

Specialized for JCQ/JMGP

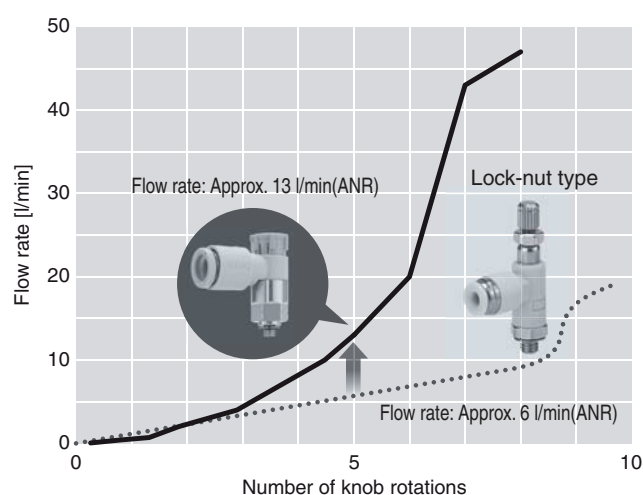
Speed Controller with One-touch Fitting Elbow Type for M3

RoHS



M3 port size added!

● Flow rate doubled



● Large knob: $\varnothing$ 9.4 mm

● Thread material: Stainless steel

Two of the applicable actuators

Compact Cylinder JCQ Series
 $\varnothing$ 12, $\varnothing$ 16

Compact Guide Cylinder JMGP Series
 $\varnothing$ 12, $\varnothing$ 16



⚠ Caution

The flow rate and overall length are different from those of the current lock-nut type speed controller. Please be careful when replacing the lock-nut type controllers.

Model

Model	Port size	Seal method	Applicable tubing O.D.					
			Metric size				Inch size	
			2*1	3.2	4	6	1/8"	5/32"
AS12□1F-M3-□A-X790	M3 x 0.5	Gasket seal	●	●	●	●	●	●

*1: Only polyurethane tubing is applicable for $\varnothing$ 2.

Flow Direction Symbols on Body

	Meter-out	Meter-in
Symbol		

⚠ Caution

Be sure to read this before handling products. For safety instructions and flow control equipment precautions, refer to the "Handling Precautions for SMC Products" and the "Operation Manual" on the SMC website: <http://www.smc.eu>

Specifications

Fluid	Air
Proof pressure	1.5 MPa
Max. operating pressure	1 MPa
Min. operating pressure	0.1 MPa
Ambient and fluid temperature	-5 to 60 °C (No freezing)
Applicable tubing material	Nylon, Soft nylon, Polyurethane*1, FEP, PFA

*1: Use caution at the max. operating pressure when using soft nylon or polyurethane tubing. (Refer to the catalogue on www.smc.eu)

Flow Rate and Sonic Conductance

Model		AS12□1F-M3-□
Tubing O.D.	Metric size	$\varnothing$ 2, $\varnothing$ 3.2 $\varnothing$ 4, $\varnothing$ 6
C values: Sonic conductance dm ³ /(s·bar)	Free flow	0.07
	Controlled flow	0.07
b values: Critical pressure ratio	Free flow	0.3
	Controlled flow	0.2

*: C and b values are for controlled flow with the needle fully open and free flow with the needle fully closed.

AS12□1F-M3-□A-X790



15-EU668-UK

AS12□1F-M3-□A-X790

For M3



How to Order

Body size 1

AS 1 2 0 1 F - M3 - 06 A - X790

Body size

1	M3 x 0.5
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Type

2	Elbow
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Control type*1

0	Meter-out
1	Meter-in

*1: Meter-out and meter-in types can be visually identified by the colour of the knob.
Meter-out: Grey
Meter-in: Light blue

Port size

M3	M3 x 0.5
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Push-lock type

Applicable tubing O.D.*1

Metric size	Inch size
02	Ø 2
23	Ø 3.2*2
04	Ø 4
06	Ø 6

*1: For selecting applicable tubing O.D., refer to the model on the cover page.

Metric size and inch size types can be visually identified by the colour of the release button.

