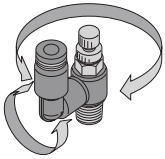
Push-In Type Flow Control Valve

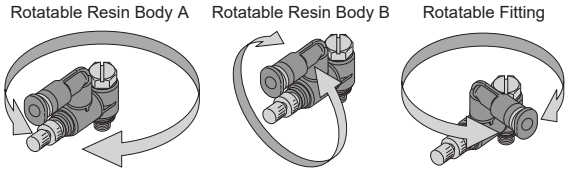
Flow Controller Series

- *Flow Control Valve - Meter-out (Exhaust) and Meter-in (Supply) controls for cylinder/actuator*
- *See Needle Valve for Bilateral flow control*

- *Rotatable Resin Body (JSS Type)*



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



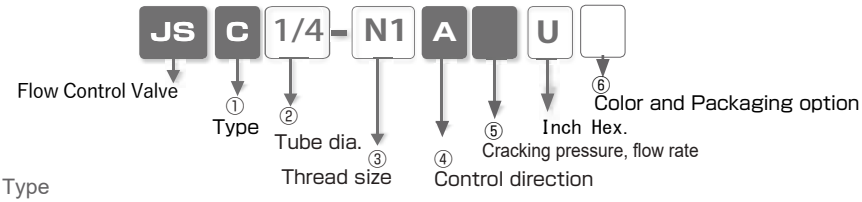
- *In-Line Straight type has been renewed to smaller In-line type.*

Achieved downsizing of In-line 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 / Banjo	S	Universal	MU	In-line Straight	M	Banjo Universal

② . Tubing outside dia.

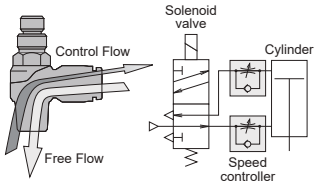
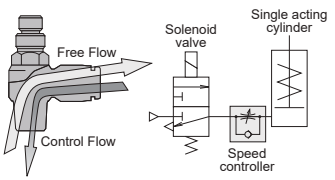
Tube dia.	Inch size							Metric (mm)				
Code	1/8	5/32	3/16	1/4	5/16	3/8	1/2	4	6	8	10	12
O.D.(mm)	ø3.2	ø3.97	ø4.76	ø6.35	ø7.94	ø9.53	ø12.7	ø4	ø6	ø8	ø10	ø12
O.D.(Inch)	ø1/8"	ø5/32"	ø3/16"	ø1/4"	ø5/16"	ø3/8"	ø1/2"					

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

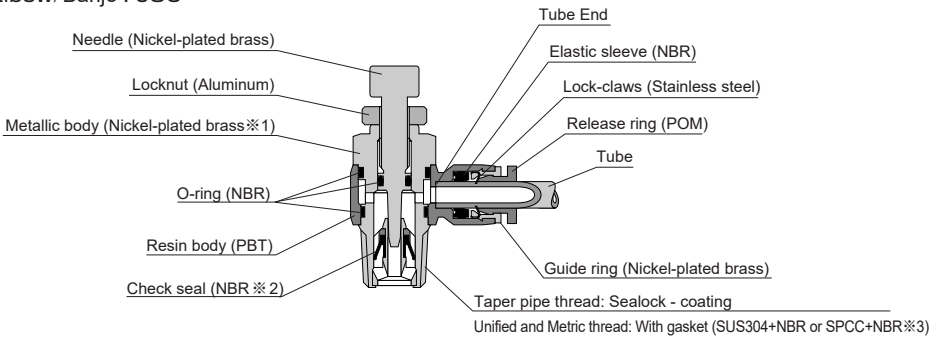
Specifications

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

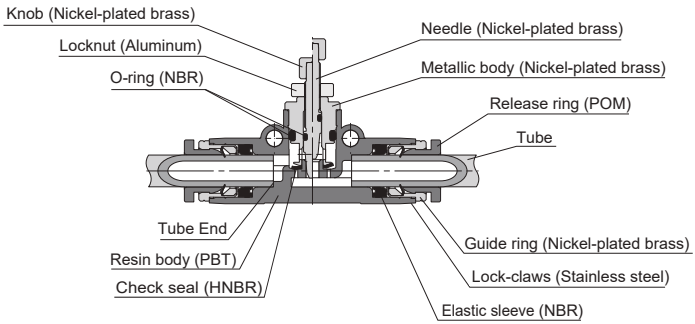
Symbol

● 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		●								

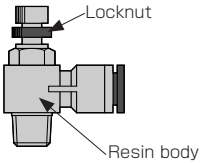
Type	Thread size	Tube O.D.								
		3	4	6	8	10	12	1/8	1/4	5/16	3/8
JSS Univeral	M3×0.5	●	●					●			
	M5×0.8	●	●	●				●	●		
	R1/8		●	●	●				●	●	
	R1/4			●	●	●			●	●	●
	R3/8				●	●	●			●	●
	R1/2						●				

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
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.

❖ NPT, Unified thread models

JSC Elbow/Banjo

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

JSS Universal

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

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

Low Pressure Operating Type

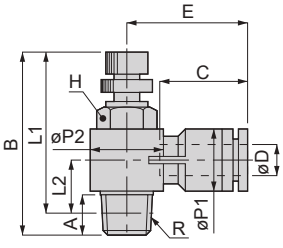
MODEL	D	R
JSC1/8-U10□KU□	1/8″	10-32UNF
JSC5/32-U10□KU□	5/32″	10-32UNF
JSC5/32-N1□KU□		NPT1/8
JSC1/4-U10□KU□	1/4″	10-32UNF
JSC1/4-N1□KU□		NPT1/8
JSC1/4-N2□KU□		NPT1/4

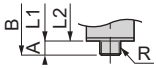
■ Connection: Thread ⇔ Tube

JSC Elbow/Banjo

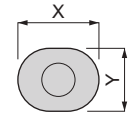
NPT and UNF thread

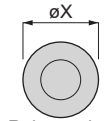
RoHS compliant





Unified thread





Unit：mm

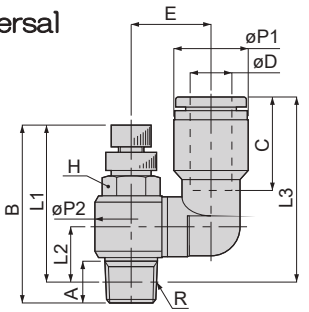
Model code	Tube O.D øD	R	A	B		L1		L2	øP1	øP2	Tube end C	E	Hex. (inch)	X (øX)	Y	Weight (g)	CAD file name
				max.	min.	max.	min.										
JSC1/8-U10④⑤⑥	1/8"	10-32UNF	2.9	29.7	27	26.8	24.1	6.7	8	9.8	11	15.4	5/16"	9.8	7.8	7.3	JSC1_8-U10_U
JSC5/32-U10④⑤⑥	5/32"	10-32UNF	2.9	29.7	27	26.8	24.1	6.7	8	9.8	11	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-N1U
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-N2U
JSC5/16-N3④⑥		3/8NPT	13.2	54.4	46.9	48.3	40.8	15.6		22		28.9	3/4"			65	JSC5_16-N3U
JSC5/16-N4④⑥		1/2NPT	16	59.7	52.4	51.5	44.2	18		28		31	1"			115	JSC5_16-N4U
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-N2U
JSC3/8-N3④⑥		3/8NPT	13.2	54.4	46.9	48.3	40.8	16.9		22		31.2	3/4"			69	JSC3_8-N3U
JSC3/8-N4④⑥		1/2NPT	16	59.7	52.4	51.5	44.2	18		28		33.6	1"			118	JSC3_8-N4U
JSC1/2-N3④⑥	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-N3U
JSC1/2-N4④⑥		1/2NPT	16	59.7	52.4	51.5	44.2	19.7		28		36.7	1"			121	JSC1_2-N4U

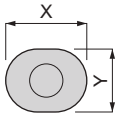
※1. ④ in model code : Replaced with "A" for Meter-out (Exhaust), "B" for Meter-in (Supply) control.
※2. ⑤ in Model code / Replaced with "K" for Low cracking pressure type.
(No ⑤ in Model code indicates Low cracking pressure type is not available.)
※3. ⑥in model code : Replaced with "W" for Light-Gray, "-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

