

Speed controller, elbow with push-in fitting

SC3W Series

● Port size: M3, M5, R1/8 to R1/2

JIS symbol



Specifications

Item	SC3W																																	
	SC3W-M3		SC3W-M5			SC3W-6			SC3W-8			SC3W-10			SC3W-15																			
Compatible 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	1.0 (≈150 psi, 10 bar)																																	
Min. working pressure MPa	0.05 (≈7.3 psi, 0.5 bar)																																	
Proof pressure MPa	1.5 (≈220 psi, 15 bar)																																	
Fluid temperature °C	5 (41°F) to 60 (140°F) (no freezing. *3)																																	
Ambient temperature °C	0 (32°F) to 60 (140°F) (no freezing)																																	
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 value (needle position) (times)	10 (14) or more		10 (16) or more			10 (15) or more			13 or more			13 or more			14 or more																			
Free flow	Flow rate l/min(ANR)	27(20)		87(80)			210(210)			270(270)			270			470		500		530		650		1000		1100		1500		1600				
	Eff. X-sectional area mm ²	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	
	Eff. X-sectional area mm ²	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				

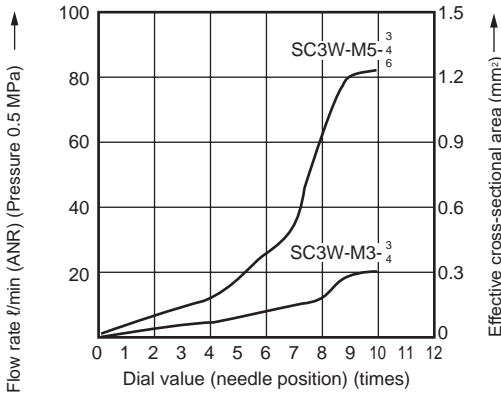
*1: Flow rate is the atmospheric pressure conversion value at pressure 0.5 MPa.

*2: Values in () indicate low speed.

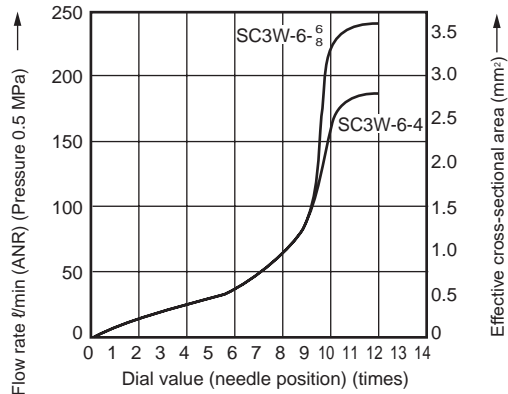
*3: Freezing may occur due to adiabatic expansion depending on the air quality (dew point).

Flow characteristics

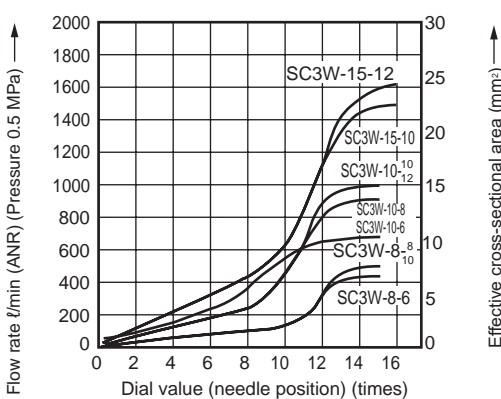
● Standard (port size M3, M5)



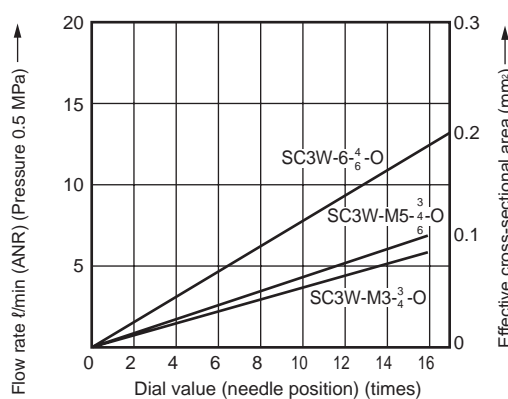
● Standard (port size 6)



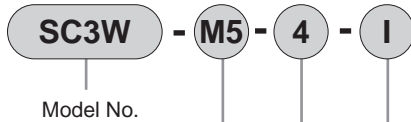
● Standard (port size 8, 10, 15)



● Low speed



How to order



A Port size

B Compatible tube O.D.

