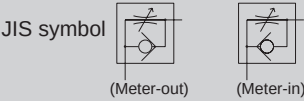




Speed controller/
universal with push-in fitting

SC3U Series

● Port size: M3, M5, R1/8 to R1/2



Features

- The piping direction can be set at any angle on the universal.
- Flame-resistant resin used
Flame-resistant PBT (UL94 Standards V-0 or equivalent) used as standard.
- The port threads are coated with fluorine-based resin sealant.

Specifications

Item		SC3U-M3			SC3U-M5			SC3U-6			SC3U-8			SC3U-10			SC3U-15	
Compatible tube O.D.mm		ø3.2	ø4		ø3.2	ø4	ø6	ø4	ø6	ø8	ø6	ø8	ø10	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		6.3	7.2		10	11	12	24	26	27	52	54	57	83	85	87	140	143
Dial value (needle position)		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	31			95			215			475			985			1500	
	ℓ/min(ANR)	(24)			(95)			(215)			(245)			(215)			(245)	
Controlled flow	Effective cross-sectional area	0.45			1.4			3.2			7			14.5			22	
	mm ²	(0.35)			(1.4)			(3.2)			(3.7)			(14.5)			(22)	
Controlled flow	Flow rate	34			95			190			440			950			1500	
	ℓ/min(ANR)	(5.4)			(9.5)			(17)			(17)			(17)			(17)	
Controlled flow	Effective cross-sectional area	0.5			1.4			2.8			6.5			14			22	
	mm ²	(0.08)			(0.14)			(0.25)			(0.25)			(0.25)			(0.25)	

*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).

How to order

SC3U - **M5** - **4** - **I**

Model No.

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.]

SC3U-M5-4-I

A Port size : M5 x 0.8

B Compatible tube O.D.: ø4

C Option : Meter-in

Ozone-proof specifications (made-to-order product)

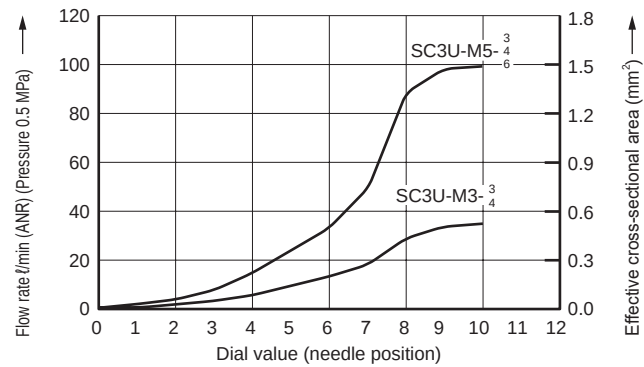
SC3U — — **P11**

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

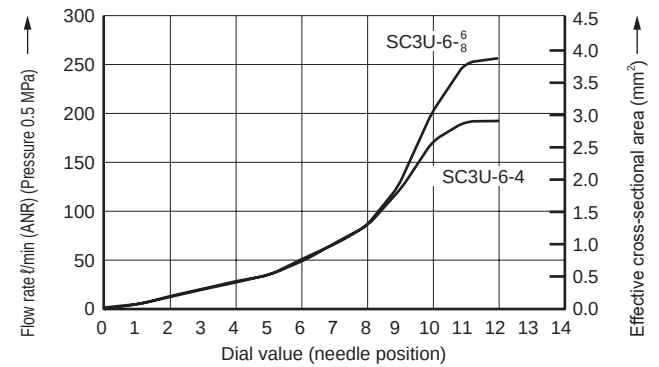
F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain Separ
Mech Press SW
Res press exh valve
SlowStart
Anti-bac/Bac- remove Filt
Film Resist FR
Oil-ProhR
Med Press FR
No Cu/ PTFE FRL
Outdrs FRL
Adapter Joiner
Press Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube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

Flow characteristics

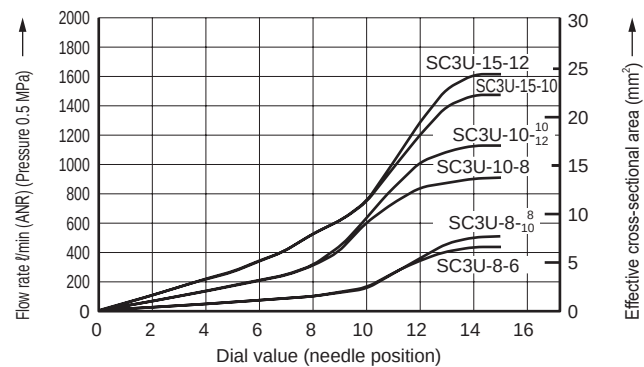
● Standard (port size M3, M5)



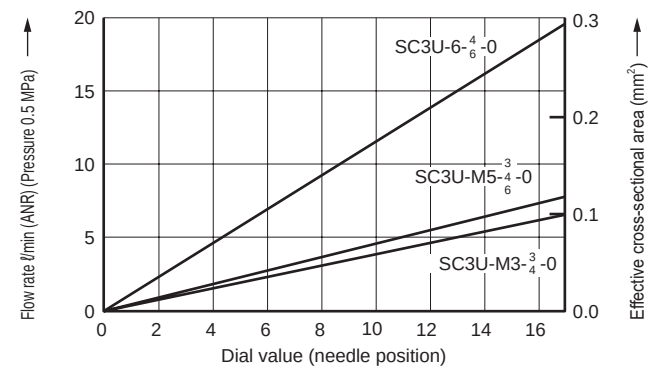
● Standard (port size 6)



● Standard (port size 8, 10, 15)

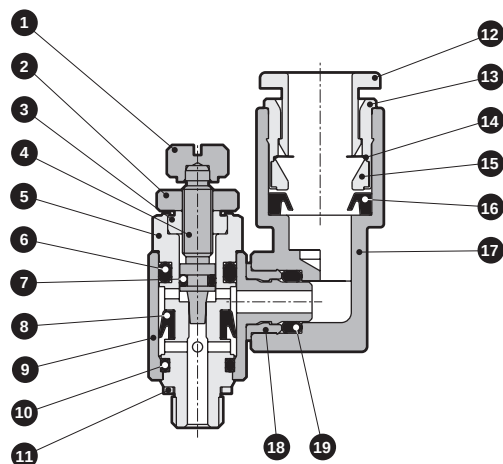


● Low speed

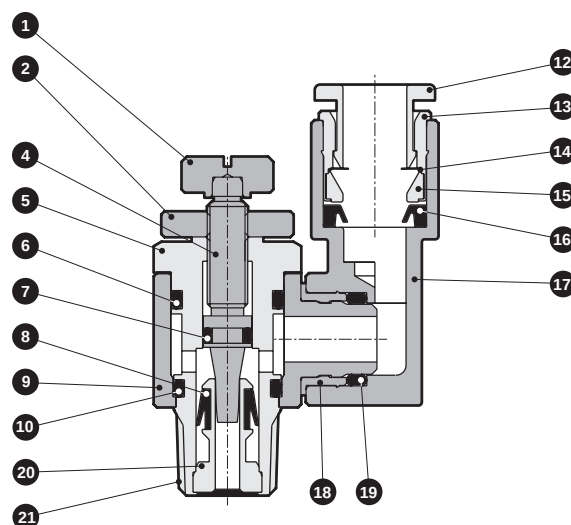


Internal structure and parts list

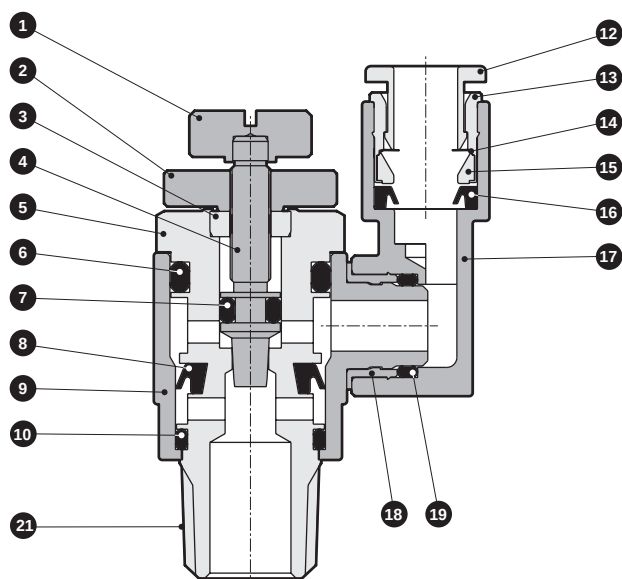
● SC3U- M3 M5



● SC3U-6-*



● SC3U- 8 10 -* 15



Part No.	Part name	Material	Part No.	Part name	Material
1	Knob	Brass	11	Gasket	Stainless steel + nitrile rubber
2	Lock nut	Brass	12	Push ring	Polybutylene terephthalate (flame-resistant resin *2)
3	Gland nut	Brass	13	Outer ring	Brass
4	Needle	Stainless steel	14	Chuck	Stainless steel
5	Rotary shaft	Brass (M3, stainless steel)	15	Chuck holder	Polyether sulfone (compatible tube O.D. ø3.2 is brass)
6	O-ring	Nitrile rubber	16	Packing	Nitrile rubber
7	O-ring	Nitrile rubber	17	Fitting body	Polybutylene terephthalate (flame-resistant resin *2)
8	V packing	Hydrogenated nitrile rubber	18	Stopper	Brass
9	Rotor	Polybutylene terephthalate (flame-resistant resin *2)	19	O-ring	Nitrile rubber
10	O-ring	Nitrile rubber	20	Check part	Brass
			21	Sealant	Fluorinated resin

*1 All the brass parts have electroless nickel plating.

*2 UL94 Standards V-0 equivalent

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

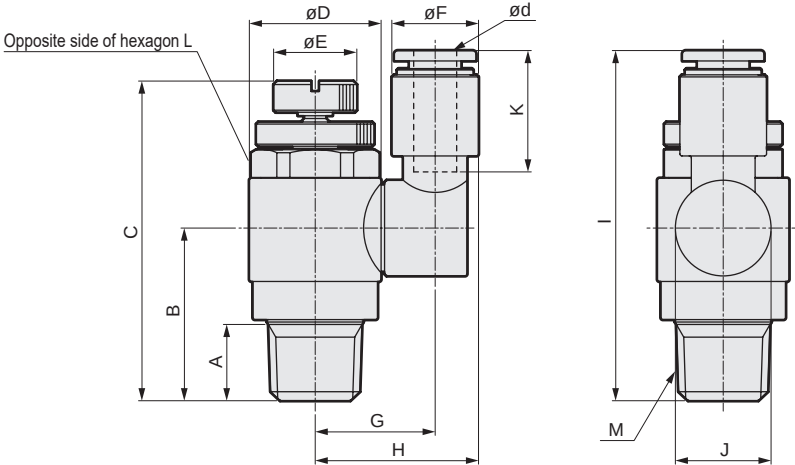
SC3U Series

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
WaterRtSens
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Gas
generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg
etc
Ending

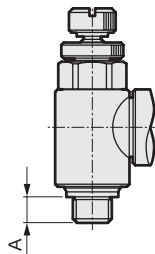
Dimensions



● SC3U-**-* (the dimensions are the same for the standard and low speed)



● Dimension A of SC3U-M3-M5



Code	ød (Tube O.D.)	M	A	B	C		D	E	F	G	H	I	J	K (tube insert leng)	L
Model No.					MAX	MIN									Hexagon
SC3U-M3-3	ø3.2	M3x0.5	2.4	11.4	28.5	26	7.4	5	8.5	10	14.3	28.9	9.8	12.5	7
SC3U-M3-4	ø4								10		15	32.5		16	
SC3U-M5-3	ø3.2	M5x0.8	3.4	12.4	30.8	27.8	9.6	6	8.5	11.1	15.4	30	9.8	12.5	8
SC3U-M5-4	ø4								10		16.1	33.5		16	
SC3U-M5-6	ø6								12.5		18.4	35		17.5	
SC3U-6-4	ø4	R1/8	8	15.4	39.2	33.4	14.5	9	10	14.5	19.5	39	13	16	13
SC3U-6-6	ø6								12.5	14.6	20.8	40.5		17.5	
SC3U-6-8	ø8								14.5	15.6	22.8	42		19	
SC3U-8-6	ø6	R1/4	11	24.9	51.2	46.1	19	12	12.5	17.3	23.6	50.5	13.8	17.5	17
SC3U-8-8	ø8								14.5	17.8	25.1	52		19	
SC3U-8-10	ø10								17.5	19.3	28.1	55.5		21.5	
SC3U-10-8	ø8	R3/8	12	29.8	60.2	53.1	22.5	14	14.5	19.6	26.8	57.9	16.7	19	19
SC3U-10-10	ø10								17.5	21.1	29.8	60.9		21.5	
SC3U-10-12	ø12								20	22.3	32.3	63.2		23	
SC3U-15-10	ø10	R1/2	15	33.8	66.7	59.1	27	16	17.5	23.3	32.1	65.9	18.8	21.5	24
SC3U-15-12	ø12								20	24.5	34.5	68.2		23	