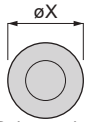
JSS Universal

RoHS compliant

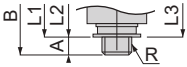




Release ring
Mini
ϕD:1 /8, 5/32, 3/16



Release ring
Standard



Unified thread

Unit：mm

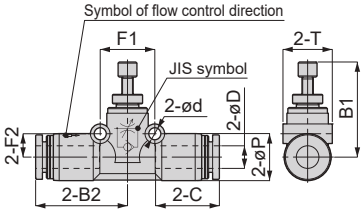
Model code	Tube O.D. øD	R	A	B		L1		L2	L3	øP1	øP2	Tube end C	E	Hex.	X (øX)	Y	Weigh (g)	CAD file name
				max.	min.	max.	min.											
JSS1/8-U10④⑤⑥	1/8"	10-32UNF	2.9	29.7	27	26.8	24.1	6.7	22.8	8	9.8	11	10	5/16"	7.8	9.8	7.7	JSS1_8-U10_U
JSS5/32-U10④⑤⑥	5/32"	10-32UNF	2.9	29.7	27	26.8	24.1	6.7	22.8	8	9.8	11	10	5/16"	7.8	9.8	8	JSS5_32-U10_U
JSS5/32-N1④⑤⑥		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-U10④⑤⑥	3/16"	10-32UNF	2.9	29.7	27	26.8	24.1	6.7	24.3	10.5	9.8	11.7	10.5	5/16"	9.8	11.8	8.6	JSS3_16-U10_U
JSS3/16-N1④⑤⑥		1/8NPT	8	41.5	34.9	37.3	30.7	10.6	28.2		14.4		12.7	7/16"			19	JSS3_16-N1_U
JSS3/16-N2④⑤⑥		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-U10④⑤⑥	1/4"	10-32UNF	2.9	29.7	27	26.8	24.1	8.2	31.2	12.4	9.8	17	12.7	5/16"	11.8	–	11	JSS1_4-U10_U
JSS1/4-N1④⑤⑥		1/8NPT	8	41.5	34.9	37.3	30.7	10.6	33.5		14.4		15.5	7/16"			21	JSS1_4-N1_U
JSS1/4-N2④⑤⑥		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-N1④⑤⑥	5/16"	1/8NPT	8	41.5	34.9	37.3	30.7	10.6	36.3	14.5	14.4	18.1	15.5	7/16"	13.8	–	23	JSS5_16-N1_U
JSS5/16-N2④⑤⑥		1/4NPT	11.1	48.9	42.2	43.1	36.4	12.1	37.8		18.4		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-N2④⑤⑥	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 (Exhaust), "B" for Meter-in (Supply) contol.
※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.)
※3.⑥in 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 In-Line Straight

RoHS compliant



	Symbol of flow control direction on resin body
Symbol of flow control direction	Free Flow ⇔ Control Flow
JIS symbol	

Unit：mm

Model code	Tube O.D. øD	B1 max.	B1 min.	B2	øP	T	Tube end C	ød	F1	F2	Weight (g)	CAD file name
JSMU5/32⑥	5/32"	21	18.6	21	10	10.5	14.9	3.2	12.7	4.8	8.9	JSMU5_32_
JSMU1/4⑥	1/4"	25.4	21.6	24.4	12.5	13.1	17	3.2	14.8	6.2	14	JSMU1_4_
JSMU5/16⑥	5/16"	28.5	24.9	28	14.8	15.4	18.1	3.2	18.2	7.2	25	JSMU5_16_
JSMU3/8⑥	3/8"	32.6	28.9	31.8	18.2	19.7	20.2	4.2	22.2	8.7	46	JSMU3_8_
JSMU1/2⑥	1/2"	35.2	31.5	37.2	21.2	22.7	23.7	4.2	25.7	10.2	65	JSMU1_2_
JSMU4⑥	4	21	18.6	21	10	10.5	14.9	3.2	12.7	4.8	8.9	JSMU4_
JSMU6⑥	6	25.4	21.6	24.4	12.5	13.1	17	3.2	14.8	6.2	14	JSMU6_
JSMU8⑥	8	28.5	24.9	28	14.8	15.4	18.1	3.2	18.2	7.2	25	JSMU8_
JSMU10⑥	10	32.6	28.9	31.8	18.2	19.7	20.2	4.2	22.2	8.7	46	JSMU10_
JSMU12⑥	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

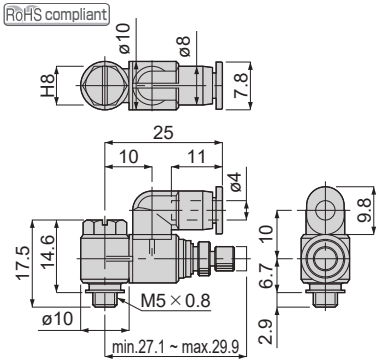
※. ⑥ in model code : Replaced with "W" for Light-Gray, "-C" for Cleanroom package, and "W-C" for Cleanroom & Light-Gray.

※ 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



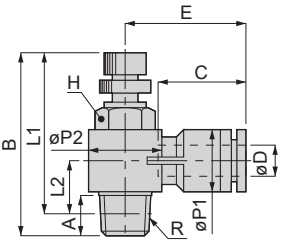
Model code	Weight (g)	CAD file name
JSM4-M5④⑤⑥	9.5(9.6)	JSM4-M5__

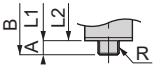
※1.Weight in ( ) is for low cracking pressure type.
※2.④ in Model code / Replaced with "A" for Meter-out, "B" for Meter-in
※3.⑤ in Model code / Replaced with "K" for Low cracking pressure type. (No ⑤ in Model code indicates Low cracking pressure type is not available.)
※4.Weight in ( ) is for low cracking pressure type.

Metric thread

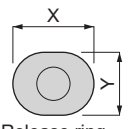
JSC Elbow/Banjo

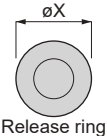
RoHS compliant





Metric thread





Unit：mm

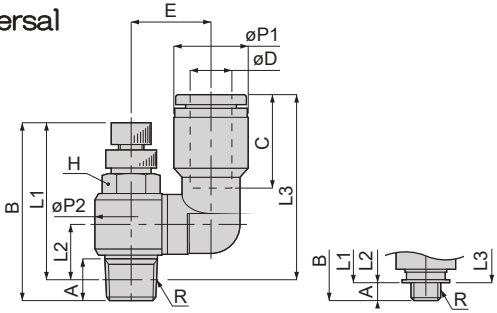
Model code	Tube O.D øD	R	A	B		L1		L2	øP1	øP2	Tube end C	E	Hex.	X (øX)	Y	Weight (g)	CAD file name
				max.	min.	max.	min.										
JSC3-M3④⑤⑥	3	M3×0.5	2.5 [2.2]	29.2	26.5	26.7 [27]	24 [24.3]	6.6 [6.9]	8	9.8	11	15.4	8	9.8	7.8	6.6	JSC3-M3_[C]
JSC3-M5④⑤⑥		M5×0.8	2.9 [3.2]	29.7	27	26.8 [26.5]	24.1 [23.8]	6.7 [6.4]								7.3	JSC3-M5_[C]
JSC4-M3④⑤⑥	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-M5④⑤⑥		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]
JSC4-01④⑤⑥		R1/8	8	41.5	34.9	37.5	30.9	10.7		14.4		17.7	10			17	JSC4-01_
JSC6-M5④⑤⑥	6	M5×0.8	2.9 [3.2]	29.7	27	26.8 [26.5]	24.1 [23.8]	7.5 [7.2]	10.5	9.8	11.6	17.5	8	11.8	9.8	7.9	JSC6-M5_[C]
JSC6-01④⑤⑥		R1/8	8	41.5	34.9	37.5	30.9	10.7		14.4		18.3	10			18	JSC6-01_
JSC6-02④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	11.9		18.4		20.2	14			35	JSC6-02_
JSC6-03④⑥		R3/8	13.2	54.4	46.9	48	40.5	15.4	14.4	22	17	29	19		–	65	JSC6-03_
JSC8-01④⑤⑥	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_
JSC8-02④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	13.2		18.4		28.4	14			38	JSC8-02_
JSC8-03④⑥		R3/8	13.2	54.4	46.9	48	40.5	15.4		22		28.9	19			65	JSC8-03_
JSC8-04④⑥		R1/2	16	59.7	52.4	51.5	44.2	18		28		31	24			101	JSC8-04_
JSC10-02④⑤⑥	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_
JSC10-03④⑥		R3/8	13.2	54.4	46.9	48	40.5	16.7		22		31.2	19			69	JSC10-03_
JSC10-04④⑥		R1/2	16	59.7	52.4	51.5	44.2	18		28		33.6	24			104	JSC10-04_
JSC12-03④⑥	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_
JSC12-04④⑥		R1/2	16	59.7	52.4	51.5	44.2	19.7		28		36.4	24			107	JSC12-04_
JSC1/8-M3④⑤⑥	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-M5④⑤⑥		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-M5④⑤⑥	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	9.8	17	24	8	11.8	–	9.5	JSC1_4-M5_[C]
JSC1/4-01④⑤⑥		R1/8	8	41.5	34.9	37.5	30.9	10.9		14.4		23.5	10			19	JSC1_4-01_
JSC1/4-02④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	12.2		18.4		25.5	14			36	JSC1_4-02_
JSC5/16-01④⑤⑥	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_
JSC5/16-02④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	13.2		18.4		28.4	14			38	JSC5_16-02_
JSC5/16-03④⑥		R3/8	13.2	54.4	46.9	48	40.5	15.4		22		28.9	19			65	JSC5_16-03_
JSC3/8-02④⑤⑥	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_
JSC3/8-03④⑥		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 (Exhaust), "B" for Meter-in (Supply) control.
※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.

