

Speed control valve Elbow type with push-in joint

# SC3W Series

● Port size: M3, M5, R1/8 to R1/2

JIS symbol



## Specifications

Descriptions	SC3W																
	SC3W-M3		SC3W-M5			SC3W-6			SC3W-8			SC3W-10				SC3W-15	
Applicable tube outer diameter mm	ø3.2	ø4	ø3.2	ø4	ø6	ø4	ø6	ø8	ø6	ø8	ø10	6ø	ø8	ø10	ø12	ø10	ø12
Working fluid	Compressed air																
Max. working pressure MPa	1.0																
Min. working pressure MPa	0.05																
Withstanding pressure MPa	1.5																
Fluid temperature °C	5 to 60 (no freezing Note 3)																
Ambient temperature °C	0 to 60 (no freezing)																
Port size	M3		M5			R1/8			R1/4			R3/8				R1/2	
Product 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
Number of needle turn (cycle)	10 (14) and over		10 (16) and over			10 (15) and over			13 and over			13 and over				14 and over	
Free flow	Flow ℓ/min. (ANR)		87 (80)			210 (210)			470			1000				1500	
	Effective sectional area mm <sup>2</sup>		1.3 (1.2)			3.2 (3.2)			7			15				22	
Controlled flow	Flow ℓ/min. (ANR)		80 (6.7)			190 (13)			470			930				1500	
	Effective sectional area mm <sup>2</sup>		1.2 (0.1)			2.8 (0.2)			7			14				22	

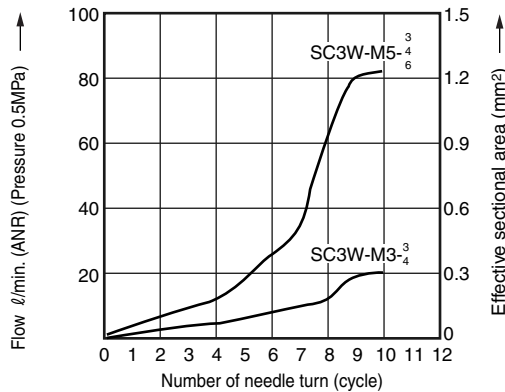
Note 1: Flow rate is the atmospheric pressure conversion value at pressure 0.5MPa.

Note 2: Value in ( ) is for low speed type.

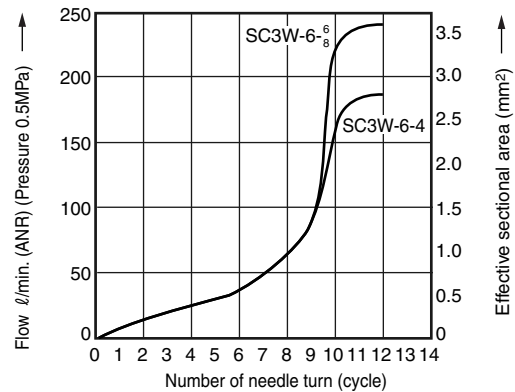
Note 3: Freezing could occur by adiabatic expansion depending on air quality (dew point).

## Flow characteristics

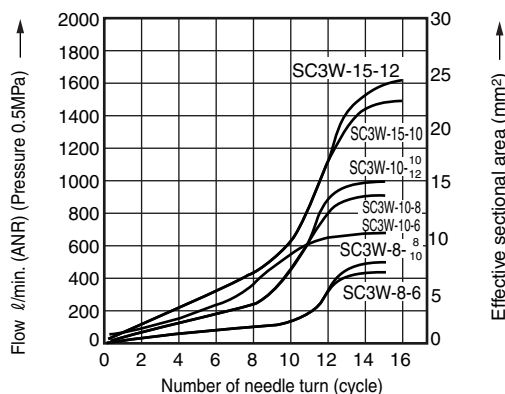
● Standard type (port size M3, M5)



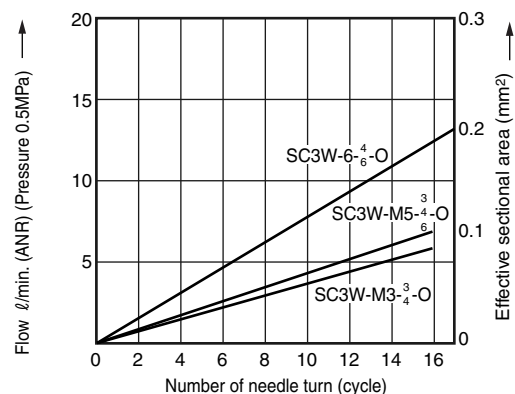
● Standard type (port size 1/8)



● Standard type (port size 1/4 to 1/2)



● Low speed type



### How to order



Model no.

