

How to Order

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

Body size

1	M3, M5 standard
2	1/8, 1/4 standard
3	3/8 standard
4	1/2 standard

Type

2	Elbow
3	Universal

Control type

0	Meter-out
1	Meter-in

With One-touch fitting

Thread type

Nil	Metric thread (M3, M5)
	Unified thread (10-32 UNF)
N	R
	NPT

Option

Nil	None
S	With seal
K	Hexagonal lock nut
N	Electroless nickel plated

*1 If more than one option is required, write option part numbers in the order of "S", "K", "N".
*2 M3, M5, and U10/32 are not available with seals.

Applicable tubing O.D.

Metric size	Inch size
02	ø2
23	ø3.2*
04	ø4
06	ø6
08	ø8
10	ø10
12	ø12
01	ø1/8"
03	ø5/32"
05	ø3/16"
07	ø1/4"
09	ø5/16"
11	ø3/8"
13	ø1/2"

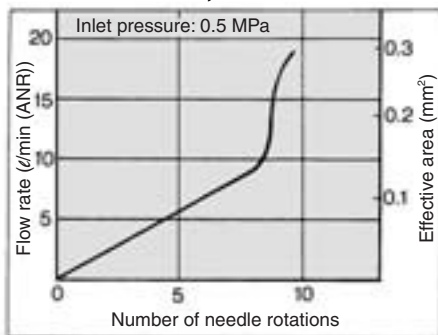
*Use ø1/8" tube.

Port size

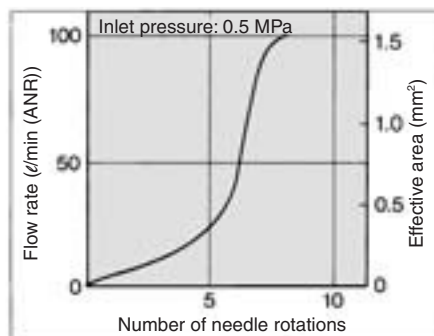
M3	M3 x 0.5
M5	M5 x 0.8
U10/32	10-32 UNF
01	1/8
02	1/4
03	3/8
04	1/2

Needle Valve/Flow Characteristics

AS1201F-M3, AS1211F-M3
AS1301F-M3, AS1311F-M3
AS1201F-M5-02, AS1211F-M5-02

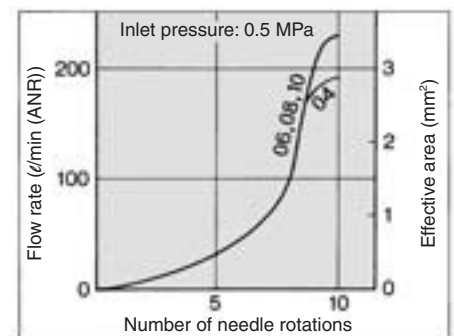


AS1201F-M5, AS1211F-M5
AS1301F-M5, AS1311F-M5

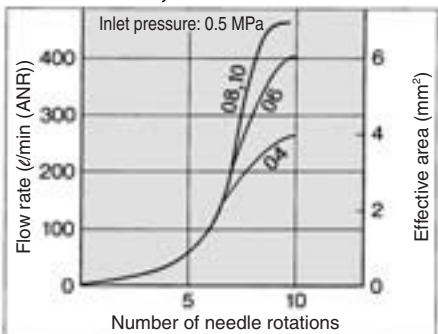


Note) "-U10/32" is the same as "M5".

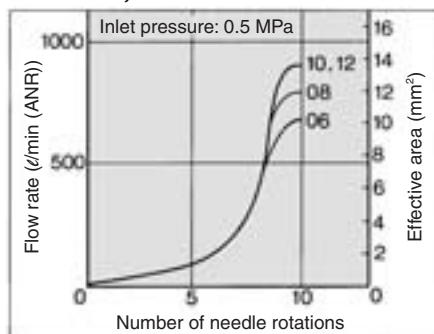
AS2201F-01, AS2211F-01
AS2301F-01, AS2311F-01



