

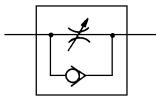
Metal Knob

Speed Controller with One-touch Fitting Elbow Type

RoHS

- Knob material changed from resin to metal
- Applicable tubing O.D.: $\varnothing 4$, $\varnothing 6$, $\varnothing 8$, $\varnothing 10$, $\varnothing 12$

Symbol



Flow Direction Symbols on Body

	Meter-out type	Meter-in type
Indication symbol		
Symbol		



Related Product

Metal Knob In-line Type

Applicable tubing O.D.:
 $\varnothing 3.2$, $\varnothing 4$, $\varnothing 6$, $\varnothing 8$, $\varnothing 10$, $\varnothing 12$



* Please contact SMC for details.

Model

Model	Port size	Applicable tubing O.D.				
		Metric size				
		4	6	8	10	12
AS12□1F-M5-X242-J	M5 x 0.8	●	●			
AS22□1F-01-X242-J	R1/8	●	●	●	●	
AS22□1F-02-X242-J	R1/4	●	●	●	●	
AS32□1F-03-X242-J	R3/8		●	●	●	●
AS42□1F-04-X242-J	R1/2				●	●

Specifications

Specifications not listed are the same as those of the standard product.
For details, refer to the [Web Catalog](#).

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

*1 Use caution when operating at the max. operating pressure when using soft nylon or polyurethane tubing. (Refer to the [Web Catalog](#) for details on tubing.)

* Brass parts are electroless nickel plated.

AS-X242-J



19-E708

AS-X242-J

How to Order



AS 2 2 0 1 F - 01 - 06 S - X242 - J

Body size

1	M5 x 0.8
2	1/8, 1/4
3	3/8
4	1/2

Type

2	Elbow
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Control type

0	Meter-out
1	Meter-in

* Meter-out and meter-in types can be visually identified by the lock nut.
Meter-out: Electroless nickel plating
Meter-in: Black zinc chromate plating

Port size

M5	M5 x 0.8
01	R1/8
02	R1/4
03	R3/8
04	R1/2

Applicable tubing O.D.*1

04	ø4
06	ø6
08	ø8
10	ø10
12	ø12

Lock nut

J	Round lock nut
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Metal knob

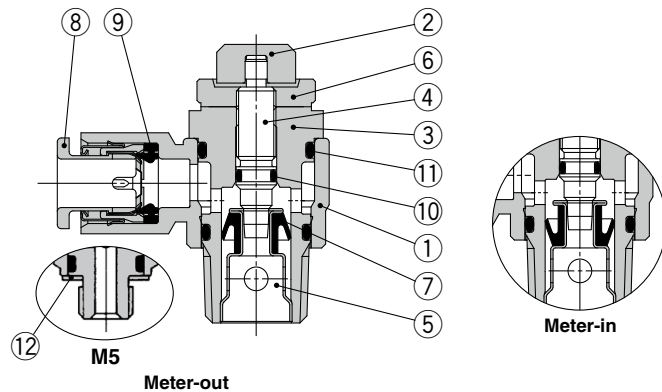
Seal method

S	With sealant (AS22□1F to AS32□1F)
SN	With sealant (AS42□1F only)

* The M5 is not available with sealant.

*1 To select the applicable tubing O.D., refer to the "Model" chart on the cover page.

