

Series AS-FS

How to Order



Body size

1	M5 x 0.8 10-32UNF
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Port size

M5	M5 x 0.8
U10/32	10-32UNF

Applicable tubing O.D. Note 1)

Metric size		Inch size	
02	ø2	01	ø1/8"
23	ø3.2 Note 2)	03	ø5/32"
04	ø4	07	ø1/4"
06	ø6		

Note 1) For selecting applicable tubing O.D., refer to Series Variations (Features 1). Metric size and inch size types can be visually identified by color of the release button.

Metric size: Light gray
Inch size: Orange

Note 2) Use ø1/8" tube.

Body size 1

AS 1 2 0 1F S - M5 - 06

Body size 2/3/4

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

Body size

2	1/8, 1/4
3	3/8
4	1/2

With indicator

Seal method

Nil	Without sealant
S	With sealant

Elbow

Control type Note)

0	Meter-out
1	Meter-in

Note) Meter-out and meter-in types can be visually identified by color of the handle.

Meter-out: Gray
Meter-in: Light blue

Indicator direction

Nil	0°	
1	180°	

Note) Orientation of indicator direction is fixed when manufacturing, and cannot be changed by the user.

Applicable tubing O.D. Note 1)

Metric size		Inch size	
23	ø3.2 Note 2)	01	ø1/8"
04	ø4	03	ø5/32"
06	ø6	07	ø1/4"
08	ø8	09	ø5/16"
10	ø10	11	ø3/8"
12	ø12	13	ø1/2"
16	ø16		

Note 1) For selecting applicable tubing O.D., refer to Series Variations (Features 1).

Note 2) Use ø1/8" tube.

Port size

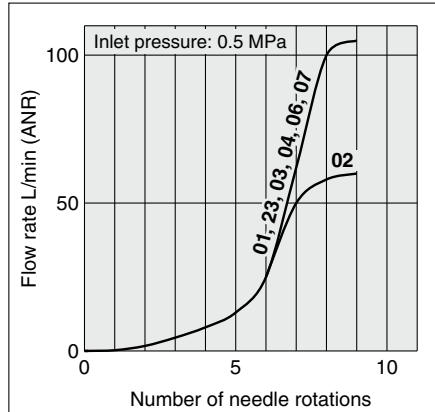
01	1/8
02	1/4
03	3/8
04	1/2

Thread type

Nil	R
N	NPT

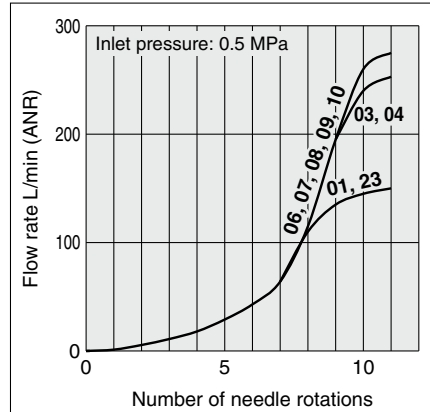
Needle Valve/Flow-rate Characteristics

AS1201FS-M5, AS1211FS-M5

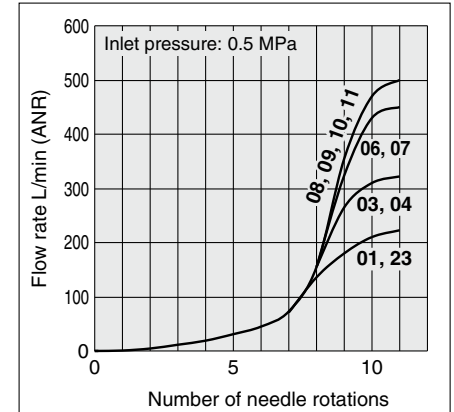


Note) -U10/32 has the same specification as M5.

