed

1. Speed adjustment of actuators

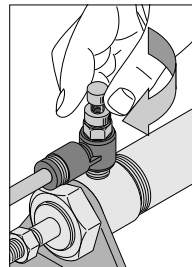
① Increasing speed

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.

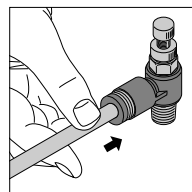


How to insert and disconnect

1. How to insert and disconnect tubes

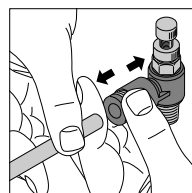
① Tube insertion

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



② Tube disconnection

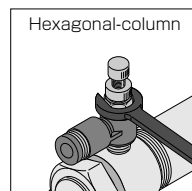
The tube is disconnected by pushing release-ring to release Lock-claws. Make sure to stop air supply before the tube disconnection.



2. How to tighten thread

① Tightening thread

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





SAFETY Instructions

This safety instructions aim to prevent personal injury and damage to properties by requiring proper use of PISCO products.

Be certain to follow ISO 4414 and JIS B 8370

ISO 4414 : Pneumatic fluid power...Recommendations for the application of equipment to transmission and control systems.

JIS B 8370 : General rules and safety requirements for systems and their components.

This safety instructions is classified into "Danger", "Warning" and "Caution" depending on the degree of danger or damages caused by improper use of PISCO products.



Danger

Hazardous conditions. It can cause death or serious personal injury.



Warning

Hazardous conditions depending on usages. Improper use of PISCO products can cause death or serious personal injury.



Caution

Hazardous conditions depending on usages. Improper use of PISCO products can cause personal injury or damages to properties.



Warning

1. Selection of pneumatic products

- ① A user who is a pneumatic system designer or has sufficient experience and technical expertise should select PISCO products.
- ② Due to wide variety of operating conditions and applications for PISCO products, carry out the analysis and evaluation on PISCO products. The pneumatic system designer is solely responsible for assuring that the user's requirements are met and that the application presents no health or safety hazards. All designers are required to fully understand the specifications of PISCO products and constitute all systems based on the latest catalog or information, considering any malfunctions.

2. Handle the pneumatic equipment with enough knowledge and experience

- ① Improper use of compressed air is dangerous. Assembly, operation and maintenance of machines using pneumatic equipment should be conducted by a person with enough knowledge and experience.

3. Do not operate machine / equipment or remove pneumatic equipment until safety is confirmed.

- ① Make sure that preventive measures against falling work-pieces or sudden movements of machine are completed before inspection or maintenance of these machine.
- ② Make sure the above preventive measures are completed. A compressed air supply and the power supply to the machine must be off, and also the compressed air in the systems must be exhausted.
- ③ Restart the machines with care after ensuring to take all preventive measures against sudden movements.

Disclaimer

1. PISCO does not take any responsibility for any incidental or indirect loss, such as production line stop, interruption of business, loss of benefits, personal injury, etc., caused by any failure on use or application of PISCO products.
2. PISCO does not take any responsibility for any loss caused by natural disasters, fires not related to PISCO products, acts by third parties, and intentional or accidental damages of PISCO products due to incorrect usage.
3. PISCO does not take any responsibility for any loss caused by improper usage of PISCO products such as exceeding the specification limit or not following the usage the published instructions and catalog allow.
4. PISCO does not take any responsibility for any loss caused by remodeling of PISCO products, or by combinational use with non-PISCO products and other software systems.
5. The damages caused by the defect of Pisco products shall be covered but limited to the full amount of the PISCO products paid by the customer.



SAFETY INSTRUCTION MANUAL

PISCO products are designed and manufactured for use in general industrial machines. Be sure to read and follow the instructions below.

Danger

1. Do not use PISCO products for the following applications.
 - ① Equipment used for maintaining / handling human life and body.
 - ② Equipment used for moving / transporting human.
 - ③ Equipment specifically used for safety purposes.

