

Flow control valve, medium port size type

SC1 Series

Light weight enables disassembly in piped state

● Port size: Rc1/8 to Rc1/2

JIS symbol



Refer to a file list on Ending 84.

Structure and materials restriction

	Structure	Material restriction			Model No.
P7 series	Particle occurrence prevention				- P70
	Particle occurrence prevention	Copper-based unacceptable	Silicon-based unacceptable	Halogen-based unacceptable (fluorine, chlorine, oxalic)	- P74

Specifications

Descriptions		SC1-6	SC1-8	SC1-10	SC1-15
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 (to be unfrozen. Note 2)			
Ambient temperature °C		0 to 60 (to be unfrozen.)			
Port size Rc		1/8	1/4	3/8	1/2
Product mass g		100	95	205	195
Applicable cylinder bore size mm		φ20 to φ50	φ32 to φ75	φ50 to φ140	φ80 to φ160
Number of needle turn		10	10	10	10

Free flow	Flow rate ℓ/min(ANR)	730	930	2600	2900
	Effective sectional area mm ²	11	14	39	43
Controlled flow	Flow rate ℓ/min(ANR)	530	870	1500	2400
	Effective sectional area mm ²	8	13	22	36

Note 1: The flow rate is the atmospheric pressure conversion value at a 0.5MPa pressure.

Note 2: Depending on the air quality (dew point), the product could freeze due to adiabatic expansion.

How to order

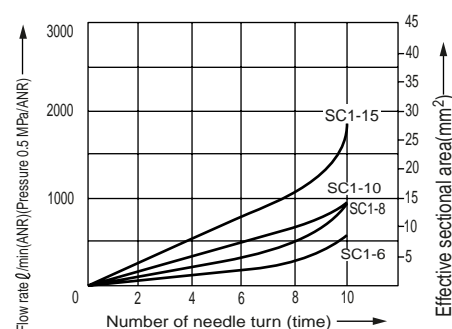
SC1 - 6 - P70

A Port size

B Clean room specifications

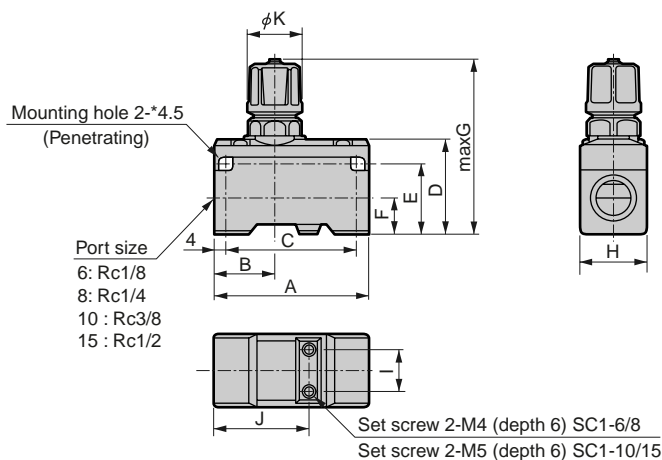
Symbol	Descriptions	
A Port size		
6	Rc1/8	
8	Rc1/4	
10	Rc3/8	
15	Rc1/2	
B Clean room specifications		
	Structure/treatment	Material restriction
P70	Particle occurrence prevention	-
P74	Particle occurrence prevention	Copper-based, silicon-based, halogen-based (fluorine, chlorine, oxalic) unacceptable

Flow characteristics



Dimensions

SC1-^{*}-P7^{*}



Model No.	A	B	C	D	E	F	G	H	I	J	K
SC1-6/8-P7 [*]	50	20	42	31	23	11	67	22	12	31	19
SC1-10/15-P7 [*]	63	21	55	40	31	15	83	30	18	37	23

⚠ Precautions

- Note that vibration sound will be generated easily when using in a low pressure range (0.05MPa or less), when the front/back pipes, etc., are drastically restricted, when the cylinder speed is fast, or when the differential pressure is low.
- Take care not to tighten the needle and lock nuts excessively.
(Tightening torque approx. 3N·m)

SCPD2

SCM

MDC2

SMD2

SSD

STS/L

LCS

STR2

MRL2

GRC

Cylinder
switch

KBA

MN4E0

4GA/B

M4GA/B

MN4GA/B

F.R.
(Module unit)

Clean F.R.

Precision
regulator

Pressure/
Differential
pressure gauge

Electro
pneumatic
regulator

Flow control
valve

Auxiliary
valve

Joint/
tube

Pressure
sensor

Flow
sensor

Valve for
air blow