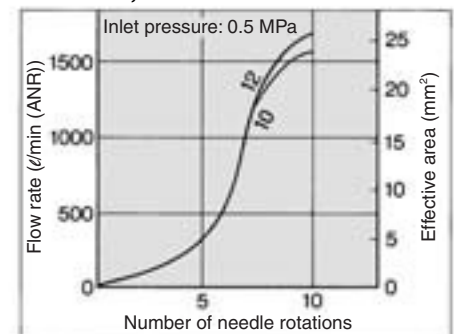
AS2201F-02, AS2211F-02
AS2301F-02, AS2311F-02



AS3201F, AS3211F
AS3301F, AS3311F



AS4201F, AS4211F
AS4301F, AS4311F

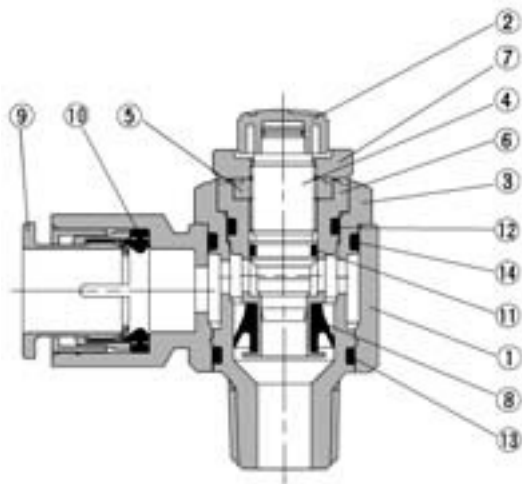


AS
ASP
ASN
AQ
ASV
AK
VCHC
ASS
ASR
ASQ
KE
TMH

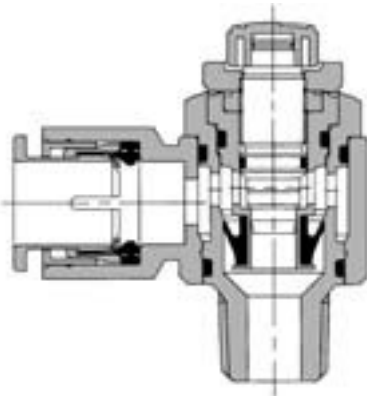
Construction

Elbow type

Meter-out type AS3201F-02



Meter-in type AS3211F-02



Component Parts

No.	Description	Material	Note
1	Body A	PBT	
2	Handle	PBT ⁽¹⁾	
3	Body B	Brass ⁽²⁾	Electroless nickel plated
4	Needle	Brass	Electroless nickel plated
5	Needle guide	Brass	Electroless nickel plated
6	Seat ring	Brass	⁽³⁾
7	Lock nut	Brass ⁽⁴⁾	Electroless nickel plated ⁽⁵⁾
8	U-packing	HNBR	
9	Cassette	—	
10	Seal	NBR	
11	O-ring	NBR	
12	O-ring	NBR	
13	O-ring	NBR	
14	O-ring	NBR	
15	Gasket	NBR, Stainless steel	

Note 1) AS12□1F-M3-02 and AS12□1F-M5-02 are made of electroless nickel plated brass.

Note 2) AS12□1F-M3 is made of stainless steel.

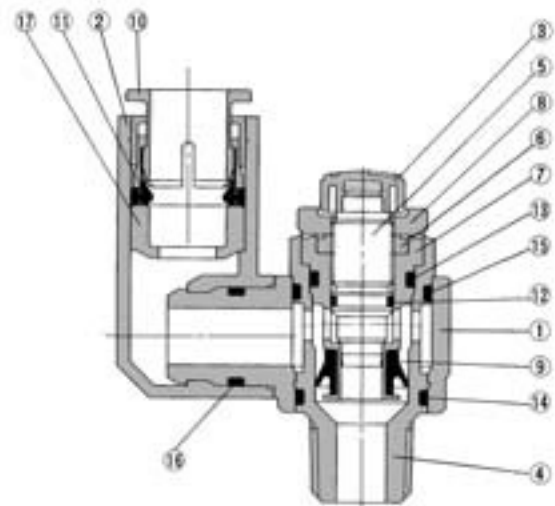
Note 3) AS22□1F, AS32□1F-02: Electroless nickel plated.