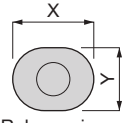
Metric thread

JSS Universal

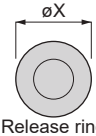
RoHS compliant



Metric thread



Release ring
Mini
ϕD:3~6
1/8



Release ring
Standard

Unit：mm

Model code	Tube O.D. øD	R	A	B		L1		L2	L3	øP1	øP2	Tube end C	E	Hex.	X (øX)	Y	Weigh (g)	CAD file name
				max.	min.	max.	min.											
JSS3-M3④⑤⑥	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-M5④⑤⑥		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-M3④⑤⑥	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-M5④⑤⑥		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]
JSS4-01④⑤⑥		R1/8	8	41.5	34.9	37.5	30.9	10.7	26.8		14.4		12.2	10			18	JSS4-01_
JSS6-M5④⑤⑥	6	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]	10.5	9.8	11.6	10.5	8	9.8	11.8	8.4	JSS6-M5_[C]
JSS6-01④⑤⑥		R1/8	8	41.5	34.9	37.5	30.9	10.7	28.2		14.4		12.7	10			18	JSS6-01_
JSS6-02④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	11.9	29.4		18.4		14.7	14			35	JSS6-02_
JSS8-01④⑤⑥	8	R1/8	8	41.5	34.9	37.5	30.9	10.7	36.4	14.5	14.4	18.1	15.5	10	13.8	–	22	JSS8-01_
JSS8-02④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	11.9	37.6		18.4		17.5	14			39	JSS8-02_
JSS8-03④⑥		R3/8	13.2	54.4	46.9	48	40.5	15.6	43.3		22		20	19			68	JSS8-03_
JSS10-02④⑤⑥	10	R1/4	11.1	48.9	42.2	42.8	36.1	11.9	40.9	17.5	18.4	20.2	18	14	16.8	–	42	JSS10-02_
JSS10-03④⑥		R3/8	13.2	54.4	46.9	48	40.5	15.6	45.6		22		20.5	19			71	JSS10-03_
JSS12-03④⑥	12	R3/8	13.2	54.4	46.9	48	40.5	15.6	49.3	21	22	23.4	21	19	19.8	–	74	JSS12-03_
JSS12-04④⑥		R1/2	16	59.7	52.4	51.5	44.2	18	53.2		28		25	24			110	JSS12-04_
JSS1/8-M3④⑤⑥	1/8"	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	JSS1_8-M3_[C]
JSS1/8-M5④⑤⑥		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	JSS1_8-M5_[C]
JSS1/4-M5④⑤⑥	1/4"	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]	12.4	9.8	17	14.3	8	11.8	–	11	JSS1_4-M5_[C]
JSS1/4-01④⑤⑥		R1/8	8	41.5	34.9	37.5	30.9	10.7	33.7		14.4		15.5	10			20	JSS1_4-01_
JSS1/4-02④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	11.9	34.8		18.4		17.5	14			37	JSS1_4-02_
JSS5/16-01④⑤⑥	5/16"	R1/8	8	41.5	34.9	37.5	30.9	10.7	36.4	14.5	14.4	18.1	15.5	10	13.8	–	22	JSS5_16-01_
JSS5/16-02④⑤⑥		R1/4	11.1	48.9	42.2	42.8	36.1	11.9	37.6		18.4		17.5	14			39	JSS5_16-02_
JSS5/16-03④⑥		R3/8	13.2	54.4	46.9	48	40.5	15.6	43.3		22		20	19			68	JSS5_16-03_
JSS3/8-02④⑤⑥	3/8"	R1/4	11.1	48.9	42.2	42.8	36.1	11.9	40.9	17.5	18.4	20.2	18	14	16.8	–	42	JSS3_8-02_
JSS3/8-03④⑥		R3/8	13.2	54.4	46.9	48	40.5	15.6	45.6		22		20.5	19			70	JSS3_8-03_

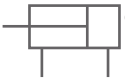
※1.④ in model code : Replaced with "A" for Meter-out (Exhaust), "B" for Meter-in (Supply) control.
※2. ⑤ in Model code / Replaced with "K" for Low cracking pressure type.
(No ⑤ in Model code indicates Low cracking pressure type is not available.)
※3.⑥in model code : Replaced with "W" for Light-Gray, "-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.

Flow characteristic

Elbow/Banjo type / Universal type

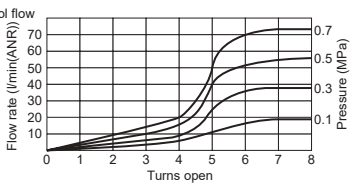
JSC 3-M3K
3-M3
1/8-M3K
1/8-M3

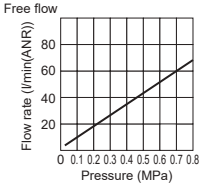
JSS 3-M3K
3-M3
1/8-M3K
1/8-M3



Cylinder tube I.D.

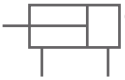
Max. ø**16**mm





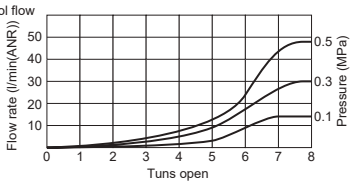
JSC 4-M3K

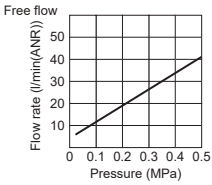
JSS 4-M3K



Cylinder tube I.D.

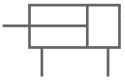
Max. ø**16**mm





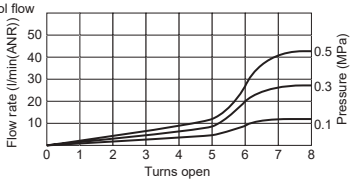
JSC 1/8-U10KU
3-M5K
4-M5K
6-M5K
1/8-M5K

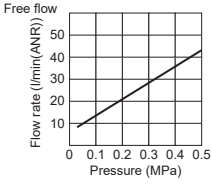
JSS 1/8-U10KU
3-M5K
4-M5K
6-M5K
1/8-M5K



Cylinder tube I.D.

Max. ø**16**mm



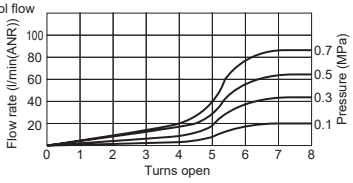


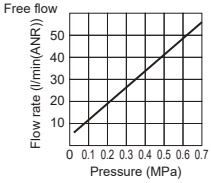
JSC 4-M3

JSS 4-M3

Cylinder tube I.D.

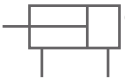
Max. ø**16**mm





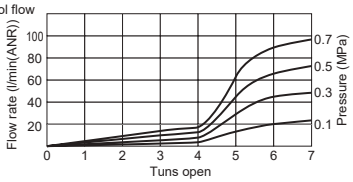
JSC 1/8-U10U
3/16-U10U
1/4-U10U
6-U10U
3-M5
4-M5
6-M5
1/8-M5
3/16-M5
1/4-M5

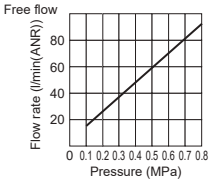
JSS 1/8-U10U
3/16-U10U
1/4-U10U
3-M5
4-M5
6-M5
1/8-M5



Cylinder tube I.D.