**A** Port size

**B** Applicable tube outer diameter

**C** Option Note1  
Note 2  
Note 3

Symbol	Descriptions						
<b>A Port size</b>							
<b>M3</b>	M3 × 0.5						
<b>M5</b>	M5 × 0.8						
<b>6</b>	R1/8						
<b>8</b>	R1/4						
<b>10</b>	R3/8						
<b>15</b>	R1/2						
<b>B Applicable tube outer diameter</b>							
		Port size					
		M3	M5	6	8	10	15
<b>3</b>	ø3.2	●	●				
<b>4</b>	ø4	●	●	●			
<b>6</b>	ø6		●	●	●	●	
<b>8</b>	ø8			●	●	●	
<b>10</b>	ø10				●	●	●
<b>12</b>	ø12					●	●
<b>C Option</b>							
<b>Blank</b>	Meter-out						
<b>I</b>	Meter-in (push ring color: black)						
<b>K</b>	Hexagon head lock nut						
<b>O</b>	Low speed type						
<b>P6</b>	Copper and PTFE free						

not available.

### ⚠ Note on model no. selection

- Note 1: Options are indicated as alphabetic order.
- Note 2: "K" can be selected for only port size M3, M5.
- Note 3: "O" can be selected for applicable tube outer diameter "4" (ø4), "6" (ø6) for port size M3, M5 and "6" (R1/8).

<Example of model number>

### SC3W-M5-4-I

- A** Port size : M5 × 0.8
- B** Applicable tube outer diameter : ø4
- C** Option : Meter-in

**Ozone specifications** (Ending 9)

SC3W—.....— **P11**

**Clean room specifications** (catalog No. CB-033SA)

- Dust generation preventing structure for use in cleanrooms

SC3W—.....— **P7\***

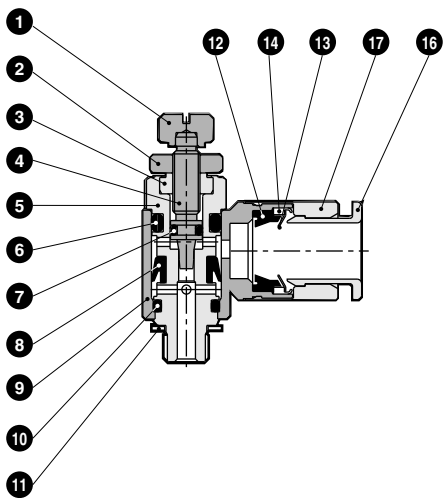
Refrigerating type dryer
Desiccant type dryer
High polymer membrane type dryer
Air filter
Auto. drain / others
F.R.L. (Module unit)
F.R.L. (Separate)
Compact F.R.
Precise regulator
F.R.L. (Related products)
Clean F.R.
Electro pneumatic regulator
Air booster
Speed control valve
Silencer
Check valve / others
Joint / tube
Vacuum filter
Vacuum regulator
Suction plate
Magnetic spring buffer
Mechanical pressure SW
Electronic pressure SW
Contact / close contact cont. SW
Air sensor
Pressure SW for coolant
Small flow sensor
Small flow controller
Flow sensor for air
Flow sensor for water
Total air system
Total air system (Gamma)
Ending