Warning

1. Do not use PISCO products under the following conditions.
 - ① Beyond the specifications or conditions stated in the catalog, or the instructions.
 - ② Under the direct sunlight or outdoors.
 - ③ Excessive vibrations and impacts.
 - ④ Exposure / adhere to corrosive gas, inflammable gas, chemicals, seawater, water and vapor. *
* Some products can be used under the condition above(④), refer to the details of specification and condition of each product.
2. Do not disassemble or modify PISCO products, which affect the performance, function, and basic structure of the product.
3. Turn off the power supply, stop the air supply to PISCO products, and make sure there is no residual air pressure in the pipes before maintenance and inspection.
4. Do not touch the release-ring of push-in fitting when there is a working pressure. The lock may be released by the physical contact, and tube may fly out or slip out.
5. Frequent switchover of compressed air may generate heat, and there is a risk of causing burn injury.
6. Avoid any load on PISCO products, such as a tensile strength, twisting and bending. Otherwise, there is a risk of causing damage to the products.
7. As for applications where threads or tubes swing / rotate, use Rotary Joints, High Rotary Joints or Multi-Circuit Rotary Block only. The other PISCO products can be damaged in these applications.
8. Use only Die Temperature Control Fitting Series, Tube Fitting Stainless SUS316 Series, Tube Fitting Stainless SUS316 Compression Fitting Series or Tube Fitting Brass Series under the condition of over 60°C (140° F) water or thermal oil. Other PISCO products can be damaged by heat and hydrolysis under the condition above.
9. As for the condition required to dissipate static electricity or provide an antistatic performance, use EG series fitting and antistatic products only, and do not use other PISCO products. There is a risk that static electricity can cause system defects or failures.
10. Use only Fittings with a characteristic of spatter-proof such as Anti-spatter or Brass series in a place where flame and weld spatter is produced. There is a risk of causing fire by sparks.
11. Turn off the power supply to PISCO products, and make sure there is no residual air pressure in the pipes and equipment before maintenance. Follow the instructions below in order to ensure safety.
 - ① Make sure the safety of all systems related to PISCO products before maintenance.
 - ② Restart of operation after maintenance shall be proceeded with care after ensuring safety of the system by preventive measures against unexpected movements of machines and devices where pneumatic equipment is used.
 - ③ Keep enough space for maintenance when designing a circuit.
12. Take safety measures such as providing a protection cover if there is a risk of causing damages or fires on machine / facilities by a fluid leakage.

⚠ Caution

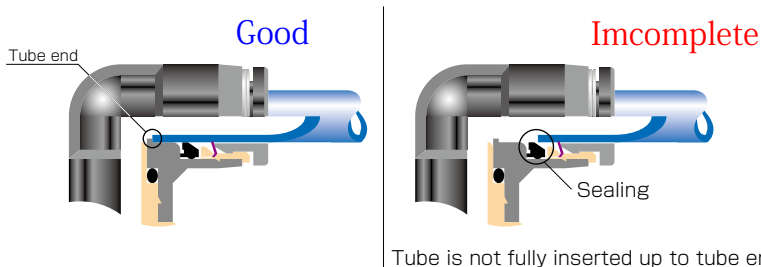
1. Remove dusts or drain before piping. They may get into the peripheral machine / facilities and cause malfunction.
2. When inserting an ultra-soft tube into push-in fitting, make sure to place an Insert Ring into the tube edge. There is a risk of causing the escape of tube and a fluid leakage without using an Insert Ring.
3. The product incorporating NBR as seal rubber material has a risk of malfunction caused by ozone crack. Ozone exists in high concentrations in static elimination air, clean-room, and near the high-voltage motors, etc. As a countermeasure, material change from NBR to HNBR or FKM is necessary. Consult with PISCO for more information.
4. Special option "Oil-free" products may cause a very small amount of a fluid leakage. When a fluid medium is liquid or the products are required to be used in harsh environments, contact us for further information.
5. In case of using non-PISCO brand tubes, make sure the tolerance of the outer tube diameter is within the limits of Table 1.

● Table 1. Tube O.D. Tolerance

mm size	Nylon tube	Polyurethane tube	inch size	Nylon tube	Polyurethane tube
ø1.8mm	—	± 0.05mm	ø1/8	± 0.1mm	± 0.15mm
ø3mm	—	± 0.15mm	ø5/32	± 0.1mm	± 0.15mm
ø4mm	± 0.1mm	± 0.15mm	ø3/16	± 0.1mm	± 0.15mm
ø6mm	± 0.1mm	± 0.15mm	ø1/4	± 0.1mm	± 0.15mm
ø8mm	± 0.1mm	± 0.15mm	ø5/16	± 0.1mm	± 0.15mm
ø10mm	± 0.1mm	± 0.15mm	ø3/8	± 0.1mm	± 0.15mm
ø12mm	± 0.1mm	± 0.15mm	ø1/2	± 0.1mm	± 0.15mm
ø16mm	± 0.1mm	± 0.15mm	ø5/8	± 0.1mm	± 0.15mm

6. Instructions for Tube Insertion

- ① Make sure that the cut end surface of the tube is at right angle without a scratch on the surface and deformations.
- ② When inserting a tube, the tube needs to be inserted fully into the push-in fitting until the tubing edge touches the tube end of the fitting as shown in the figure below. Otherwise, there is a risk of leakage.