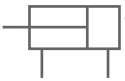
Max. ø**20**mm





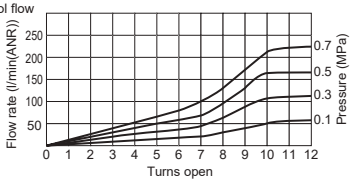
JSC 5/32-N1U
3/16-N1U
1/4-N1U
5/16-N1U
6-N1U
4-01
6-01
8-01
1/4-01
5/16-01

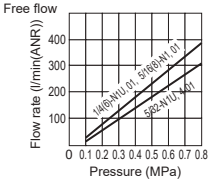
JSS 5/32-N1U
3/16-N1U
1/4-N1U
5/16-N1U
4-01
6-01
8-01
1/4-01
5/16-01



Cylinder tube I.D.

Max. ø**32**mm

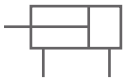




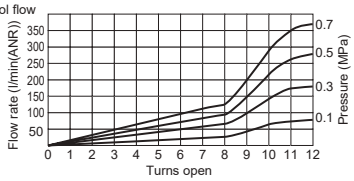
Elbow type / Universal type

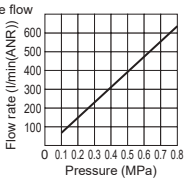
JSC 1/4-N2U
3/16-N2U
6-N2U
6-02
1/4-02

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



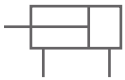
Cylinder tube I.D.
Max. ø**40**mm



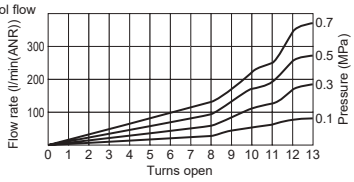


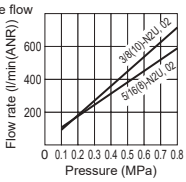
JSC 5/16-N2U
3/8-N2U
10-N2U
8-02
10-02
5/16-02
3/8-02