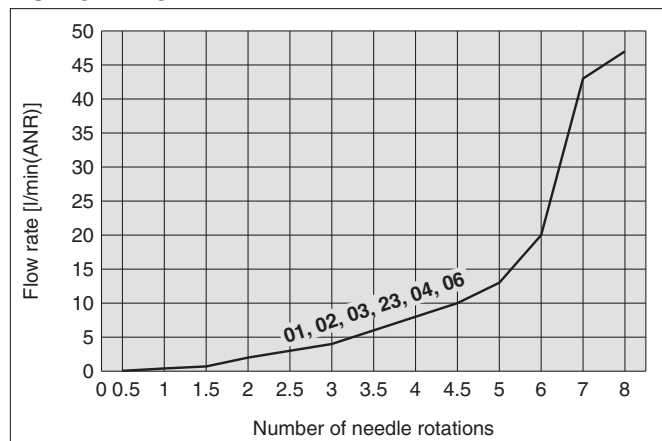
Metric size: Light grey

Inch size: Orange

*2: Use Ø 1/8" tubing.

Needle Valve/Flow Rate Characteristics

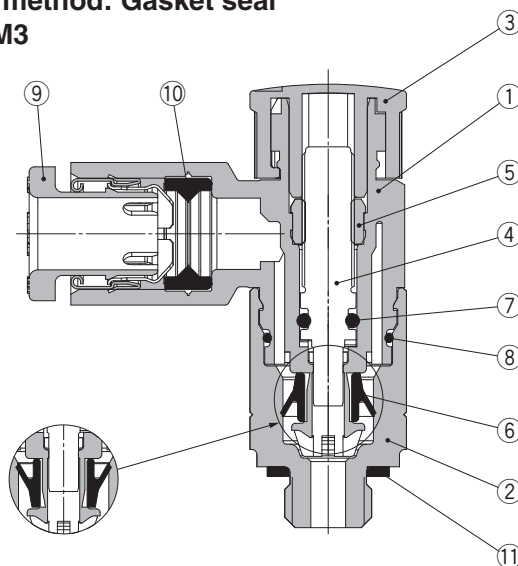
AS1201F-M3-□



*: The numbers above the flow rate characteristic curves in the chart show the applicable tubing outside diameter as defined by the product number.

Construction

Seal method: Gasket seal
For M3



Meter-in type

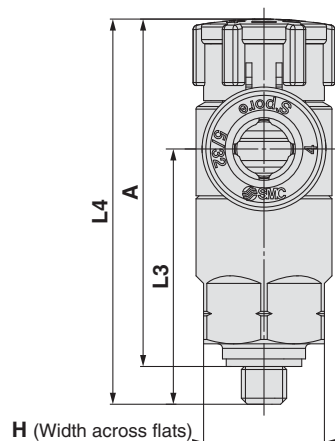
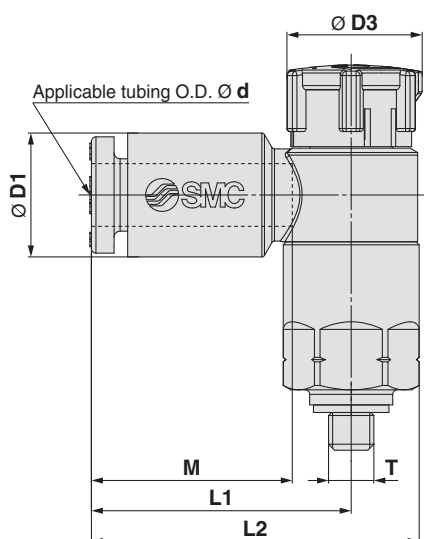
Meter-out type

Component Parts

No.	Description	Material	Note
1	Body A	PBT	
2	Body B	Stainless steel	
3	Knob	POM	
4	Needle	PBT	
5	Needle guide	Brass	Electroless nickel plating
6	U-seal	HNBR	
7	O-ring	NBR	
8	O-ring	NBR	
9	Cassette	—	
10	Seal	NBR	
11	Gasket	NBR/Stainless steel	IN-233-497-1

Dimensions

Seal method: Gasket seal
For M3



Metric Size/Inch Size

Model	d	T	H	D1	D3	L1	L2	L3	L4*1		A*2		M	Weight [g]
									Unlocked	Locked	Unlocked	Locked		
AS12□1F-M3-02A-X790	2	M3 x 0.5	8	5.8	9.4	15.8	20.3	16.9	26.5	25.4	23.5	22.4	11.9	5
AS12□1F-M3-23A-X790	3.2			7.2		17.2	21.7							
AS12□1F-M3-04A-X790	4			8.2		18.6	23.1						6	
AS12□1F-M3-06A-X790	6			10.4		17.2	21.7							
AS12□1F-M3-01A-X790	1/8"			7.2										
AS12□1F-M3-03A-X790	5/32"			8.2										

*1: Reference dimensions

*2: Reference dimensions of threads after installation



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