

Speed controller, elbow with push-in fitting

# SC3W Series

● Port size: M3, M5, R1/8 to R1/2

JIS symbol



(meter-out)



(meter-in)



## Structure and material restriction

	Structure/treatment	Material restriction			Model No.
P7 Series	Dust generation preventing				<b>P70</b>
	Dust generation preventing	Copper-based materials prohibited	Silicon-based materials prohibited	Halogen-based materials prohibited (fluorine, chlorine, bromine)	<b>P74</b>

## Specifications

Descriptions	SC3W																		
	SC3W-M3		SC3W-M5			SC3W-6			SC3W-8			SC3W-10				SC3W-15			
Applicable tube O.D.	mm		ø3.2	ø4	ø3.2	ø4	ø6	ø4	ø6	ø8	ø6	ø8	ø10	ø6	ø8	ø10	ø12	ø10	ø12
Working fluid	Compressed air																		
Max. working pressure	MPa																		
Min. working pressure	MPa																		
Proof pressure	MPa																		
Fluid temperature	°C																		
Ambient temperature	°C																		
Port size	M3		M5			R1/8			R1/4			R3/8				R1/2			
Weight	g		4.9	5.7	7.9	8.8	9.6	25	26	27	50	51	54	63.7	75	78	81	134	138
Dial indicator value	10 (14) and over		10 (16) and over			10 (15) and over			13 and over			13 and over				14 and over			
Free flow	Flow rate	ℓ/min (ANR)	27 (20)	87 (80)			210 (210)	270 (270)	270	470	500	530	650	1000	1100	1500	1600		
	Effective cross-sectional area	mm <sup>2</sup>	0.4 (0.3)	1.3 (1.2)			3.2 (3.2)	4.0 (4.0)	4.0	7	7.5	8	10	15	16	22	24		
Controlled flow	Flow rate	ℓ/min (ANR)	20 (5.9)	80 (6.7)			190 (13)	240 (13)	240	430	470	470	650	930	1000	1500	1600		
	Effective cross-sectional area	mm <sup>2</sup>	0.3 (0.08)	1.2 (0.1)			2.8 (0.2)	3.6 (0.2)	3.6	6.5	7	7.0	10	14	15	22	24		

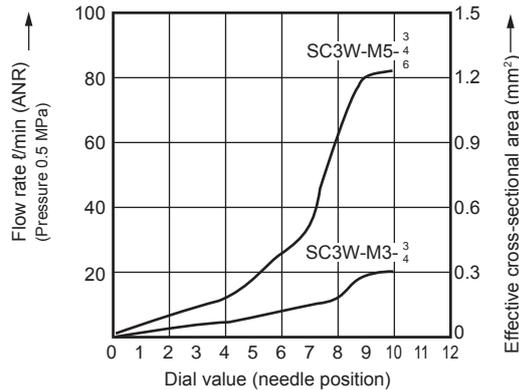
\*1: Flow rate is the atmospheric pressure conversion value at pressure 0.5 MPa.

\*2: Values in ( ) indicate low speed type.

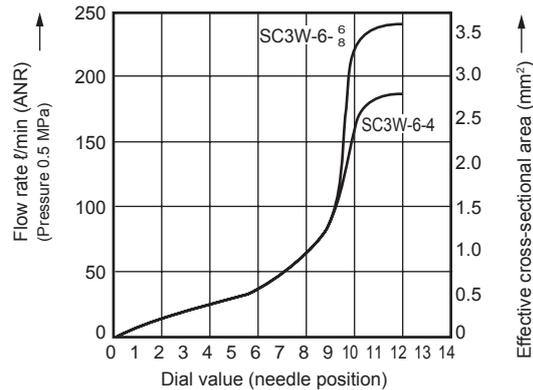
\*3: Freezing could occur by adiabatic expansion depending on air quality (dew point).