Elbow type with push-in joint  
Speed control valve

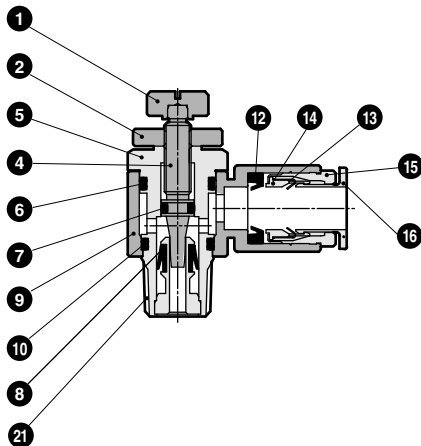
## Internal structure and parts list

Refrigerating type dryer
Desiccant type dryer
High polymer membrane type dryer
Air filter
Auto. drain / others
F.R.L. (Module unit)
F.R.L. (Separate)
Compact F.R.
Precise regulator
F.R.L. (Related products)
Clean F.R.
Electro pneumatic regulator
Air booster
Speed control valve
Silencer
Check valve / others
Joint / tube
Vacuum filter
Vacuum regulator
Suction plate
Magnetic spring buffer
Mechanical pressure SW
Electronic pressure SW
Contact / close contact cont. SW
Air sensor
Pressure SW for coolant
Small flow sensor
Small flow controller
Flow sensor for air
Flow sensor for water
Total air system
Total air system (Gamma)
Ending

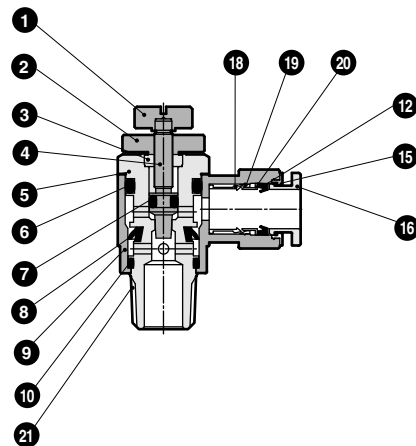
● Port size: M3, M5



● Port size: 1/8, 3/8(only ø6)



● Port size: 1/4 to 1/2



No.	Parts name	Material No.	No.	Parts name	Material
1	Knob	Brass	11	Gasket	Steel + nitrile rubber (only M5)
2	Lock nut	Brass	12	Packing seal	Nitrile rubber
3	Gland nut	Brass	13	Chuck	Stainless steel
4	Needle	Stainless steel	14	Chuck holder	M3,M5 Brass
5	Rotary shaft	Brass (M3 is stainless steel)			R1/8 Polyacetal
6	O ring	Nitrile rubber	15	Outer ring	Brass
7	O ring	Nitrile rubber	16	Push ring	PBT (flame resistance resin *2)
8	Packing seal	Hydrogen nitrile rubber	17	Joint	Copper alloy
9	Rotor	PBT (flame resistance resin *2)	18	Chucking ring	Brass
10	O ring	Nitrile rubber	19	Chucking guide	Brass
			20	Release ring	Brass
			21	Sealant	Fluorine system resin

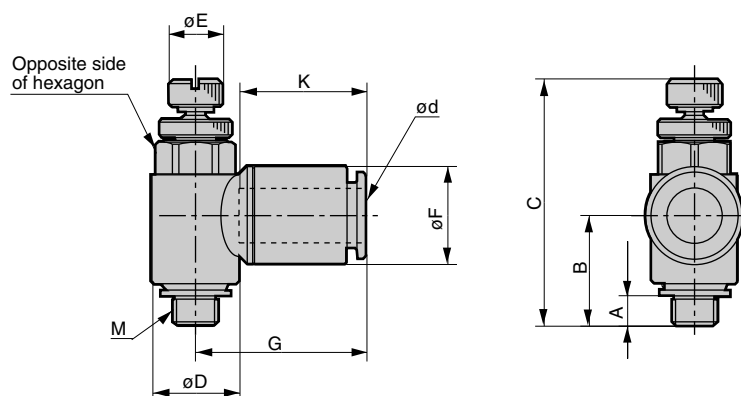
\*1 All the brass parts are plated with electroless nickeling