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

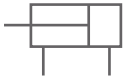


Cylinder tube I.D.
Max. ø**40**mm

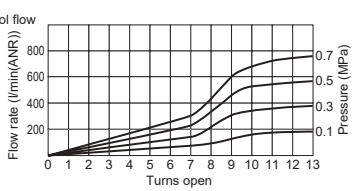


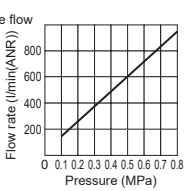


JSC 1/4-N3U
3/16-N3U
6-N3U
6-03

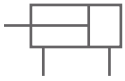


Cylinder tube I.D.
Max. ø**63**mm

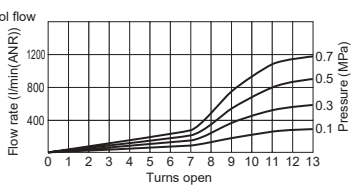


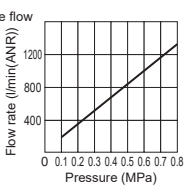


JSC 5/16-N3U
8-03
5/16-03

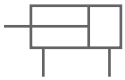


Cylinder tube I.D.
Max. ø**63**mm

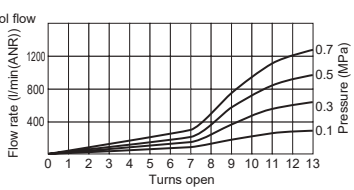


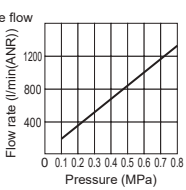


JSC 3/8-N3U
10-N3U
10-03
3/8-03



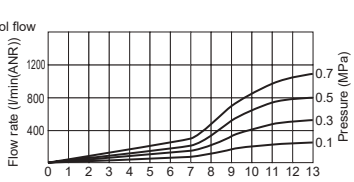
Cylinder tube I.D.
Max. ø**63**mm

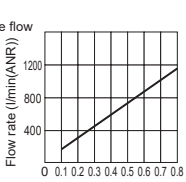




JSS 5/16-N3U
3/8-N3U
8-03
10-03
5/16-03
3/8-03

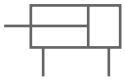
Cylinder tube I.D.
Max. ø**63**mm



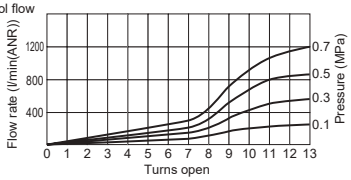


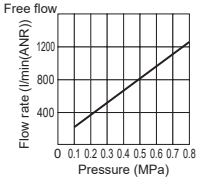
Elbow/Banjo type / Universal type

JSC 1/2-N3U 12-03 JSS 1/2-N3U 12-03

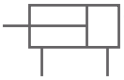


Max. ø**63**mm

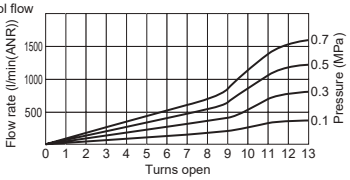


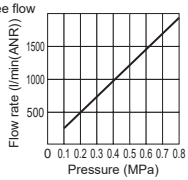


JSC 5/16-N4U 8-04

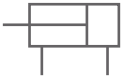


Max. ø**80**mm

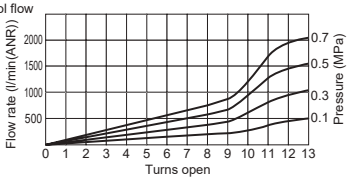


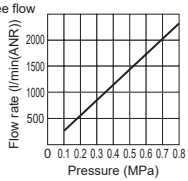


JSC 3/8-N4U 10-04

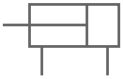


Max. ø**100**mm

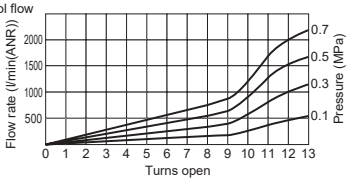


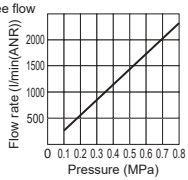


JSC 1/2-N4U 12-04 JSS 1/2-N4U 12-04



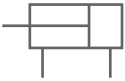
Max. ø**100**mm



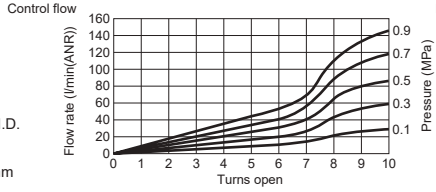


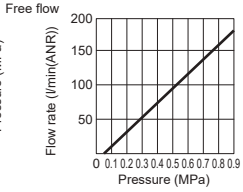
In-Line Straight type

JSMU 5/32
JSMU 4

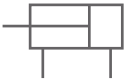


Max. ø**20**mm

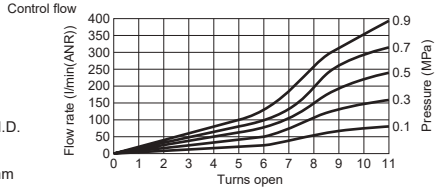


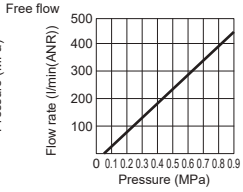


JSMU 1/4
JSMU 6



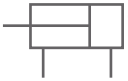
Max. ø**32**mm



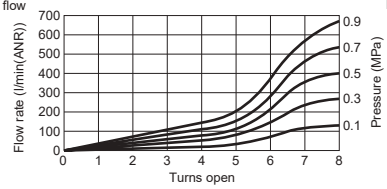


In-Line Straight type

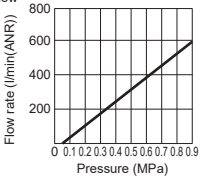
JSMU 5/16
JSMU 8



Control flow

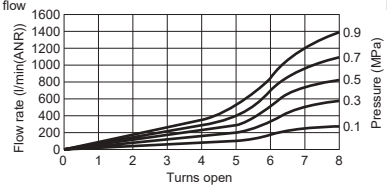


Free flow

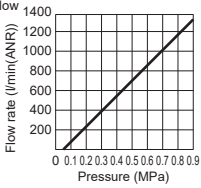


JSMU 3/8
JSMU 10

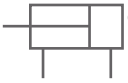
Control flow



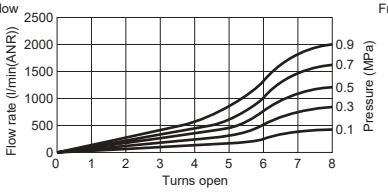
Free flow



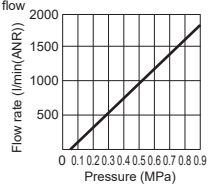
JSMU 1/2
JSMU 12



Control flow

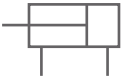


Free flow

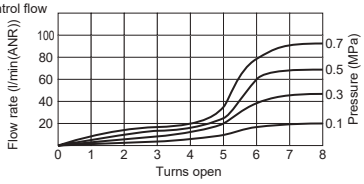


Banjo Universal type

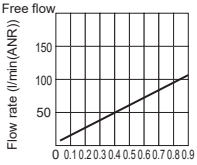
JSM 4-M5



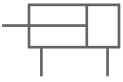
Control flow



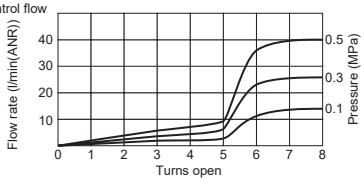
Free flow



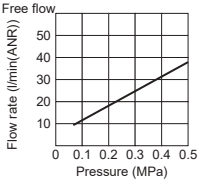
JSM 4-M5K



Control flow



Free flow



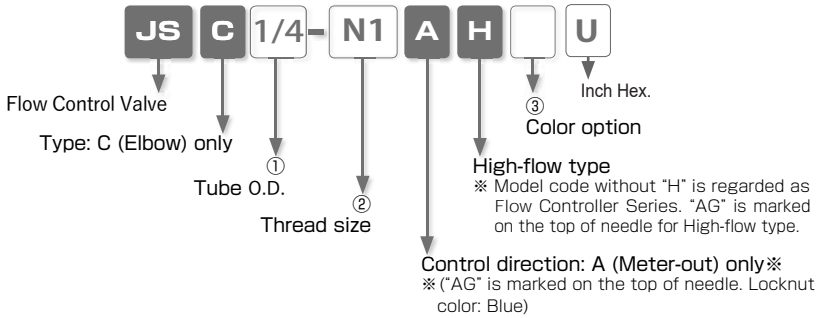
Flow Control Valve for High Speed Cylinder

High Flow

- *Speed Control Valve for Actuator*
- *Meter-out (Exhaust) control only*
- *Higher Flow Capacity*
- *Suitable for High Speed Cylinder*
- *Optional Selection of Body Color (light-gray)*

High Flow

■ Model Designation (Example)



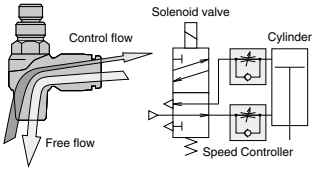
① Tubing outside dia.

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

※ Meter-out (Exhaust) control

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



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

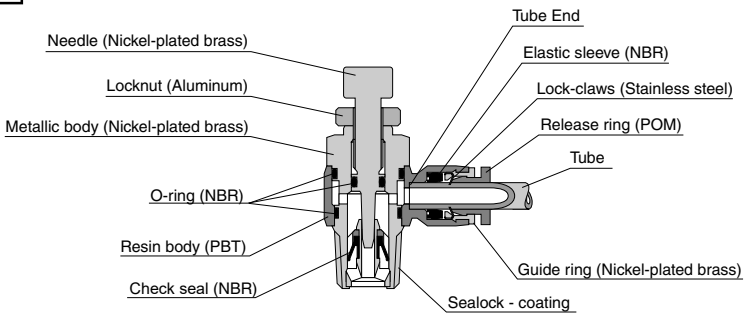
W : Light-gray

■ 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 (0～60ºC) (no freezing)

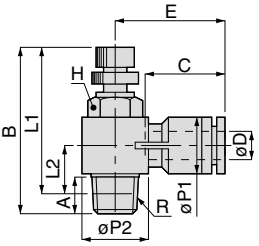
Construction (Elbow/Banjo : JSC)

Symbol



JSC-H Elbow / Banjo

RoHS compliant



Unit：mm

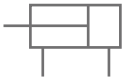
Model code	Tube O.D. øD	R	A	B		L1		L2	øP1	øP2	Tube end C	E	Hex. H	Weight (g)	CAD file name
				max.	min.	max.	min.								
JSC1/4-N1AHU	1/4"	1/8NPT	8.5	42.5	37.5	38.5	33.5	12.5	12.5	15.4	17	24.2	13	24	JSC1_4-N1AHU
JSC1/4-N2AHU		1/4NPT	11.6	50.8	44.8	44.7	38.7	14.1		19.6		26.8	17	43	JSC1_4-N2AHU
JSC3/8-N2AHU	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□		R3/8	12.6	54.3	48.7	47.9	42.3	16.3		24.4		30.2	21	72	JSC8-03_H
JSC10-02AH□	10	R1/4	11.6	50.8	44.8	44.7	38.7	15.6	18	19.6	20.2	30.5	17	48	JSC10-02_H
JSC10-03AH□		R3/8	12.6	54.3	48.7	47.9	42.3	16.3		24.4		32.5	21	75	JSC10-03_H
JSC12-03AH□	12	R3/8	12.6	54.3	48.7	47.9	42.3	17.8	21	24.4	23.4	35.2	21	78	JSC12-03_H
JSC12-04AH□		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