C Option *1
*2
*3

Code	Description
A Port size	
M3	M3x0.5
M5	M5x0.8
6	R1/8
8	R1/4
10	R3/8
15	R1/2
B Compatible tube O.D.	
	Piping size
	M3 M5 6 8 10 15
3	ø3.2 ● ●
4	ø4 ● ● ●
6	ø6 ● ● ● ●
8	ø8 ● ● ● ●
10	ø10 ● ● ● ●
12	ø12 ● ● ● ●
C Option	
Blank	Meter-out
I	Meter-in (Push ring color: black)
K	Hexagon lock nut
O	Low speed
P6	Copper and PTFE free specifications

Not available

⚠ Precautions for model No. selection

- *1: The options are listed in alphabetical order.
- *2: "K" can be selected for port sizes M3 and M5 only.
- *3: "O" can be selected for Compatible tube O.D. "4" (ø4), "6" (ø6) and port size M3, M5 and "6" (R1/8) only.

[Example of model No.]

SC3W-M5-4-I

- A** Port size : M5x0.8
- B** Compatible tube O.D.: ø4
- C** Option : meter-in

Ozone-proof specifications (Ending Page 9)

SC3W-.....- **P11**

Clean-room specifications (Catalog No. CB-033SA)

- Anti-dust generation structure for use in cleanrooms

SC3W-.....- **P7***

Specifications for rechargeable battery (Catalog No. CC-1226A)

- Structure compatible with rechargeable battery manufacturing process

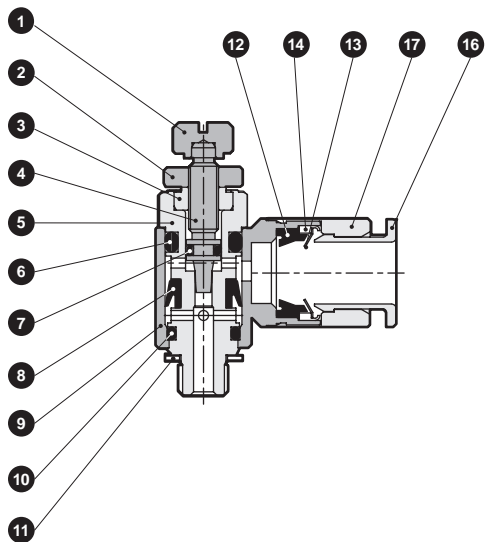
SC3W-.....- **P4**

- F.R.L.
- F.R.
- F (Filtr)
- R (Reg)
- L (Lub)
- Drain Separ
- Mech Press SW
- Res press exh valve
- SlowStart
- Anti-bac/Bac-remove Filtr
- Film Resist FR
- Oil-ProhR
- Med Press FR
- No Cu/ PTFE FRL
- Outdrs FRL
- Adapter Joiner Press Gauge
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- Speed Ctrl
- Silncr
- CheckV/ other
- Fit/Tube
- Nozzle
- Air Unit
- PrecsCompn
- Electro Press SW
- ContactSW
- AirSens
- PresSW Cool
- Air Flo Sens/Ctrl
- WaterRISens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Gas generator
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

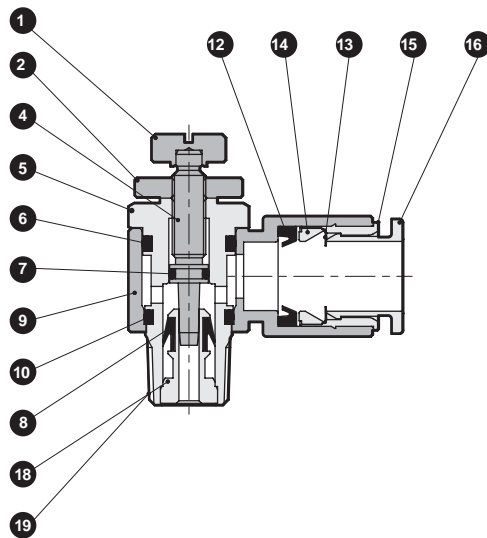
F.R.L. Internal structure and parts list