Tube is not fully inserted up to tube end.

- ③ After inserting the tube, make sure it is inserted properly and not to be disconnected by pulling it moderately.
- ※. When inserting tubes, Lock-claws may be hardly visible in the hole, observed from the front face of the release-ring. But it does not mean the tube will surely escape. Major causes of the tube escape are the followings;
- ① Shear drop of the lock-claws edge
 - ② The problem of tube diameter (usually small)
- Therefore, follow the above instructions from ① to ③, even lock-claws is hardly visible.

7. Instructions for Tube Disconnection

- ① Make sure there is no air pressure inside of the tube, before disconnecting it.
- ② Push the release-ring of the push-in fitting evenly and deeply enough to pull out the tube toward oneself. By insufficient pushing of the release-ring, the tube may not be pulled out or damaged by scratch, and tube shavings may remain inside of the fitting, which may cause the leakage later.

8. Instructions for Installing a fitting

- ① When installing a fitting, use proper tools to tighten a hexagonal-column or an inner hexagonal socket. When inserting a hex key into the inner hexagonal socket of the fitting, be careful so that the tool does not touch lock-claws. The deformation of lock-claws may result in a poor performance of systems or an escape of the tube.
- ② Refer to Table 2 which shows the recommended tightening torque. Do not exceed these limits to tighten a thread. Excessive tightening may break the thread part or deform the gasket and cause a fluid leakage. Tightening thread with tightening torque lower than these limits may cause a loosened thread or a fluid leakage.
- ③ Adjust the tube direction while tightening thread within these limits, since some PISCO products are not rotatable after the installation.

●Table 2: Recommended tightening torque / Sealock color / Gasket materials

Thread type	Thread size	Tightening torque	Sealock color	Gasket materials
Metric thread	M3 × 0.5	0.7N·m	—	SUS304 NBR
	M5 × 0.8	1.0 ~ 1.5N·m		
	M6 × 1	2 ~ 2.7N·m		
	M3 × 0.5	0.5 ~ 0.6N·m		POM
	M5 × 0.8	1 ~ 1.5N·m		
	M6 × 0.75	0.8 ~ 1N·m		
Taper pipe thread	M8 × 0.75	1 ~ 2N·m	White	—
	R1/8	7 ~ 9N·m		
	R1/4	12 ~ 14N·m		
	R3/8	22 ~ 24N·m		
Unified thread	R1/2	28 ~ 30N·m	—	SUS304、NBR
	No.10-32UNF	1.0 ~ 1.5N·m		
National pipe thread taper	1/16-27NPT	7 ~ 9N·m	White	—
	1/8-27NPT	7 ~ 9N·m		
	1/4-18NPT	12 ~ 14N·m		
	3/8-18NPT	22 ~ 24N·m		
	1/2-14NPT	28 ~ 30N·m		

※ These values may differ for some products. Refer to each specification as well.

9. Instructions for removing a fitting

- ① When removing a fitting, use proper tools to loosen a hexagonal-column or an inner hex bolt.
- ② Remove the sealant stuck on the mating equipment. The remained sealant may get into the peripheral equipment and cause malfunctions.

10. Arrange piping avoiding any load on fittings and tubes such as twist, tensile, moment load, shaking and physical impact. These may cause damages to fittings, tube deformations, bursting and the escape of tubes.

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.

■ Reference chart of Apperance Color Combination (For Controller)

Series	Resin color or Option	Tube dia.		Seal rubber material	Release-ring color
				-F FKM	-R レッド
Speed Controller Series Throttle (Needle) Valve Standard Series	—	mm size			
		inch size			
	Light-gray	mm size			
		inch size			
	Clean-room pkg	mm size			
		inch size			
	Light-gray + Clean-room pkg	mm size			
		inch size	