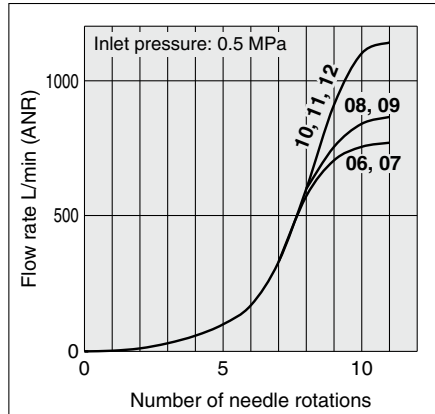
AS2201FS-01, AS2211FS-01



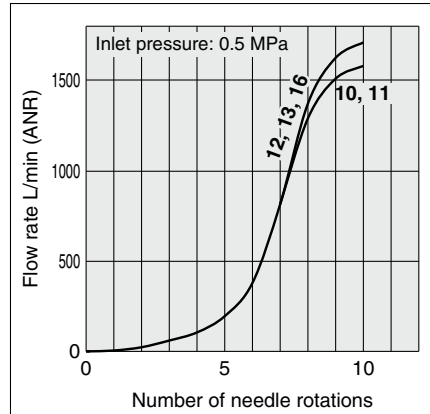
AS2201FS-02, AS2211FS-02



AS3201FS-03, AS3211FS-03



AS4201FS-04, AS4211FS-04



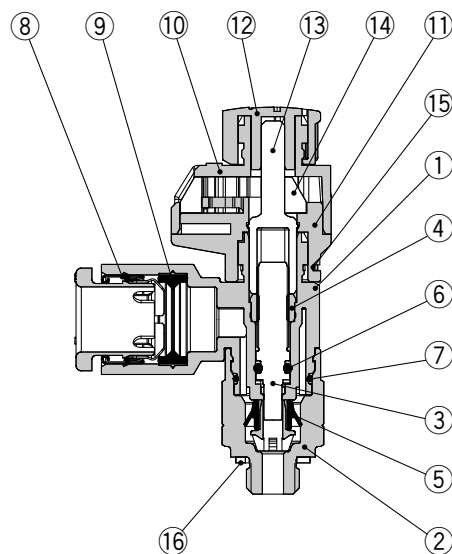
Note) The numbers above the flow-rate characteristic curves in the charts show the applicable tubing outside diameter as defined by the product number.