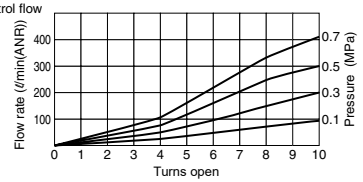
Elbow/Banjo High Flow type

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

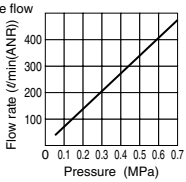


Cylinder tube I.D.
Max. ø**40**mm

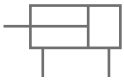
Control flow



Free flow

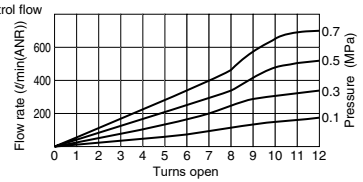


JSC 1/4-N2AHU
6-02AH

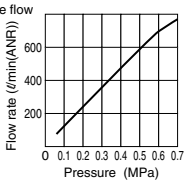


Cylinder tube I.D.
Max. ø**50**mm

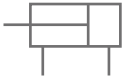
Control flow



Free flow

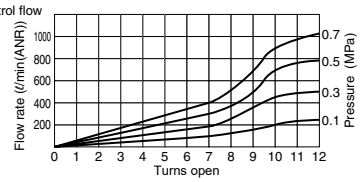


JSC 3/8-N2AHU
8-02AH
10-02AH

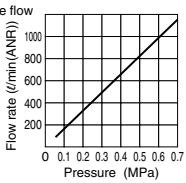


Cylinder tube I.D.
Max. ø**63**mm

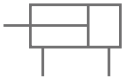
Control flow



Free flow

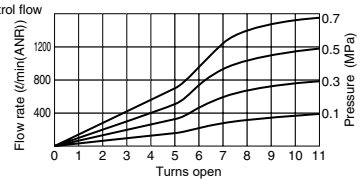


JSC 8-03AH

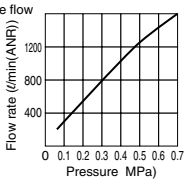


Cylinder tube I.D.
Max. ø**80**mm

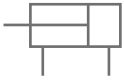
Control flow



Free flow

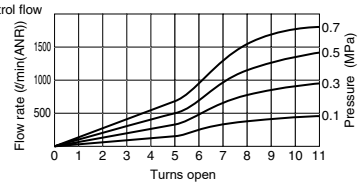


JSC 3/8-N3AHU
10-03AH
12-03AH

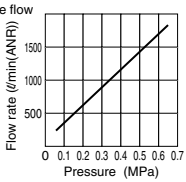


Cylinder tube I.D.
Max. ø**100**mm

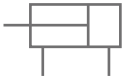
Control flow



Free flow

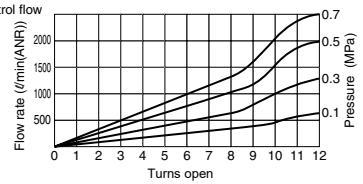


JSC 12-04AH

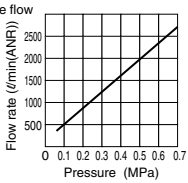


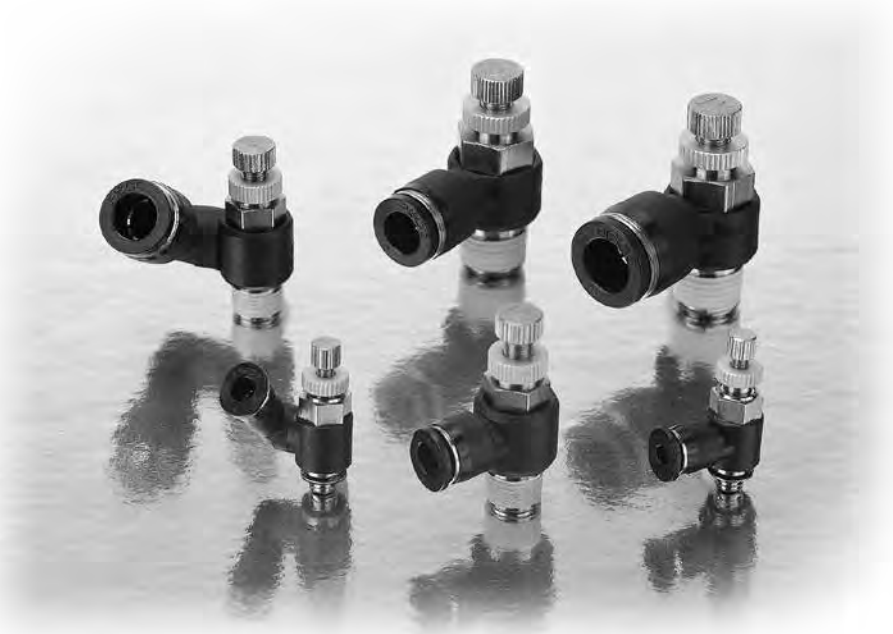
Cylinder tube I.D.
Max. ø**100**mm

Control flow



Free flow

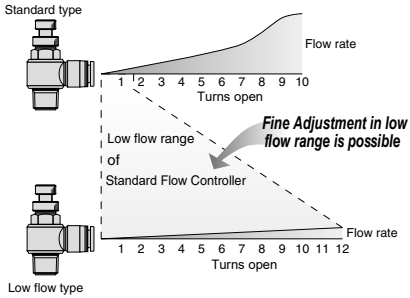




Flow Control Valve for Low Speed Cylinder

Low Flow

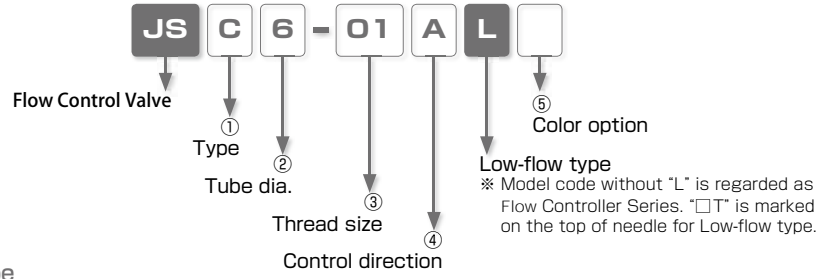
- *Suitable for Low Speed Cylinder.*
- *Precise Control for Low Speed Cylinder.*



- *Same Free Flow as Flow Controller Series. High Speed Returning Stroke of Cylinder.*
- *Newly Added Small Sized Elbow, Universal, In-line Straight of ø1.8, ø2 and ø3mm.*
- *Optional Selection of Body Color (light-gray).*

Low Flow

■ Model Designation (Example)



① Type

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

② Tubing outside dia.

Tube dia.	O.D.						
Code	180	2	3	4	6	8	10
mm size	ø1.8	ø2	ø3	ø4	ø6	ø8	ø10

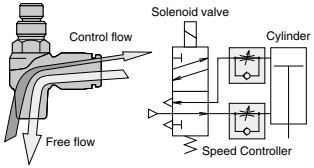
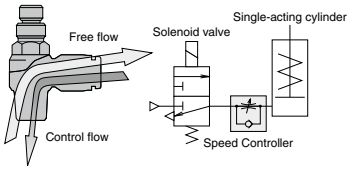
※. Only ø1.8mm, ø2mm and ø3mm port sizes are available for In-line Straight type.

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 In line Straight - JSMU)

Code	A	B
Control direction	Meter-out (Exhaust)	Meter-in (Supply)
	■ Air from thread side is controlled. Air from tube side is not controlled and flows out from thread side. 	■ Air from tube side is controlled. Air from thread side is not controlled and flows out from tube side. 
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 / Clean room

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

Specifications

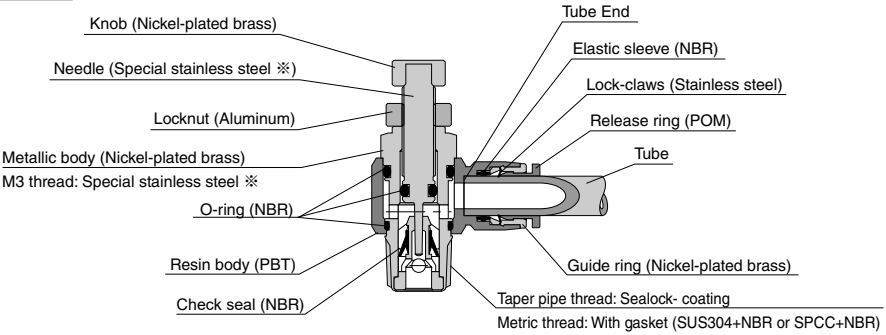
Fluid medium	Air
Operating pressure range	14.5~130psi (0.1～0.9MPa)
Check valve cracking pressure	7.25psi (0.05MPa)
Operating temp. range	32~140°F (0～60ºC) (no freezing)

Control Flow Rate

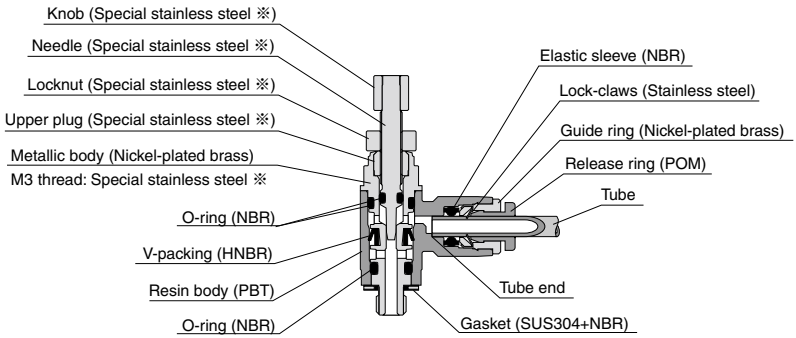
Thread size (code)	M3 × 0.5 (M3)		M5 × 0.8 (M5)			R1/8 (01)	R1/4 (02)
Tubing outside dia.(mm)	ϕ1.8, ϕ2, ϕ3	ø4	ϕ1.8、ϕ2	ø3	ø4、ø6	ø4、ø6、ø8、ø10	ø6、ø8、ø10
Flow rate (l/min(ANR))	20	35	20	35	6.5	13	41
Effective area (mm^2)	0.3	0.5	0.3	0.5	0.1	0.2	0.6
Needle rotations (turns)	10	10	10	10	10	10	12
Primary pressure (MPa)	0.5	0.5	0.5	0.5	0.5	0.5	0.5

Construction (Elbow/Banjo : JSC)

Symbol



Construction (Small sized Elbow/Banjo : JSC)



※ Equivalent Corrosion Resistance to SUS303

Standard Size List

Connection: Thread ⇔ Tube

Type	Thread size	Tube O.D. 1.8	2	3	4
JSC-L Small Elbow/Banjo	M3×0.5	●	●	●	●
	M5×0.8	●	●	●	

Type	Thread size	Tube O.D. 1.8	2	3	4
JSS-L Small Universal	M3×0.5	●	●	●	●
	M5×0.8	●	●	●	

Type	Thread size	Tube O.D. 4	6	8	10
JSC-L Elbow/Banjo	M5×0.8	●	●		
	R1/8	●	●	●	
	R1/4		●	●	●

Type	Thread size	Tube O.D. 4	6	8	10
JSS-L Universal	M5×0.8	●	●		
	R1/8	●	●	●	
	R1/4		●	●	●

Connection: Tube ⇔ Tube (Equal dia.)