Construction

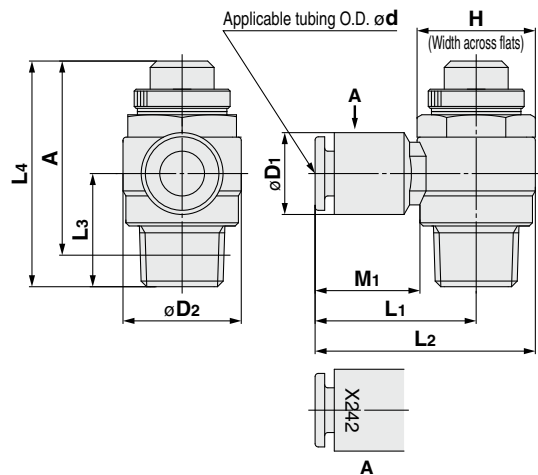


Component Parts

No.	Description	Material	Note
1	Body A	PBT	
2	Knob	Brass	Electroless nickel plating
3	Body B	Brass	Electroless nickel plating
4	Needle	Brass	Electroless nickel plating
5	Seat ring	Brass	Electroless nickel plating
6	Lock nut	Brass*1	Meter-out: Electroless nickel plating Meter-in: Black zinc chromate plating
7	U-seal	HNBR	
8	Cassette	—	
9	Seal	NBR	
10	O-ring	NBR	
11	O-ring	NBR	
12	Gasket	NBR/Stainless steel	*2

*1 Steel for the AS22□1F *2 Only applicable to the AS12□1F-M5

Dimensions



Model	Applicable tubing O.D. d	T	H	D1	D2	L1	L2	L3	L4*1		A*2		M1	Weight [g]
									Max.	Min.	Max.	Min.		
AS12□1F-M5-04-X242-J	4	M5 x 0.8	8	9.3	9.6	17.3	22.1	12.3	28.6	25.8	25	22.2	12.7	7.5
AS12□1F-M5-06-X242-J	6		8	11.6	9.6	18.1	22.9	11.7	28.6	25.8	25	22.2	13.5	7.5
AS22□1F-01-04S-X242-J	4		12	9.3	14.2	20.4	27.5	13.4	35.2	30.2	32.1	27.1	12.7	18.5
AS22□1F-01-06S-X242-J	6		12	11.6	14.2	20.4	27.5	13.4	35.2	30.2	32.1	27.1	13.5	18.5
AS22□1F-01-08S-X242-J	8	R1/8	12	15.2	14.2	25.3	32.4	13.4	35.2	30.2	32.1	27.1	18.5	20.5
AS22□1F-01-10S-X242-J	10		12	18.5	14.2	32.1	39.2	14.1	35.2	30.2	32.1	27.1	21	22.5
AS22□1F-02-04S-X242-J	4		17	10.4	18.5	25.2	34.4	17.7	39.9	34.9	34.4	29.4	16	34.5
AS22□1F-02-06S-X242-J	6		17	12.8	18.5	25.2	34.4	17.7	39.9	34.9	34.4	29.4	17	34.5
AS22□1F-02-08S-X242-J	8	R1/4	17	15.2	18.5	27.2	36.4	17.7	39.9	34.9	34.4	29.4	18.5	36.4
AS22□1F-02-10S-X242-J	10		17	18.5	18.5	35.3	44.5	18.3	39.9	34.9	34.4	29.4	21	38.5
AS32□1F-03-06S-X242-J	6		19	12.8	23	27.8	39.3	19.8	45.4	40.4	40.2	35.2	17	58
AS32□1F-03-08S-X242-J	8		19	15.2	23	29.5	41	19.8	45.4	40.4	40.2	35.2	18.5	60
AS32□1F-03-10S-X242-J	10	R3/8	19	18.5	23	31.8	43.3	19.8	45.4	40.4	40.2	35.2	21	62
AS32□1F-03-12S-X242-J	12		19	20.9	23	32.8	44.3	19.8	45.4	40.4	40.2	35.2	22	64
AS42□1F-04-10SN-X242-J	10		24	18.5	28.6	33.6	47.9	24.5	56.7	49.2	49.6	42.1	21	106.5
AS42□1F-04-12SN-X242-J	12		24	21.7	28.6	35.2	49.5	24.5	56.7	49.2	49.6	42.1	22	106.5

*1 Reference dimensions *2 Reference dimensions of threads after installation

Caution

Be sure to read this before handling the 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: <https://www.smcworld.com>

Safety Instructions Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) and "Operation Manual" before use.