Note 4) AS2□□1F type is made of steel.

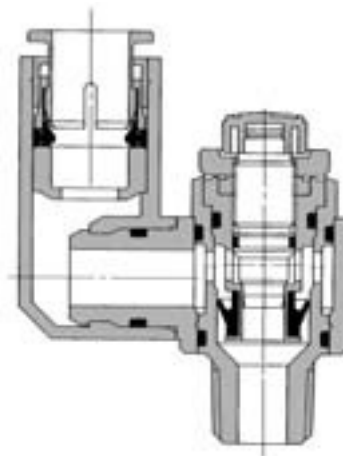
Note 5) Meter-in type is black zinc chromate plated.

Universal type

Meter-out type AS3301F-02



Meter-in type AS3311F-02



Component Parts

No.	Description	Material	Note
1	Body A	PBT	
2	Elbow body	PBT	
3	Handle	PBT	
4	Body B	Brass ⁽¹⁾	Electroless nickel plated
5	Needle	Brass	Electroless nickel plated
6	Needle guide	Brass	Electroless nickel plated
7	Seat ring	Brass	⁽²⁾
8	Lock nut	Brass ⁽³⁾	Electroless nickel plated ⁽⁴⁾
9	U seal	HNBR	
10	Cassette	—	
11	Seal	NBR	
12	O-ring	NBR	
13	O-ring	NBR	
14	O-ring	NBR	
15	O-ring	NBR	
16	O-ring	NBR	
17	Spacer	—	
18	Gasket	NBR, Stainless steel	

Note 1) AS13□1F-M3 is made of stainless steel.

Note 2) AS23□1F, AS33□1F-02: Electroless nickel plated.

Note 3) AS2□□1F type is made of steel.

Note 4) Meter-in type is black zinc chromate plated.

AS

ASP

ASN

AQ

ASV

AK

VCHC

ASS

ASR

ASQ

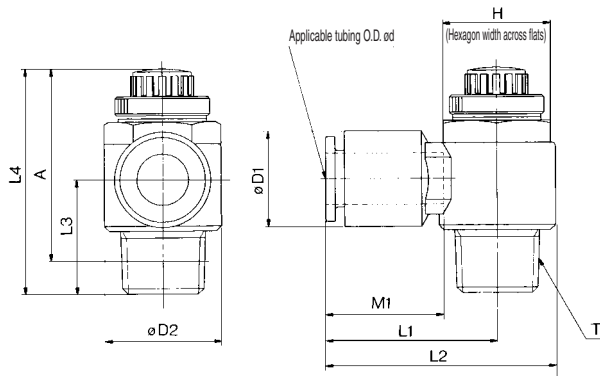
KE

TMH

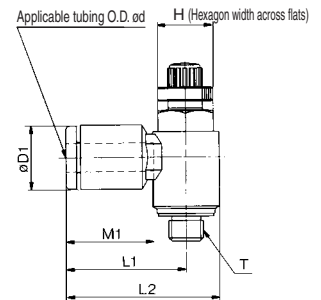
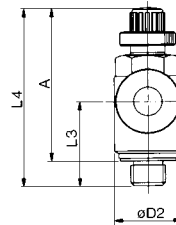
Series AS



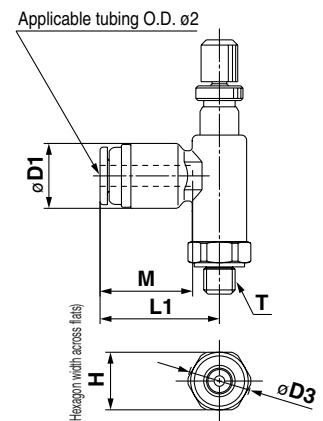
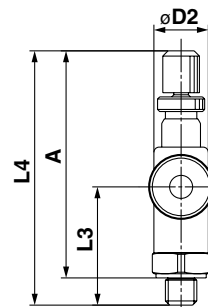
Elbow Type