Type	Tube O.D. 1.8	2	3
JSU-L In-line Straight	●	●	●

⚠ Detailed Safety Instructions

Before using PISCO products, be sure to read "Safety Instructions" and "Safety Instruction Manual" and "Common Safety Instructions for Controllers" .

Warning

1. When controlling the speed of actuators, slowly release the air by adjusting the needle from a fully closed state. In case the needle is opened, actuator can move suddenly. Turn needle in the clockwise direction to close, and in the counterclockwise to open.
2. Do not swing or rotate resin body of the products by force. It may damage to the products and cause a fluid leakage.

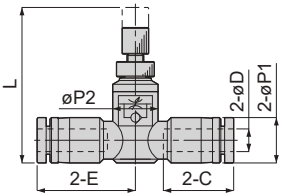
Caution

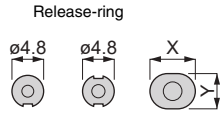
1. Speed controller permits some air leakage. Do not use the products for the application which requires no leakage.
2. Stick-slip easily happens when actuator is operated at low speed. Make sure to carry out the operation test with the actual machine before using the products.
3. When changing tubing directions of products with metric thread, turn the resin body in the clockwise direction. Turning it in the counterclockwise direction may loosen the thread.

Low Flow

JSMU-L Small Sized In-line Straight

RoHS compliant





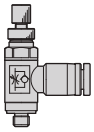
Unit：mm

Model code	Tubing O.D. øD	L max.	L min.	E	Tube end C	øP1	øP2	X	Y	Weight (g)	CAD File name
JSMU180L⑤	1.8	20.6	17.9	12.5	8.4	6	6	–	–	2.8	JSU180L_
JSMU2L⑤	2	20.6	17.9	12.5	8.4	6	6	–	–	2.8	JSU2L_
JSMU3L⑤	3	20.6	17.9	13	9.3	6	6	7	6	2.8	JSU3L_

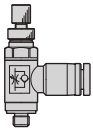
※ ⑤ in Model code / No entry for Black body color
Replaced with " W" for Light-gray color, "-C" for Cleanroom, "W-C" for Light-gray color+Cleanroom

JSC-L Small Sized Elbow/Banjo

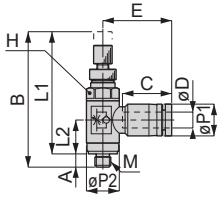
RoHS compliant

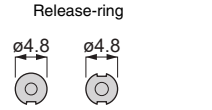


Symbol of meter-out type



Symbol of meter-in type



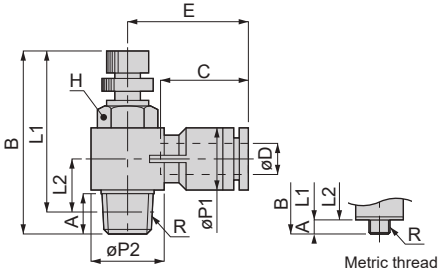


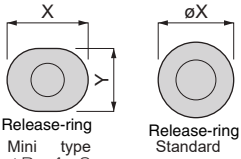
Unit：mm

Model code	Tubing O.D. øD	M	A	B max.	B min.	L1 max.	L1 min.	L2	øP1	øP2	Tube end C	E	Hex. H	X	Y	Weight (g)	CAD File name
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	7.2		8.8		13.5	8			5.1	JSC180-M5_L_
JSC2-M3④L⑤	2	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	JSC2-M3_L_
JSC2-M5④L⑤		M5×0.8	3	27.2	24.5	24.2	21.5	7.2		8.8		13.5	8			5.1	JSC2-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	7.2		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_

JSC-L Elbow/Banjo

RoHS compliant





Unit：mm

Model code	Tubing O.D. øD	R	A	B max.	B min.	L1 max.	L1 min.	L2	øP1	øP2	Tube end C	E	Hex. H	X (øX)	Y	Weight (g)	CAD File name
JSC4-M5④L⑤	4	M5×0.8	2.9 [3.2]	33.4	29.9	30.5 [30.2]	27 [26.7]	6.7 [6.4]	8	9.8	11	15.4	8	9.8	7.8	7.2	JSC4-M5_L_[C]
JSC4-01④L⑤		R1/8	8	41	35.9	37	31.9	10.7		14.4		17.7	10			17	JSC4-01_L_
JSC6-M5④L⑤	6	M5×0.8	2.9 [3.2]	33.4	29.9	30.5 [30.2]	27 [26.7]	7.5 [7.2]	10.5	9.8	11.6	17.5	8	11.8	9.8	7.8	JSC6-M5_L_[C]
JSC6-01④L⑤		R1/8	8	41	35.9	37	31.9	10.7		14.4		18.3	10			18	JSC6-01_L_
JSC6-02④L⑤		R1/4	11.1	48.7	42.6	42.6	36.5	11.9		18.4		20.2	14			35	JSC6-02_L_
JSC8-01④L⑤	8	R1/8	8	41	35.9	37	31.9	11.9	14.4	14.4	18.1	26.9	10	13.8	–	21	JSC8-01_L_
JSC8-02④L⑤		R1/4	11.1	48.7	42.6	42.6	36.5	13.2		18.4		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. ④ in Model code / Replaced with " A" for Meter-out (Exhaust), "B" for Meter-in (Supply) control
※2. ⑤ in Model code / No entry for Black body color
Replaced with " W" for Light-gray color, "-C" for Cleanroom, "W-C" for Light-gray color+Cleanroom

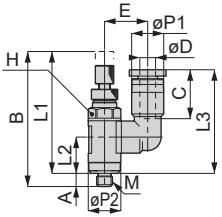
※3. L1、L2 dimensions of taper thread are of those of after installation
※4. The dimensions in [ ]is those of clean room type

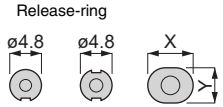
JSS-L Small Sized Universal

RoHS compliant

Symbol of meter-out type

Symbol of meter-in type



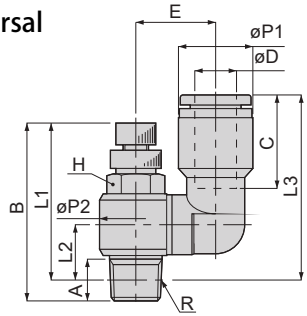


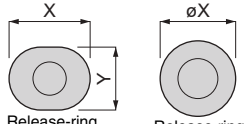
Unit：mm

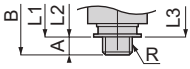
Model code	Tubing O.D. øD	M	A	B max.	B min.	L1 max.	L1 min.	L2	L3	øP1	øP2	Tube end C	E	Hex. H	X	Y	Weight (g)	CAD File name
JSS180-M3④L⑤	1.8	M3×0.5	2.5	25.7	23	23.2	20.5	6.9	19.2	6.1	6.2	8.4	8.2	5.5	–	–	2.8	JSS180-M3_L_
JSS180-M5④L⑤		M5×0.8	3	27.2	24.5	24.2	21.5	7.8	20.1		8.8		9.4	8			5.3	JSS180-M5_L_
JSS2-M3④L⑤	2	M3×0.5	2.5	25.7	23	23.2	20.5	6.9	19.2	6.1	6.2	8.4	8.2	5.5	–	–	2.8	JSS2-M3_L_
JSS2-M5④L⑤		M5×0.8	3	27.2	24.5	24.2	21.5	7.8	20.1		8.8		9.4	8			5.3	JSS2-M5_L_
JSS3-M3④L⑤	3	M3×0.5	2.5	25.7	23	23.2	20.5	6.9	19.7	6.1	6.2	9.3	8.2	5.5	7	6	2.8	JSS3-M3_L_
JSS3-M5④L⑤		M5×0.8	3	27.2	24.5	24.2	21.5	7.8	20.6		8.8		9.4	8			5.3	JSS3-M5_L_
JSS4-M3④L⑤	4	M3×0.5	2.5	25.7	23	23.2	20.5	6.9	21	8	6.2	11	8.2	5.5	9.8	7.8	3.3	JSS4-M3_L_