- F.R.
- F (Filtr)
- R (Reg)
- L (Lub)
- Drain Separ
- Mech Press SW
- Res press exh valve
- SlowStart
- Anti-bac/Bac-remove Filtr
- Film Resist FR
- Oil-ProhR
- Med Press FR
- No Cu/PTFE FRL
- Outdrs FRL
- Adapter Joiner
- Press Gauge
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- Speed Ctrl**
- Silncr**
- CheckV/other
- Fit/Tube
- Nozzle
- Air Unit
- PrecsCompn
- Electro Press SW
- ContactSW
- AirSens
- PresSW Cool
- Air Flo Sens/Ctrl
- WaterRiSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Gas generator
- RefrDry
- DesiccDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

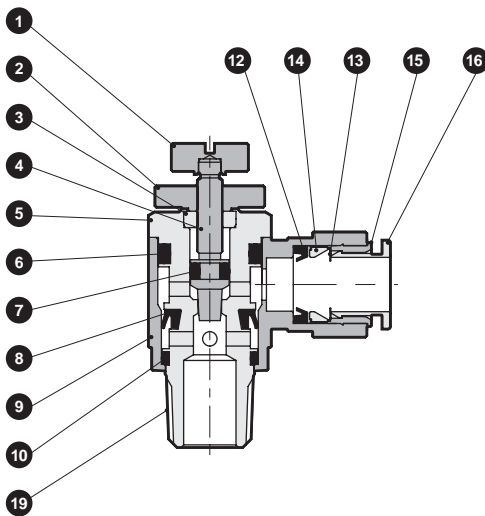
● Port size: M3, M5



● Port size: 6, 10 (φ6 only)



● Port size: 8, 10, 15



Part No.	Part name	Material	Part No.	Part name	Material
1	Knob	Brass	11	Gasket	Steel + nitrile rubber (M5 only)
2	Lock nut	Brass	12	Packing	Nitrile rubber
3	Gland nut	Brass	13	Chuck	Stainless steel
4	Needle	Stainless steel	14	Chuck holder	M3,M5 Brass R1/8 up polyether sulfone
5	Rotary shaft	Brass (M3, stainless steel)	15	Outer ring	Brass
6	O-ring	Nitrile rubber	16	Push ring	Polybutylene terephthalate (flame-resistant resin *2)
7	O-ring	Nitrile rubber	17	Fitting body	Copper alloy
8	Packing	Hydrogenated nitrile rubber	18	Check part	Brass
9	Rotor	Polybutylene terephthalate (flame-resistant resin *2)	19	Sealant	Fluorinated resin
10	O-ring	Nitrile rubber			

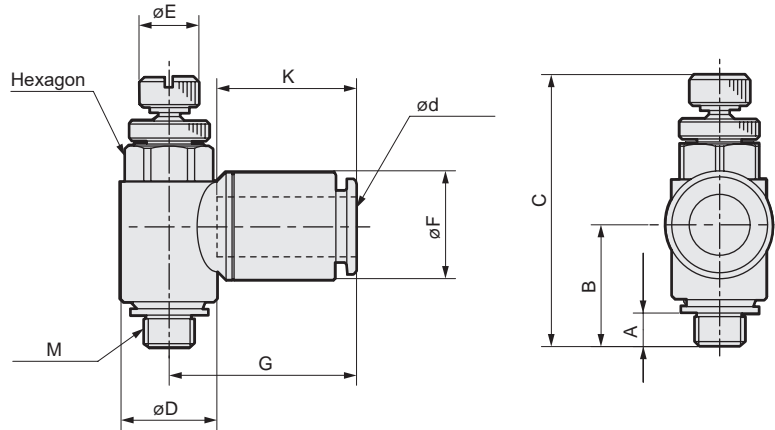
*1 All the brass parts have electroless nickel plating.