## Flow characteristics

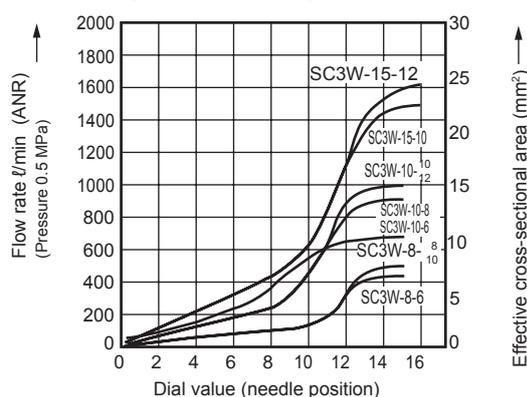
● Standard (port size M3, M5)



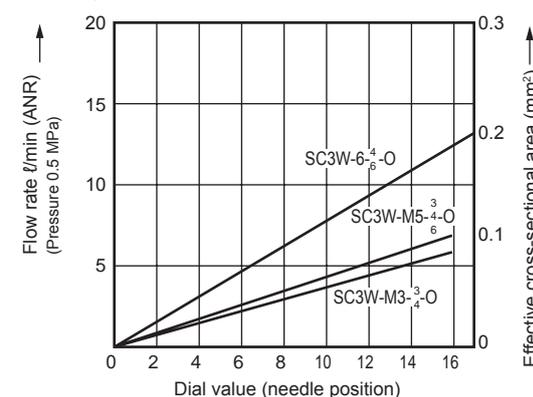
● Standard (port size 1/8)



● Standard (port size 1/4 to 1/2)



● Low speed



### How to order

SC3W - M5 - 4 - I - P70

Model No.

**A** Port size

**B** Applicable tube O.D.

**C** Option  
\*1  
\*2  
\*3

**D** Clean room specifications

Code	Content						
<b>A Port size</b>							
M3	M3 × 0.5						
M5	M5 × 0.8						
6	R1/8*						
8	R1/4*						
10	R3/8*						
15	R1/2*						
<b>B Applicable tube O.D.</b>							
		Port size					
		M3	M5	6	8	10	15
3	ø3.2	●	●				
4	ø4	●	●	●			
6	ø6		●	●	●	●	
8	ø8			●	●	●	
10	ø10				●	●	●
12	ø12					●	●
<b>C Option</b>							
Blank	Meter-out						
I	Meter-in (Push ring color: Black)						
K	Hexagon head lock nut						
O	Low speed						
<b>D Clean room specifications</b>							
	Structure/treatment	Material restriction					
P70	Dust generation preventing	-					
P74	Dust generation preventing	Copper-based/silicon-based/halogen-based materials (fluorine, chlorine, bromine) are prohibited					
	Not available.	* Sealant is not applied.					

### ⚠ Precautions for model No. selection

\*1: Options are indicated in alphabetic order.

\*2: "K" can be selected for port size M3, M5 only.

\*3: "O" can be selected for applicable tube O.D. "4" (ø4), "6" (ø6) for port size M3, M5 and "6" (R1/8).

[Example of model No.]

**SC3W-M5-4-I-P70**

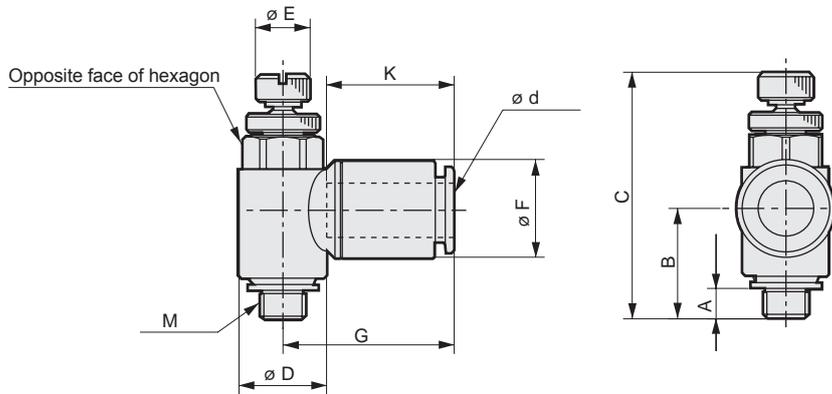
- A** Port size : M5 × 0.8
- B** Applicable tube O.D.: ø4
- C** Option : Meter-in
- D** Clean room specifications : Dust generation preventing

SCPD3
SCM
SSD2
MDC2
SMG
LCM
LCR
LCG
LCX
STM
STG
STR2
MRL2
GRC
Cylinder Switch
MN3E
MN4E
4GA/B
M4GA/B
MN4GA/B
F.R.(module unit)
Clean F.R
Precision R
Press gauge
Diff. press gauge
Electro-pneumatic R
Speed controller
Auxiliary valve
Fitting/ tube
Clean air unit
Pressure sensor
Flow rate sensor
Valve for air blow
Ending