\*2 Equivalent to UL94 standards V-O

### Dimensions

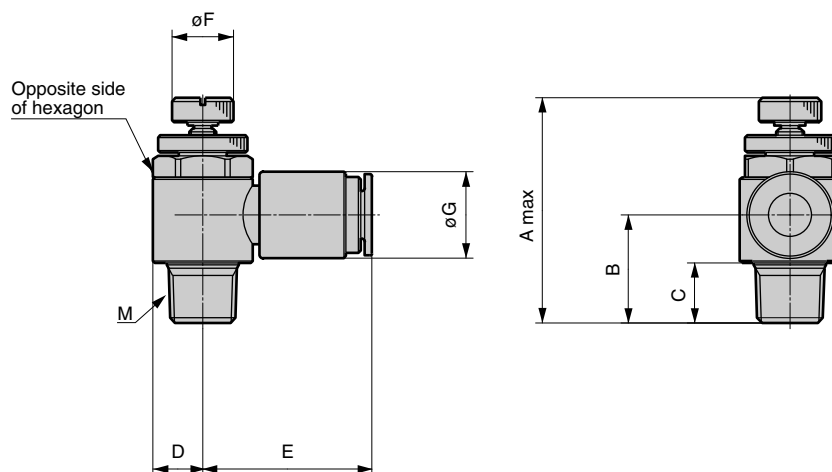


#### ● SC3W-M<sub>5</sub><sup>3</sup>-\*



Model no.	ød (Applicable tube O.D.)	M	A	B	C		D	E	F	G	K (tube insertion length)	Opposite side of hexagon
					MAX	MIN						
SC3W-M3-3	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	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	ø3.2	M5×0.8	3.4	12.4	30.2	27.2	9.6	6	7.5	16.0	11.7	8
SC3W-M5-4	ø4	M5×0.8	3.4	12.4	30.2	27.2	9.6	6	8.8	17.2	12.9	8
SC3W-M5-6	ø6	M5×0.8	3.4	12.4	30.2	27.2	9.6	6	10.8	18.8	14.0	8

#### ● SC3W-<sup>6</sup>/<sub>10</sub><sup>8</sup>-\* (as same as low speed type/standard (SC3W-6))



Model no.	M	Applicable tube O.D.	A	B	C	D	E	F	G	Opposite side of hexagon
SC3W-6-4	R1/8	ø4	38.4	16.2	8	7.3	23.1	9	10.0	13
SC3W-6-6		ø6	38.4	15.7	8	7.3	24.1	9	12.5	13
SC3W-6-8		ø8	38.4	15.4	8	7.3	25.3	9	14.5	13
SC3W-8-6	R1/4	ø6	51.2	24.9	11	9.5	27.2	12	13.8	17
SC3W-8-8		ø8	51.2	24.9	11	9.5	28.5	12	16.3	17
SC3W-8-10		ø10	51.2	23.9	11	9.5	32.0	12	19.3	17
SC3W-10-6	R3/8	ø6	52.4	23.1	12	11.3	28.3	14	12.5	19
SC3W-10-8		ø8	60.2	29.8	12	11.3	30.3	14	16.3	19
SC3W-10-10		ø10	60.2	30.0	12	11.3	33.8	14	19.3	19
SC3W-10-12		ø12	60.2	29.3	12	11.3	37.8	14	21.3	19
SC3W-15-10	R1/2	ø10	66.7	33.8	15	13.5	36.0	16	19.3	24
SC3W-15-12		ø12	66.7	33.8	15	13.5	40.0	16	21.3	24

Refrigerating  
type dryer  
Desiccant  
type dryer  
High polymer  
membrane  
type dryer  
Air filter  
Auto. drain  
/ others  
F.R.L.  
(Module unit)  
F.R.L.  
(Separate)  
Compact  
F.R.  
Precise  
regulator  
F.R.L.  
(Related  
products)  
Clean  
F.R.  
Electro  
pneumatic  
regulator  
Air  
booster  
Speed  
control valve  
Silencer  
Check valve  
/ others  
Joint  
/ tube  
Vacuum  
filter  
Vacuum  
regulator  
Suction  
plate  
Magnetic  
spring  
buffer  
Mechanical  
pressure SW  
Electronic  
pressure SW  
Contact / close  
contact cont.  
SW  
Air sensor  
Pressure SW  
for coolant  
Small  
flow sensor  
Small  
flow controller  
Flow sensor  
for air  
Flow sensor  
for water  
Total air  
system  
Total air  
system  
(Gamma)

Ending

Elbow type with push-in joint  
Speed control valve