Series AS-FS

Construction

Seal method: Gasket seal

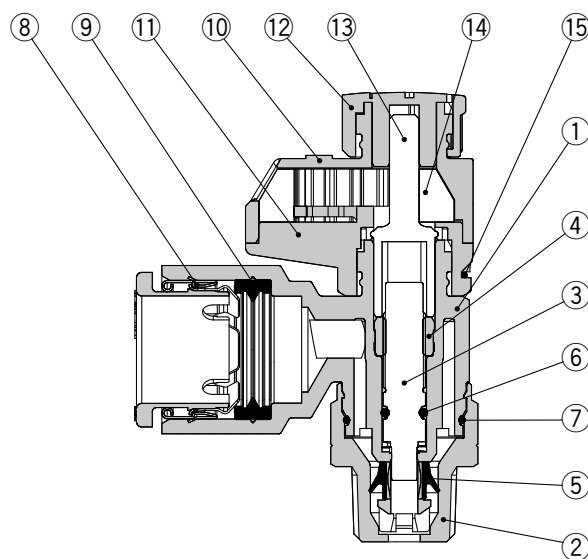
Thread type: M5, 10-32UNF



Meter-out type

Seal method: Sealant

Thread type: R, NPT



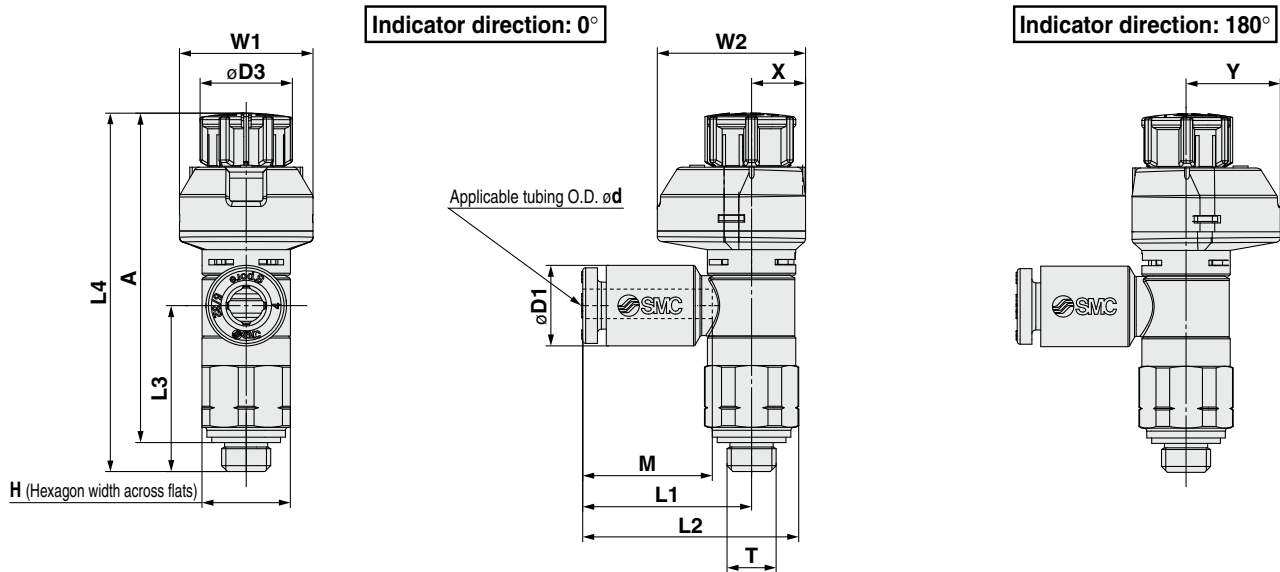
Meter-out type

Component Parts

No.	Description	Material	Note
1	Body A	PBT	
2	Body B	Brass	Electroless nickel plating
3	Needle	PBT	
4	Needle guide	Steel wire	Zinc chromated
5	U seal	HNBR	
6	O-ring	NBR	
7	O-ring	NBR	
8	Cassette	—	
9	Seal	NBR	
10	Bonnet A	POM	
11	Bonnet B	POM	
12	Handle	POM	
13	Gear	PPS	
14	Indicator gear	POM	
15	Clip	Steel wire	
16	Gasket	NBR/Stainless steel	

Dimensions

Seal method: Gasket seal
Thread type: M5, 10-32UNF



Metric Size

Metric Size																	(mm)				
Model	d	T	H	D1	D3	L1	L2	L3	L4 Note 1)		A Note 2)		M	W1	W2	X	Y	Weight (g)			
									Unlocked	Locked	Unlocked	Locked									
AS12□1FS-M5-02	2	M5 x 0.8 10/32UNF	9	5.8	9.4	15.8	20.6	16.9	39	36.5	35	33.5	11.9	13.6	15.1	5.5	9.6	7			
AS12□1FS-U10/32-02				AS12□1FS-M5-23		AS12□1FS-U10/32-23	AS12□1FS-M5-04						AS12□1FS-U10/32-04						AS12□1FS-M5-06	AS12□1FS-U10/32-06	13.3