JSS-L Universal

RoHS compliant







Metric thread type

Unit：mm

Model code	Tubing O.D. øD	R	A	B max.	B min.	L1 max.	L1 min.	L2	L3	øP1	øP2	Tube end C	E	Hex. H	X (øX)	Y	Weight (g)	CAD File name
JSS4-M5④L⑤	4	M5×0.8	2.9 [3.2]	33.4	29.9	30.5 [30.2]	27 [26.7]	6.7 [6.4]	22.8 [22.5]	8	9.8	11	10	8	9.8	7.8	7.6	JSS4-M5_L_[C]
JSS4-01④L⑤		R1/8	8	41	35.9	37	31.9	10.7	26.8		14.4		12.2	10			17	JSS4-01_L_
JSS6-M5④L⑤	6	M5×0.8	2.9 [3.2]	33.4	29.9	30.5 [30.2]	27 [26.7]	6.7 [6.4]	24.2 [23.9]	10.5	9.8	11.6	10.5	8	11.8	9.8	8.4	JSS6-M5_L_[C]
JSS6-01④L⑤		R1/8	8	41	35.9	37	31.9	10.7	28.2		14.4		12.7	10			18	JSS6-01_L_
JSS6-02④L⑤		R1/4	11.1	48.7	42.6	42.6	36.5	11.9	29.4		18.4		14.7	14			36	JSS6-02_L_
JSS8-01④L⑤	8	R1/8	8	41	35.9	37	31.9	10.7	36.4	14.5	14.4	18.1	15.5	10	13.8	–	22	JSS8-01_L_
JSS8-02④L⑤		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_
JSS10-02④L⑤	10	R1/4	11.1	48.7	42.6	42.6	36.5	11.9	40.9	17.5	18.4	20.2	18	14	16.8	–	42	JSS10-02_L_

※1. ④ in Model code / Replaced with " A" for Meter-out (Exhaust), "B" for Meter-in (Supply) control
※2. ⑤ in Model code / No entry for Black body color
Replaced with " W" for Light-gray color, "-C" for Cleanroom, "W-C" for Light-gray color+Cleanroom

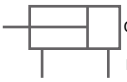
※3. L1、L2 dimensions of taper thread are of those of after installation
※4. The dimensions in [ ]is those of clean room type

Flow characteristic

Small Sized Elbow/Banjo and Small sized Universal

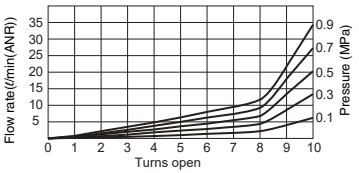
JSC180-M3 L
2-M3 L

JSS180-M3 L
2-M3 L

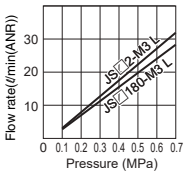


Cylinder tube I.D.
Max. ø**10**mm

Control flow

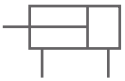


Free flow



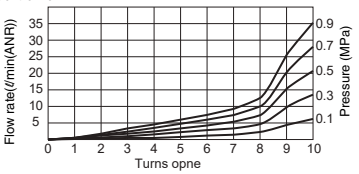
JSC180-M5 L
2-M5 L

JSS180-M5 L
2-M5 L

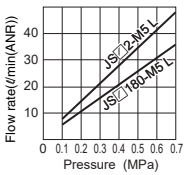


Cylinder tube I.D.
Max. ø**10**mm

Control flow



Free flow

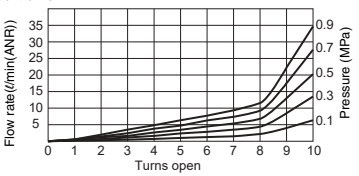


JSC3-M3 L

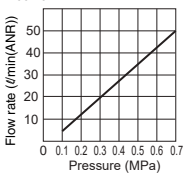
JSS3-M3 L

Cylinder tube I.D.
Max. ø**10**mm

Control flow

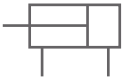


Free flow



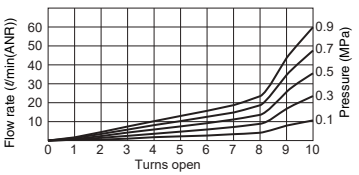
JSC3-M5 L

JSS3-M5 L

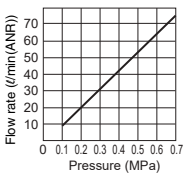


Cylinder tube I.D.
Max. ø**12**mm

Control flow

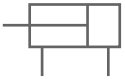


Free flow



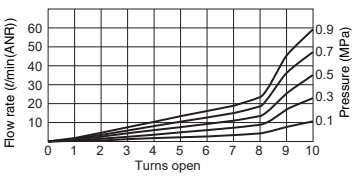
JSC4-M3 L

JSS4-M3 L

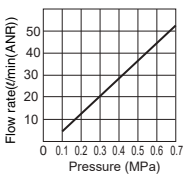


Cylinder tube I.D.
Max. ø**12**mm

Control flow



Free flow

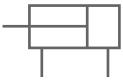


Low Flow

Elbow/Banjo and Universal

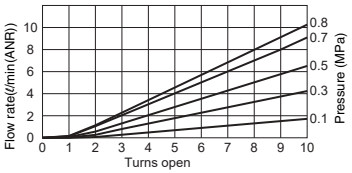
JSC 4-M5 L
6-M5 L

JSS 4-M5 L
6-M5 L

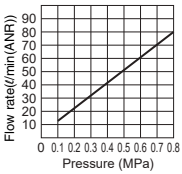


Cylinder tube I.D.
Max. ø**6**mm

Control flow

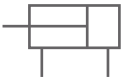


Free flow



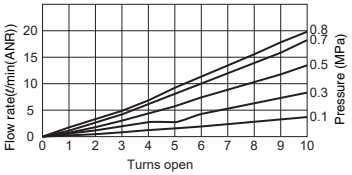
JSC 4-01 L
6-01 L
8-01 L

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

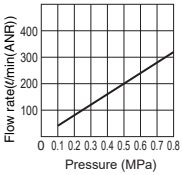


Cylinder tube I.D.
Max. ø**8**mm

Control flow

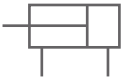


Free flow



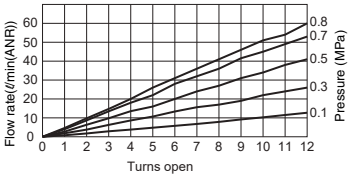
JSC 6-02 L
8-02 L
10-02 L

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

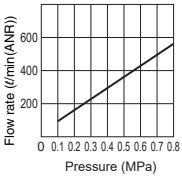


Cylinder tube I.D.
Max. ø**16**mm

Control flow

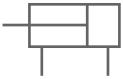


Free flow



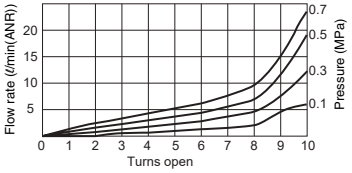
Small sized In-line Straight

JSMU180L
2L

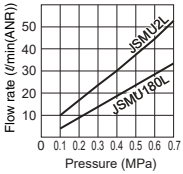


Cylinder tube I.D.
Max. ø**10**mm

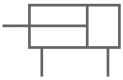
Control flow



Free flow

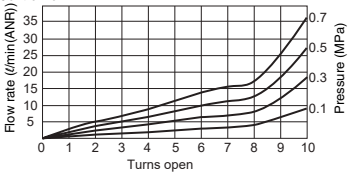


JSMU3L

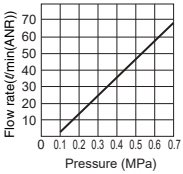


Cylinder tube I.D.
Max. ø**12**mm

Control flow



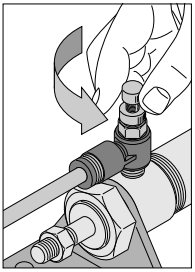
Free flow



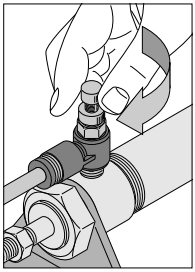
How to adjust the spee

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.



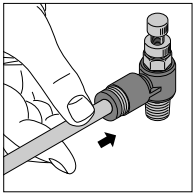
② Reducing speed
Turn the needle in the clockwise direction when the speed is too fast. Make sure to tighten the locknut at the desired speed. The speed setting can be changed without tightening the locknut.



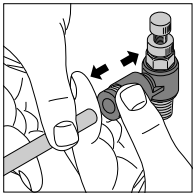
2. How to insert and disconnect

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".

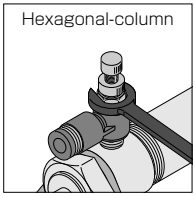


② Tubing disconnection
The tubing is disconnected by pushing release-ring to release Lock-claws. Make sure to stop air supply before the tube disconnection.



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 Enviroment.

●*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 -F FKM	Release-ring color -R レッド
Flow Controller & Needle (Throttle) Valve Standard	–	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