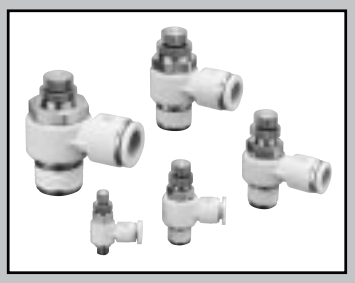
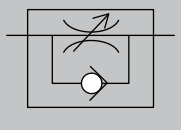


Speed control valve Stainless steel anti-corrosion type

SC3P Series

●Port size: M5, R1/8 to R1/2

JIS symbol



RoHS

Features

●Speed control valve with SUS303 or equivalent (Cr20%, Mo2%) corrosion-resistant stainless steel body. Free of brass parts, this product is perfect for use in environments which are susceptible to copper ion.

●Standard ozone-resistant materials
Ozone-proof materials for degradation prevention are used as a standard for the check packing.

●Environment compatible products
With this RoHS Directive compatible product, all substances which adversely affect the global environment have been eliminated from the materials.

Specifications

Model no.	SC3P														
Descriptions	SC3P-M5		SC3P-6			SC3P-8			SC3P-10				SC3P-15		
Applicable tube outer diameter mm	ø4	ø6	ø4	ø6	ø8	ø6	ø8	ø10	ø6	ø8	ø10	ø12	ø8	ø10	ø12
Working fluid	Compressed air														
Max. working pressure MPa	0.9														
Min. working pressure MPa	0.1														
Withstanding pressure MPa	1.35														
Ambient temperature range ˚C	0 to 60 (no freezing)														
Port size Rc	M5		R1/8			R1/4			R3/8				R1/2		
Product weight g	7	7.6	17	17	20	33	36	39	63	63	66	69	95	98	101
Number of needle turn	7 and over		12 and over			13 and over									

Note1: Freezing could occur by adiabatic expansion depending on air quality (dew point).

How to order

SC3P - 8 - 8 - I

- SC3P: Model no.
- 8: Ⓐ Port size
- 8: Ⓑ Applicable tube outer diameter
- I: Ⓒ Option

Symbol	Descriptions
Ⓐ Port size	
M5	M5×0.8
6	R1/8
8	R1/4
10	R3/8
15	R1/2

Ⓑ Applicable tube outer diameter		Port size				
		M5	6	8	10	15
4	ø4	●	●			
6	ø6	●	●	●	●	
8	ø8		●	●	●	●
10	ø10			●	●	●
12	ø12				●	●

Ⓒ Option	
Blank	Meter-out type
I	Meter-in type

not available.

Flow and effective sectional area

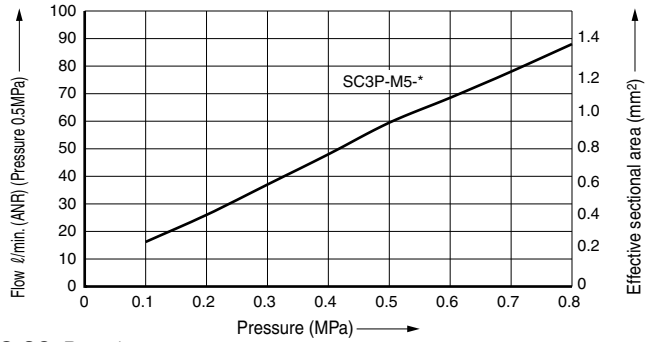
Model no.		SC3P														
Descriptions		SC3P-M5		SC3P-6			SC3P-8			SC3P-10				SC3P-15		
Applicable tube outer diameter mm		ø4	ø6	ø4	ø6	ø8	ø6	ø8	ø10	ø6	ø8	ø10	ø12	ø8	ø10	ø12
Free flow	Flow ℓ/min. (ANR)	55		200		230	390	400		600	800		840	1140	1380	
	Effective sectional area mm²	0.9		3		3.5	5.9	6		9	12		12.5	17	21	
Controlled flow	Flow ℓ/min. (ANR)	70		150			270			550	850	920		1100	1450	1600
	Effective sectional area mm²	1.1		2.3			4			8	12.8	14		16.5	22	24

Note 1: Flow rate is the atmospheric pressure conversion value at pressure 0.5MPa.
Note 2: The effective sectional area lists the value converted from the flow rate.

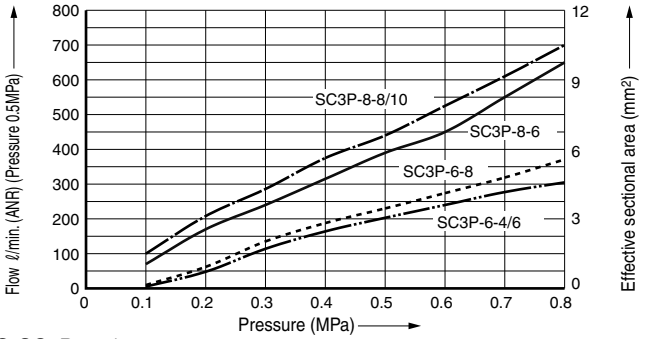
Flow characteristics

(Free flow)

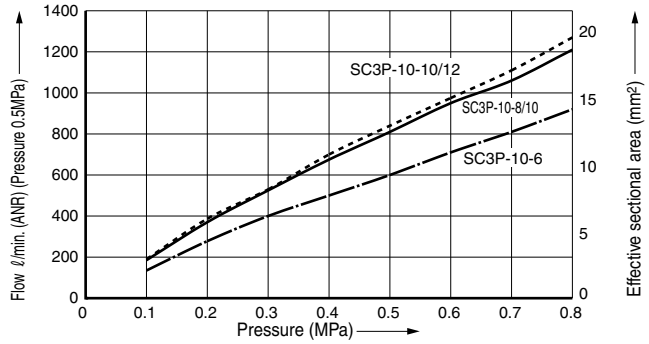
● SC3P-M5-*



● SC3P-6-*,SC3P-8-*



● SC3P-10-*



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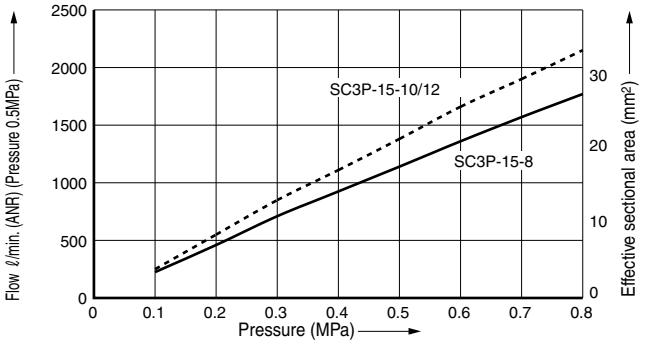
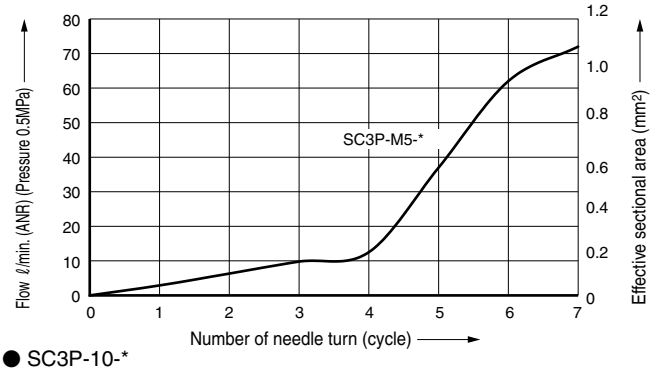
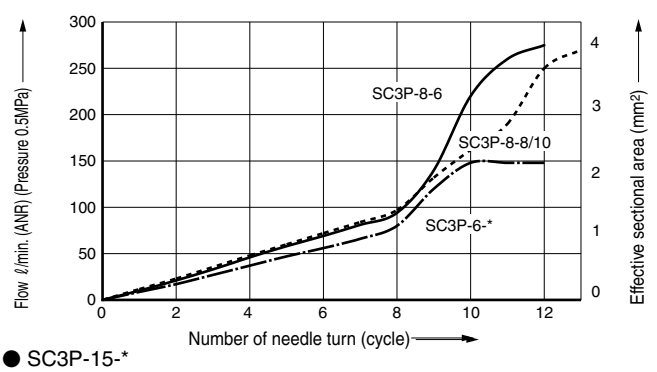