## Dimensions

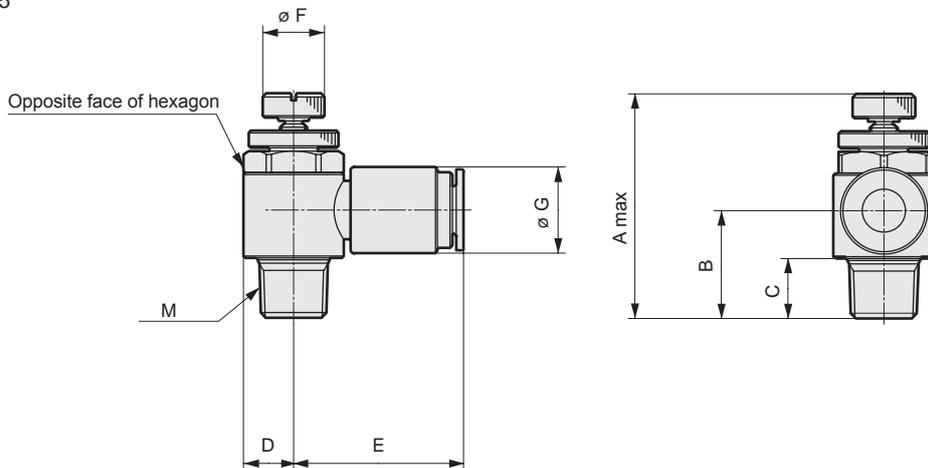


● SC3W-M  $\frac{3}{5}$  \*-P7\*



Model No.	ø d (applicable tube O.D.)	M	A	B	C		D	E	F	G	K (tube insert length)	Opposite face of hexagon
					MAX	MIN						
SC3W-M3-3-P7*	ø3.2	M3 × 0.5	2.4	11.4	27.6	25.1	7.4	5	7.5	15.5	11.7	7
SC3W-M3-4-P7*	ø4	M3 × 0.5	2.4	11.4	27.6	25.1	7.4	5	8.8	16.6	12.9	7
SC3W-M5-3-P7*	ø3.2	M5 × 0.8	3.4	12.4	30.6	27.2	9.6	6	7.5	16.0	11.7	8
SC3W-M5-4-P7*	ø4	M5 × 0.8	3.4	12.4	30.6	27.2	9.6	6	8.8	17.2	12.9	8
SC3W-M5-6-P7*	ø6	M5 × 0.8	3.4	12.4	30.6	27.2	9.6	6	10.8	18.8	14.0	8

● SC3W- $\frac{6}{8/10/15}$  \*-P7\* (same as low speed type, standard (SC3W-6))



Model No.	M	Applicable tube O.D.	A	B	C	D	E	F	G	Opposite face of hexagon
SC3W-6-4-P7*	R1/8	ø4	38.4	16.2	8	7.3	23.1	9	10.0	13
SC3W-6-6-P7*		ø6	38.4	15.7	8	7.3	24.1	9	12.5	13
SC3W-6-8-P7*	R1/4	ø8	38.4	15.4	8	7.3	25.3	9	14.5	13
SC3W-8-6-P7*		ø6	51.2	25.0	11	9.5	27.2	12	13.8	17
SC3W-8-8-P7*		ø8	51.2	25.0	11	9.5	28.5	12	16.3	17
SC3W-8-10-P7*	R3/8	ø10	51.2	24.0	11	9.5	32.0	12	19.3	17
SC3W-10-6-P7*		ø6	52.4	23.1	12	11.3	28.3	14	12.5	19
SC3W-10-8-P7*		ø8	60.2	30.0	12	11.3	30.3	14	16.3	19
SC3W-10-10-P7*		ø10	60.2	30.0	12	11.3	33.8	14	19.3	19
SC3W-10-12-P7*	R1/2	ø12	60.2	29.3	12	11.3	37.8	14	21.3	19
SC3W-15-10-P7*		ø10	66.7	33.8	15	13.5	36.0	16	19.3	24
SC3W-15-12-P7*		ø12	66.7	33.8	15	13.5	40.0	16	21.3	24