Note 1) Reference dimensions

Note 2) Reference dimensions of threads after installation

Inch Size

Model	d	T	H	D1	D3	L1	L2	L3	L4 Note 1)		A Note 2)		M	W1	W2	X	Y	Weight (g)
									Unlocked	Locked	Unlocked	Locked						
AS12□1FS-M5-01	1/8"	M5 x 0.8 10/32UNF	9	7.2	9.4	17.2	22	16.9	39.0	36.5	35	33.5	13.3	13.6	15.1	5.5	9.6	7
AS12□1FS-U10/32-01	5/32"			8.2		18.6	23.4											
AS12□1FS-M5-03	1/4"			11.2		18.6	23.4											
AS12□1FS-U10/32-03	1/4"			11.2		18.6	23.4											
AS12□1FS-M5-07	1/4"			11.2		18.6	23.4											8
AS12□1FS-U10/32-07	1/4"			11.2		18.6	23.4											

Note 1) Reference dimensions

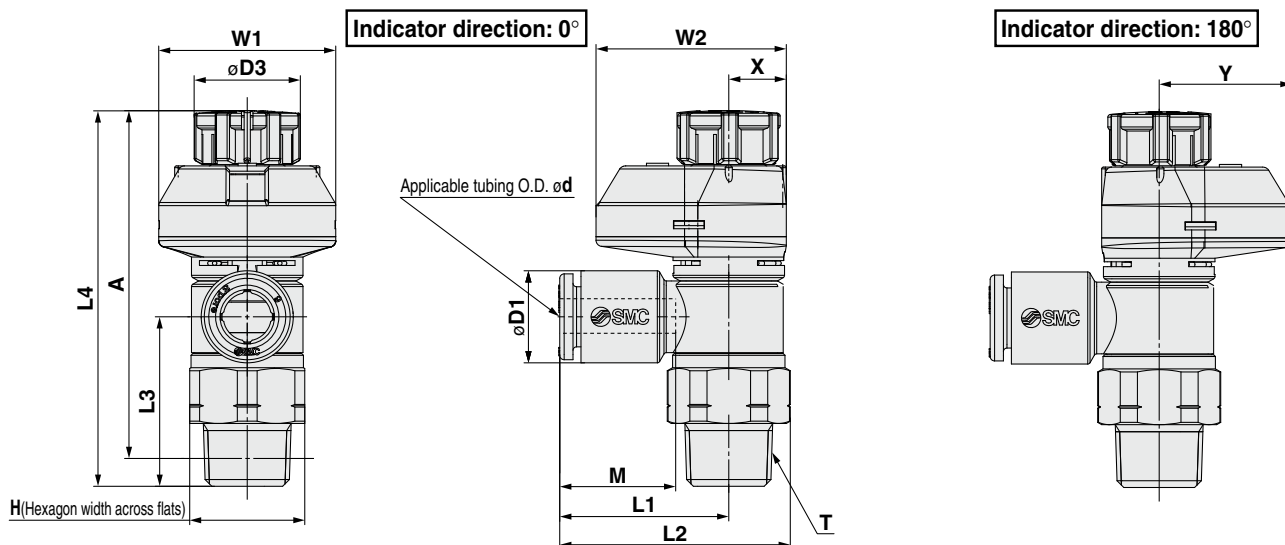
Note 2) Reference dimensions of threads after installation