(Controlled flow)

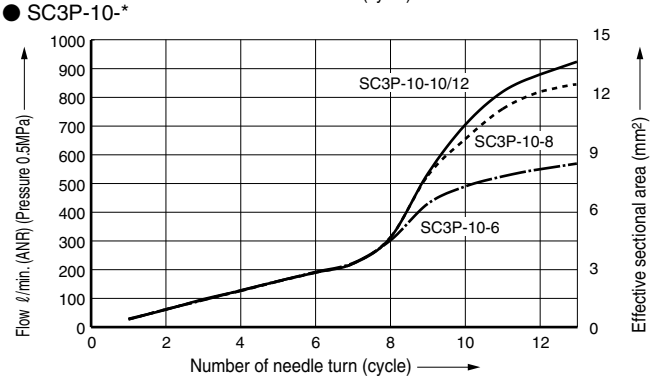
● SC3P-M5-*



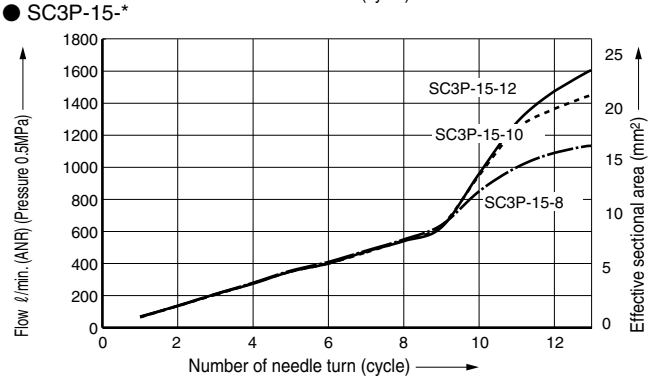
● SC3P-6-*,SC3P-8-*



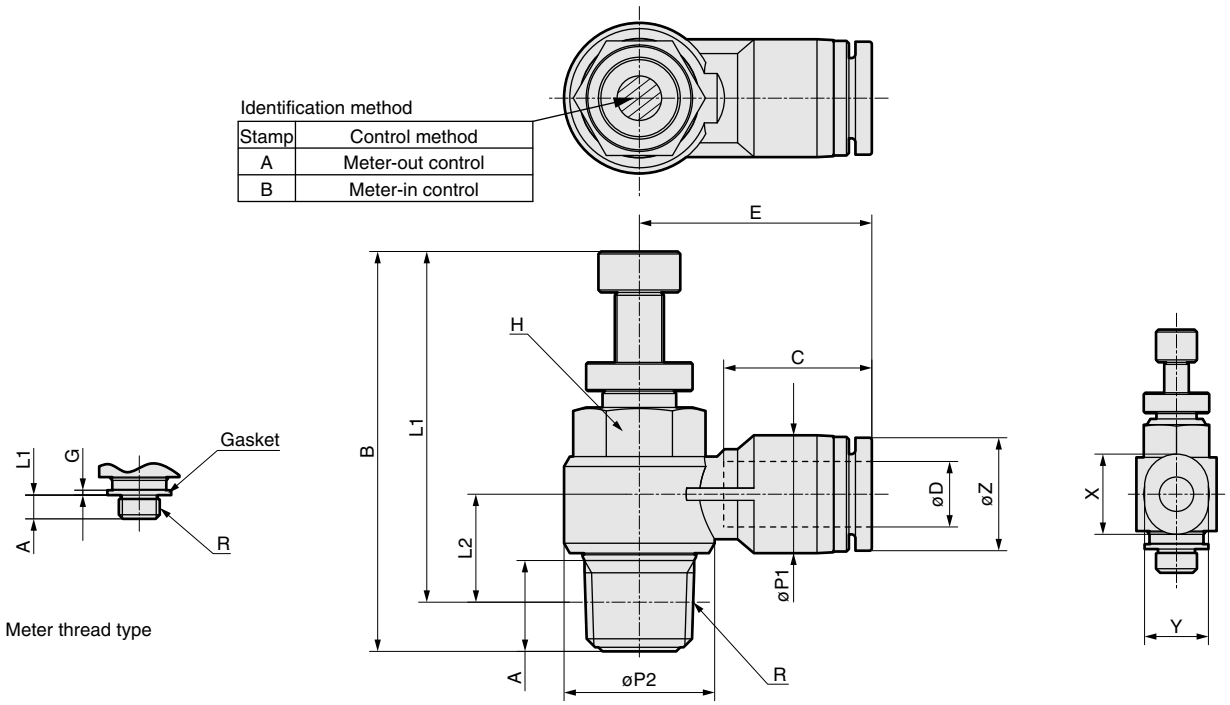
● SC3P-10-*



● SC3P-15-*



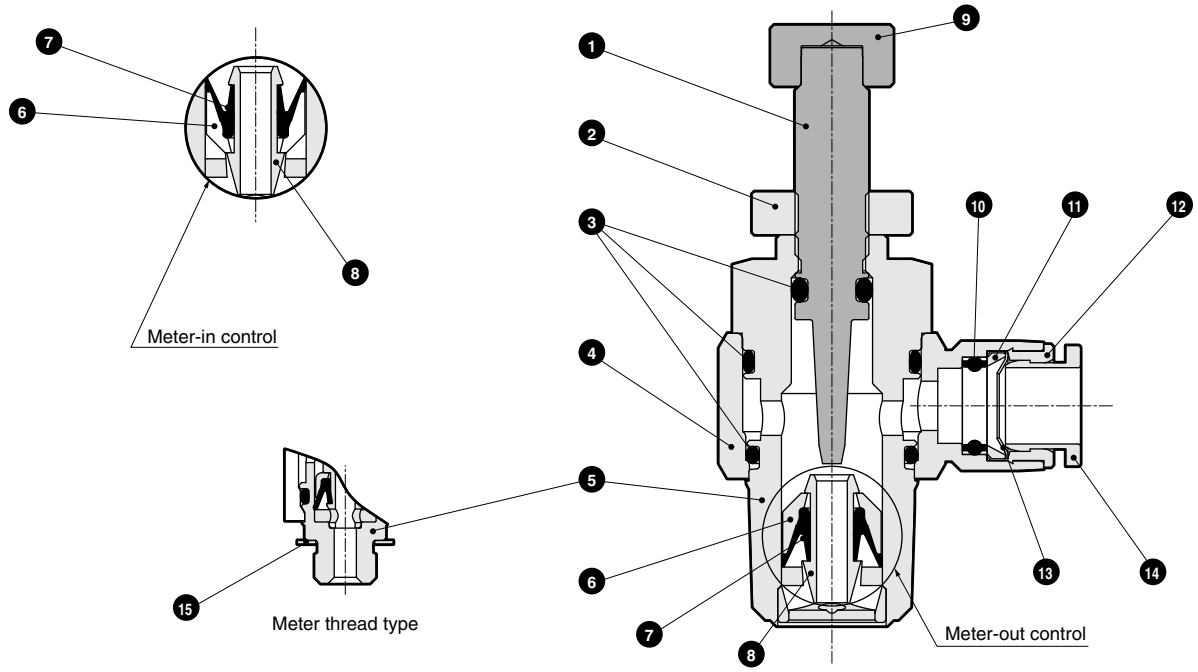
Dimensions



Symbol / Model no.	øD tube O.D.	R	A	B MAX	B MIN	L1 MAX	L1 MIN	L2	øP1	øP2	C tube end	E	H opposite side	øZ	X	Y
SC3P-M5-4	ø4	M5×0.8	3.2	29.7	27.0	26.5	23.8	6.4	8	9.8	11.3	15.7	8	–	9.8	7.8
SC3P-M5-6	ø6							7.2	10.5		11.8	17.7		–	11.8	9.8
SC3P-6-4	ø4	R1/8	8	41.5	34.9	37.5	30.9	10.7	8	14.4	11.3	18	10	–	9.8	7.8
SC3P-6-6	ø6							10.7	10.5		11.8	18.5		–	11.8	9.8
SC3P-6-8	ø8							11.9	14.4		18.1	26.9		13.8	–	–
SC3P-8-6	ø6	R1/4	11.1	48.9	42.2	42.8	36.1	11.9	10.5	18.4	11.8	20.4	14	–	11.8	9.8
SC3P-8-8	ø8							13.2	14.4		18.1	28.4		13.8	–	–
SC3P-8-10	ø10							14.8	17.6		20.2	30.9		16.8	–	–
SC3P-10-6	ø6	R3/8	13.2	54.4	46.9	48	40.5	15.4	14.4	22	17	29	19	11.8	–	–
SC3P-10-8	ø8							15.4	14.4		18.1	28.9		13.8	–	–
SC3P-10-10	ø10							16.7	17.6		20.2	31.2		16.8	–	–
SC3P-10-12	ø12							18.4	21		23.4	36.9		19.8	–	–
SC3P-15-8	ø8	R1/2	16	59.7	52.4	51.5	44.2	18	14.4	28	18.1	31	24	13.8	–	–
SC3P-15-10	ø10							18	17.6		20.2	33.6		16.8	–	–