*2 UL94 Standards V-0 equivalent

Dimensions

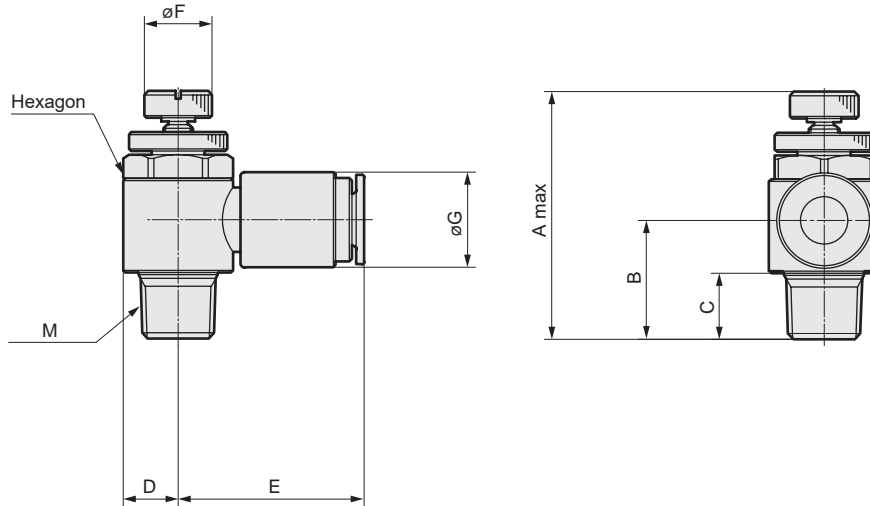


● SC3W-M ³/₅



Model No.	ød (Compatible tube O.D.)	M	A	B	C		D	E	F	G	K (tube insert length)	Hexagon
					MAX	MIN						
SC3W-M3-3	ø3.2	M 3 x 0.5	2.4	11.4	27.6	25.1	7.4	5	7.5	15.5	11.7	7
SC3W-M3-4	ø4	M 3 x 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	M 5 x 0.8	3.4	12.4	30.6	27.2	9.6	6	7.5	16.0	11.7	8
SC3W-M5-4	ø4	M 5 x 0.8	3.4	12.4	30.6	27.2	9.6	6	8.8	17.2	12.9	8
SC3W-M5-6	ø6	M 5 x 0.8	3.4	12.4	30.6	27.2	9.6	6	10.8	18.8	14.0	8

● SC3W- ⁶/₈/₁₀/₁₅ -* (same as low speed/standard (SC3W-6))



Model No.	M	Compatible tube O.D.	A	B	C	D	E	F	G	Hexagon
SC3W-6-4	R 1/8	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	R 1/4	ø6	51.2	25	11	9.5	26.7	12	13.8	17
SC3W-8-8		ø8	51.2	25	11	9.5	27.7	12	16.3	17
SC3W-8-10		ø10	51.2	24	11	9.5	30.5	12	19.3	17
SC3W-10-6	R 3/8	ø6	52.4	23.1	12	11.3	28.3	14	12.5	19
SC3W-10-8		ø8	60.2	30.0	12	11.3	29.4	14	16.3	19
SC3W-10-10		ø10	60.2	30.0	12	11.3	32.2	14	19.3	19
SC3W-10-12		ø12	60.2	29.3	12	11.3	35.4	14	21.3	19
SC3W-15-10	R 1/2	ø10	66.7	33.8	15	13.5	34.5	16	19.3	24
SC3W-15-12		ø12	66.7	33.8	15	13.5	37.7	16	21.3	24

- F.R.L.
- F.R.
- F (Filtr)
- R (Reg)
- L (Lub)
- Drain Separ
- Mech Press SW
- Res press exh valve
- SlowStart
- Anti-bac/Bac-remove Filtr
- Film Resist FR
- Oil-ProhR
- Med Press FR
- No Cu/ PTFE FRL
- Outdrs FRL
- Adapter Joiner
- Press Gauge
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- Speed Ctrl
- Silncr
- CheckV/ other
- Fit/Tube
- Nozzle
- Air Unit
- PrecsCompn
- Electro Press SW
- ContactSW
- AirSens
- PresSW Cool
- Air Flo Sens/Ctrl
- WaterRISens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Gas generator
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending