



Discontinue

Flow control valve
Universal type / push in joint

SC3WU Series

• Port diameter: M3, M5, R1/8 to R1/2

JIS symbol



CAD DATA AVAILABLE.

Specifications

Descriptions		SC3WU															
		SC3WU-M3			SC3WU-M5			SC3WU-6			SC3WU-8			SC3WU-10			SC3WU-15
Applicable tube outer diameter mm		3.2 dia.	4 dia.	3.2 dia.	4 dia.	6 dia.	4 dia.	6 dia.	8 dia.	6 dia.	8 dia.	10 dia.	8 dia.	10 dia.	12 dia.	10 dia.	12 dia.
Working fluid		Compressed air															
Max. working pressure MPa		1.0															
Min. working pressure MPa		0.1															
Withstanding pressure MPa		1.5															
Fluid temperature °C		5 to 60 (to be unfrozen Note 3)															
Ambient temperature °C		0 to 60 (to be unfrozen)															
Port size		M3		M5			R1/8			R1/4			R3/8			R1/2	
Product mass g		6.9	7.7	13.2	14.0	15.0	25(15.5)	26(16.5)	35.5	31.5	40.5	63.0	48.5	68.5	86.0	87.0	104.0
Number of needle turn (cycle)		10 (14) and over		10 (16) and over			10 (10) and over			10 and over			12 and over	10 and over	12 and over	12 and over	
Free flow	Flow rate ℓ/min (ANR)	27 (20)		87 (80)			170(32)	230(32)	325	230	325	565	325	565	730	565	730
	Effective sectional area mm ²	0.4 (0.3)		1.3 (1.2)			2.6(0.5)	3.5(0.5)	5.0	3.5	5.0	8.7	5.0	8.7	11.2	8.7	11.2
Controlled flow	Flow rate ℓ/min (ANR)	20 (5.9)		80 (6.7)			135(13)	150(13)	310	150	310	530	310	530	735	530	735
	Effective sectional area mm ²	0.3 (0.08)		1.2 (0.1)			2.1(0.2)	2.3(0.2)	4.8	2.3	4.8	8.2	4.8	8.2	11.3	8.2	11.3

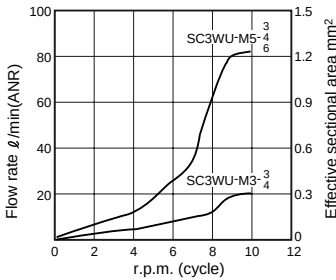
Note 1: Flow rate is the atmospheric pressure conversion at 0.5MPa.

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

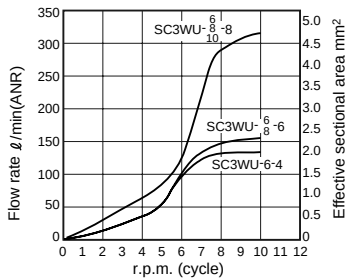
Note 3: Could be frozen by adiabatic expansion depending on air quality (dew point).

Flow characteristics

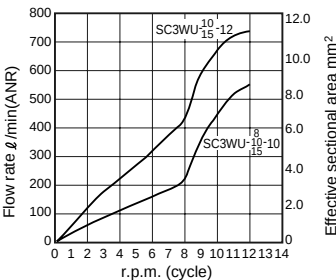
- Standard type (piping size M3, M5)



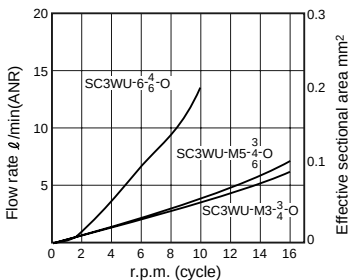
- Standard type (Applicable tube outer diameter: 4, 6, 8 dia.)



- Standard type (Applicable tube outer diameter: 10, 12 dia.)



- Low speed type



How to order



Model

A Piping size

B Applicable tube outer diameter

C Option
Note 1
Note 2
Note 3

Note on model No. selection

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

[Example of model number]

SC3WU-M5-4-I

- A Piping size : M5 X 0.8
B Applicable tube outer diameter: 4 dia.
C Option : Meter in

Symbol	Descriptions						
A Piping size							
M3	M3 X 0.5						
M5	M5 X 0.8						
6	R1/8						
8	R1/4						
10	R3/8						
15	R1/2						
B Applicable tube outer diameter							
		Piping size					
		M3	M5	6	8	10	15
3	3.2 dia.	●	●				
4	4 dia.	●	●	●			
6	6 dia.		●	●	●		
8	8 dia.			●	●	●	
10	10 dia.				●	●	●
12	12 dia.					●	●
C Option							
Blank	Meter out						
I	Meter in (Push ring color: Black)						
K	Hexagon head lock nut						
O	Low speed type						
P6	Copper and PTFE free						

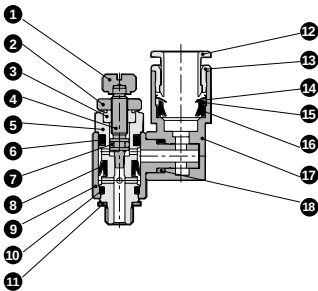
not available.

- Refrigerating type dryer
Desiccant type dryer
High polymer membrane dryer
Air filter
Automatic drain other
F.R.L (Module)
F.R.L (Separate)
Small F.R.
Precise R.
Electro pneumatic R.
Auxiliary
Flow control valve
Silencer
Check valve / others
Joint / tube
Vacuum F.
Vacuum R.
Vacuum generator
Vacuum auxiliary / pad
Mechanical pressure SW
Electronic pressure SW
Electronic dif. pres. SW
Sealing / close contact conf. SW
Pressure SW for coolant
Flow sensor for air
Total air system
Water cooling refrigerator
Flow sensor for water

Flow control valve
Universal type / push in joint

Internal structure and parts list

• Port size: M3, M5

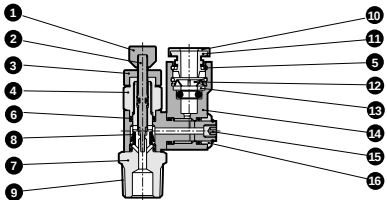
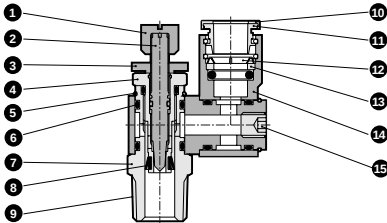


No.	Parts name	Material	No.	Parts name	Material
1	Knob	Brass (electroless nickeling)	10	O ring	Nitrile rubber
2	Lock nut	Brass (electroless nickeling)	11	Gasket	Iron + nitrile rubber
3	Gland nut	Brass (electroless nickeling)	12	Push ring	PBT (flame resistance resin*)
4	Needle	Stainless steel	13	Outer ring	Brass (electroless nickeling)
5	Rotary shaft	Brass (electroless nickeling) (stainless steel for M3)	14	Chuck	Stainless steel
6	O ring	Nitrile rubber	15	Chuck holder	Brass (electroless nickeling)
7	O ring	Nitrile rubber	16	Packing seal	Nitrile rubber
8	V packing seal	Nitrile rubber	17	Joint main body	Copper alloy (electroless nickeling)
9	Rotation body	PBT (flame resistance resin*)	18	O ring	Nitrile rubber

*Equivalent to UL94 standards V-O

• Port size: R1/8 to R1/2

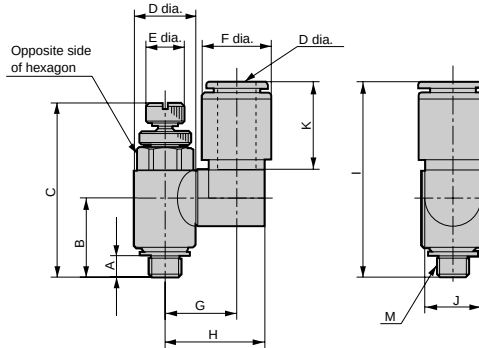
• Port size: R1/8, low speed type



No.	Parts name	Material	No.	Parts name	Material
1	Knob	Brass (electroless nickeling)	11	Push ring	Zinc alloy die casting
2	Needle	Brass (electroless nickeling)	12	Lock ring	Milled copper
3	Lock nut	Brass (electroless nickeling)	13	Stop washer	Brass
4	Shaft bearing	Brass (electroless nickeling)	14	Body	Polyacetal resin
5	Stop ring	Stainless steel	15	Set screw	Stainless steel
6	O ring	Nitrile rubber	16	Collar	Brass (electroless nickeling)
7	Adaptor	Brass (electroless nickeling)			
8	Packing seal	Nitrile rubber			
9	Sealant	Fluorine system resin			
10	Display ring	Polyacetal resin			

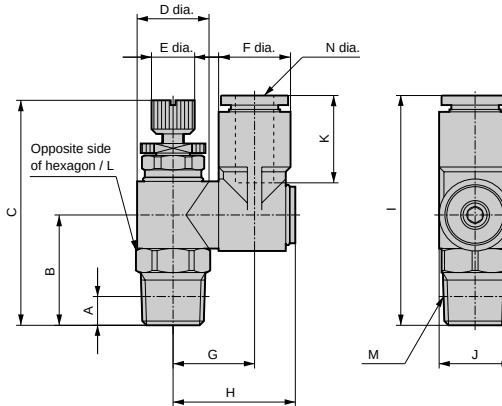
Dimensions

- SC3WU-M $\frac{3}{5}$ -*  (File name: Page 625 or Ending 21)



Model No.	d dia. (Tube O.D.)	M	A	B	C		D	E	F	G	H	I	J	K (tube inser. length)	Opposite side of hexagon
					MAX	MIN									
SC3WU-M3-3	3.2 dia.	M3 X 0.5	2.4	11.4	27.6	25.1	7.4	5	6.9	9.3	12.8	27.2	6.8	8.0	7
SC3WU-M3-4	4 dia.	M3 X 0.5	2.4	11.4	27.6	25.1	7.4	5	7.9	9.3	13.3	28.3	7.0	12.9	7
SC3WU-M5-3	3.2 dia.	M5 X 0.8	3.4	12.4	30.2	27.2	9.6	6	7.8	11.2	15.6	28.0	8.8	11.5	8
SC3WU-M5-4	4 dia.	M5 X 0.8	3.4	12.4	30.2	27.2	9.6	6	8.8	11.2	15.6	29.0	8.8	12.5	8
SC3WU-M5-6	6 dia.	M5 X 0.8	3.4	12.4	30.2	27.2	9.6	6	10.8	11.2	15.6	30.6	8.8	13.7	8

- SC3WU- $\frac{8}{10}$ -*  (File name: Page 625 or Ending 21)



Model No.	N dia. (Tube O.D.)	M	A	B	C		D	E	F	G	H	I	J	K (tube inser. length)	L Opposite side of hexagon
					MAX	MIN									
SC3WU-6-4	4 dia.	R1/8	4	19.0	44.4	41.3	13	9.0	13	14.5	22.0	41.3	13	15.0	12
SC3WU-6-6	6 dia.			19.0	44.4	41.3	13	9.0	13	14.5	22.0	41.4	13	16.5	12
SC3WU-6-8	8 dia.	R1/4	6	20.0	48.9	43.9	15	9.0	15	17.0	25.5	44.9	15	17.5	14
SC3WU-8-6	6 dia.			22.0	47.4	44.3	13	9.0	13	14.5	22.0	44.4	13	16.5	14
SC3WU-8-8	8 dia.			23.0	51.9	46.9	15	9.0	15	17.0	25.5	47.9	15	17.5	14
SC3WU-8-10	10 dia.			24.5	56.8	50.8	18	11.5	17	20.2	30.9	51.8	18	18.5	17
SC3WU-10-8	8 dia.	R3/8	6.4	24.0	52.9	47.9	15	9.0	15	17.0	25.5	48.9	15	17.5	17
SC3WU-10-10	10 dia.			25.5	57.8	51.8	18	11.5	17	20.2	30.9	52.8	18	18.5	17
SC3WU-10-12	12 dia.	R1/2	8	26.5	63.5	54.5	21	13.0	20	21.7	32.9	56.3	21	19.5	19
SC3WU-15-10	10 dia.			29.5	61.8	55.8	18	11.5	17	20.2	30.9	56.8	18	18.5	21
SC3WU-15-12	12 dia.			30.5	67.5	58.5	21	13.0	20	21.7	32.9	60.3	21	19.5	21

Refrigerating
type dryer

Desiccant
type dryer

High polymer
membrane
dryer

Air filter

Automatic
drain
other

F.R.L.
(Module)

F.R.L.
(Separate)

Small
F.R.

Precise
R.

Electro
pneumatic R.

Auxiliary

Flow control
valve

Silencer

Check valve
/ others

Joint
/ tube

Vacuum
F.

Vacuum
R.

Vacuum
generator

Vacuum
auxiliary
/ pad

Mechanical
pressure SW

Electronic
pressure SW

Electronic
dif. pres.
SW

Sealing / close
contact conf.
SW

Pressure SW
for coolant

Flow sensor
for air

Total air
system

Water
cooling
refrigerator

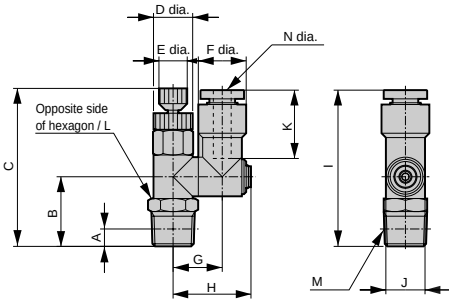
Flow sensor
for water

Flow control valve

Universal type / push in joint

Dimensions

• SC3WU-6-⁴/₆ low speed type  (File name: Page 625 or Ending 21)

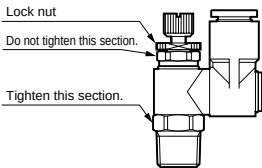


Model No.	N dia. (Tube O.D.)	M	A	B	C		D	E	F	G	H	I	J	K (tube insertion length)	L Opposite side of hexagon
					MAX	MIN									
SC3WU-6-4-O	4 dia.	R1/8	4	16.0	39.8	36.3	9	6.5	11	11.3	17.9	35.9	9	15.0	10
SC3WU-6-6-O	6 dia.								13	12.3		38.4		16.5	

 Caution

• Precautions

- For installation, apply the adequate tool on the hexagon head section of body to fix. The hexagon head section under lock nut is only used to assemble the product, so if this section is tighten, the product may be damaged.



(Universal type R1/8 to R1/2)

• Precautions for piping

- When piping or inserting tube, remove swarf and foreign matter, etc. at first.
- Refer to the table below for recommended tightening torque of lock nut. Care must be taken for damage caused by excessive tightening.

Lock nut recommended tightening torque

Thread size	Tightening torque (N·m)
M3	0.1
M5	0.3
1/8	0.8
1/4	1.4
3/8	2.5
1/2	4.0

- For universal type size R1/8 to R1/2, its plastic parts such as the body, and the display ring, etc. is not flame resistant. Do not use this product where spatters, etc. directly contact, or causing a danger of fire.