SC3P-15-12	ø12							19.7	21		23.4	36.4		19.8	–	–

* The taper female thread type L1 and L2 dimensions are the reference dimensions after tightening.

Internal structure and parts list



No.	Parts name	Material	No.	Parts name	Material
1	Needle	Stainless steel (SUS303 or equivalent)	9	Knob	Stainless steel (SUS303 or equivalent)
2	Lock nut	Stainless steel (SUS303 or equivalent)	10	Rubber sleeve	Hydrogen nitrile rubber
3	O ring	Hydrogen nitrile rubber	11	Lock ring	Stainless steel (SUS303 or equivalent)
4	Resin body	PBT	12	Guide ring	Stainless steel (SUS303 or equivalent)
5	Metal body	Stainless steel (SUS303 or equivalent)	13	Lock jaw	Stainless steel(SUS301)
6	Cage	PBT	14	Release ring	Polyacetal
7	Check packing seal	Hydrogen nitrile rubber	15	Gasket	Polyacetal
8	Nest	Stainless steel (SUS303 or equivalent)			

- Always use within the product specifications.
- This product is for compressed air. Avoid using with other fluids.
- Securely insert the tube to the tube end, and make sure that the tube cannot be pulled off.
- Cut the tube with a dedicated cutter, and cut at a right angle.
- Remove all swarf and foreign debris generated during piping and tube insertion before starting use.
- Provide sufficient allowance in the tube so that it does not bent suddenly.
- Avoid using this product in a hot humid place, outdoors or where it is subject to direct sunlight.
- Avoid using this product in places with high levels of vibration or impact.
- The needle tolerates a slight leak even when fully closed, so do not use it as a stop valve.
- Stop air and confirm that there is no residual pressure before replacing the tube.
- The chemical resistance is equivalent to SUS440. This product cannot be used when a higher chemical resistance is required.
- Consult with CKD when using in an easy to corrode environment. The joint body could break under some conditions.

■ Precautions for piping

- Always use within the recommended tightening torque range.
- Do not tighten while pressure is applied.
- Stop air flow and confirm that there is no residual pressure before replacing the tube.
- The joint can be rotated to a random direction and mounted. However, this product must not be used for constantly rotating or swaying applications.

(Recommended tightening torque)

Port thread	Tightening torque N·m
M5	1.0 to 1.5
R1/8	7 to 9
R1/4	12 to 14
R3/8	22 to 24
R1/2	28 to 30