Series AS-FS

Dimensions

Seal method: Sealant

Thread type: R, NPT



Metric Size

Model	d	T (R, NPT)	H	D1	D3	L1	L2	L3	L4 Note 1)		A Note 2)		M	W1	W2	X	Y	Weight (g)
									Unlocked	Locked	Unlocked	Locked						
AS22□1FS-01-23 (S)	3.2	1/8	13 (12.7)	7.2	12	19.1	26.1 (26)	19.1	43.9	42.4	40.8	39.3	13.3	20	21.5	6.5	15	13 (13)
AS22□1FS-01-04 (S)	4			8.2														14 (13)
AS22□1FS-01-06 (S)	6			10.4														15 (14)
AS22□1FS-01-08 (S)	8			13.2														16 (15)
AS22□1FS-01-10 (S)	10	1/4	17 (17.5)	15.9	13	25.3	32.3 (32.2)	22.6	49.7	48.3	44.2	42.8	14.2	21.5	24	7.8	16.2	23 (24)
AS22□1FS-02-23 (S)	3.2			7.2		20.9	30 (30.3)											24 (25)
AS22□1FS-02-04 (S)	4			8.2		23.4	32.5 (32.8)											25 (26)
AS22□1FS-02-06 (S)	6			10.4		23.9	33 (33.3)											25 (26)
AS22□1FS-02-08 (S)	8			13.2		26.9	36 (36.3)											25 (26)
AS22□1FS-02-10 (S)	10	3/8	19	15.9	16.6	26.7	37	28.7	55.4	54	50.2	48.8	15.6	24.5	28.5	9.3	19.2	38 (39)
AS32□1FS-03-06 (S)	6			10.4		21.8	32.1											29 (40)
AS32□1FS-03-08 (S)	8			13.2		22.7	33											41 (42)
AS32□1FS-03-10 (S)	10			15.9		26.7	37											41 (42)
AS32□1FS-03-12 (S)	12	1/2	24 (23.8)	18.5	18.8	29.7	40	36.2	64.1	62.5	57	55.4	17	26	29	10	19	62 (61)
AS42□1FS-04-10 (S)	10			15.9		27.4	40.3 (40.2)											64 (63)
AS42□1FS-04-12 (S)	12			18.5		30.8	43.7 (43.6)											64 (63)
AS42□1FS-04-16 (S)	16			23.8		34.8	47.7 (47.6)											68 (67)

Note 1) Reference dimensions Note 2) Reference dimensions of threads after installation Note 3) () are the dimensions of NPT thread.

Inch Size

Model	d	T (R, NPT)	H	D1	D3	L1	L2	L3	L4 Note 1)		A Note 2)		M	W1	W2	X	Y	Weight (g)
									Unlocked	Locked	Unlocked	Locked						
AS22□1FS-01-01 (S)	1/8"	1/8	13 (12.7)	7.2	12	19.1	26.1 (26)	19.1	43.8	42.4	40.7	39.3	13.3	20	21.5	6.5	15	13 (13)
AS22□1FS-01-03 (S)	5/32"			8.2														14 (13)
AS22□1FS-01-07 (S)	1/4"			11.2		20.8	27.8 (27.7)											15 (14)
AS22□1FS-01-09 (S)	5/16"			13.2		22.4	29.4 (29.3)											15 (14)
AS22□1FS-02-01 (S)	1/8"	1/4	17 (17.5)	7.2	13	20.9	30 (30.3)	22.6	49.7	48.3	44.2	42.8	13.3	21.5	24	7.8	16.2	23 (24)
AS22□1FS-02-03 (S)	5/32"			8.2														24 (24)
AS22□1FS-02-07 (S)	1/4"			11.2		23.4	32.5 (32.8)											24 (25)
AS22□1FS-02-09 (S)	5/16"			13.2		23.9	33 (33.3)											25 (26)
AS22□1FS-02-11 (S)	3/8"			15.5		26.4	35.5 (35.8)											25 (26)
AS32□1FS-03-07 (S)	1/4"	3/8	19	11.2	16.6	21.8	32.1	28.7	55.4	54	50.2	48.8	13.3	24.5	28.5	9.3	19.2	38 (39)
AS32□1FS-03-09 (S)	5/16"			13.2		22.7	33											39 (40)
AS32□1FS-03-11 (S)	3/8"			15.5		26.7	37											39 (40)
AS42□1FS-04-11 (S)	3/8"	1/2	24 (23.8)	15.5	18.8	27.4	40.3 (40.2)	36.2	64.1	62.5	57	55.4	15.6	26	29	10	19	62 (61)
AS42□1FS-04-13 (S)	1/2"			19.3		30.9	43.8 (43.7)											64 (63)

Note 1) Reference dimensions Note 2) Reference dimensions of threads after installation Note 3) () are the dimensions of NPT thread.