M3 port
M5 port
U10/32 port



ø2 tubing type
AS12□1F-M3-02
AS12□1F-M5-02



Metric Size

Model	Applicable tubing O.D. ød	T	H ⁽¹⁾	D1	D2	D3	L1	L2	L3	L4 ⁽³⁾	A ⁽²⁾	M1	Mass (g)
AS12□1F-M3-02	2	M3 x 0.5	5.5	6	5.2	6	11.4	—	11	26.8	24.3	24.3	2.4
AS12□1F-M5-02	4	M5 x 0.8	7	8	7.5	8	11.5	—	11.5	27.3	24.8	24.8	3
AS12□1F-M3-23	3.2	M3 x 0.5	5.5	8.4	7.2	—	16.1	19.7	10.5	26.6	24.1	24	4
AS12□1F-M3-04	4	M3 x 0.5	5.5	9.3	—	—	16.1	19.7	10	26.6	24.1	24	12.7
AS12□1F-M5-23	3.2	M5 x 0.8	8	9.3	9.6	—	17.3	22.1	12.3	28.6	25.8	25	7
AS12□1F-U10/32-23	4	10-32UNF	8	9.3	9.6	—	17.3	22.1	12.3	28.6	25.8	25	13.5
AS12□1F-M5-04	4	M5 x 0.8	8	9.3	9.6	—	17.3	22.1	12.3	28.6	25.8	25	13.5
AS12□1F-U10/32-04	4	10-32UNF	8	9.3	9.6	—	17.3	22.1	12.3	28.6	25.8	25	13.5
AS12□1F-M5-06	6	M5 x 0.8	11.6	—	—	—	18.1	22.9	11.7	—	—	—	13.5
AS12□1F-U10/32-06	6	10-32UNF	11.6	—	—	—	18.1	22.9	11.7	—	—	—	13.5
AS22□1F-01-23	3.2	1/8	12	9.3	—	—	20.4	27.5	13.4	35.2	30.2	32.1	16
AS22□1F-01-04	4	1/8	12	9.3	—	—	20.4	27.5	13.4	35.2	30.2	32.1	17
AS22□1F-01-06	6	1/8	12	11.6	14.2	—	20.4	27.5	13.4	35.2	30.2	32.1	18.5
AS22□1F-01-08	8	1/8	12	15.2	—	—	25.3	32.4	—	—	—	—	21
AS22□1F-01-10	10	1/8	12	18.5	—	—	32.1	39.2	14.1	—	—	—	21
AS22□1F-02-04	4	1/4	17	10.4	—	—	25.2	34.4	17.7	39.9	34.9	34.4	16
AS22□1F-02-06	6	1/4	17	12.8	18.5	—	25.2	34.4	17.7	39.9	34.9	34.4	17
AS22□1F-02-08	8	1/4	17	15.2	—	—	27.2	36.4	—	—	—	—	18.5
AS22□1F-02-10	10	1/4	17	18.5	—	—	35.3	44.5	19.5	—	—	—	21
AS32□1F-02-06	6	3/8	19	12.8	—	—	27.8	39.3	—	—	—	—	17
AS32□1F-02-08	8	3/8	19	15.2	—	—	29.5	41	—	—	—	—	18.5
AS32□1F-02-10	10	3/8	19	18.5	—	—	31.8	43.3	—	—	—	—	21
AS32□1F-02-12	12	3/8	19	20.9	—	—	32.8	44.3	—	—	—	—	22
AS32□1F-03-06	6	3/8	19	12.8	—	—	27.8	39.3	—	—	—	—	17
AS32□1F-03-08	8	3/8	19	15.2	—	—	29.5	41	—	—	—	—	18.5
AS32□1F-03-10	10	3/8	19	18.5	—	—	31.8	43.3	—	—	—	—	21
AS32□1F-03-12	12	3/8	19	20.9	—	—	32.8	44.3	—	—	—	—	22
AS42□1F-04-10	10	1/2	24	18.5	28.6	—	33.6	47.9	24.5	56.7	49.2	49.6	21
AS42□1F-04-12	12	1/2	24	20.9	—	—	34.6	48.9	24.5	56.7	49.2	49.6	22

Note 1) () are the dimensions of NPT thread.

Note 2) Reference thread dimensions after installation.

Note 3) Reference dimensions

Inch Size

Model	Applicable tubing O.D. ød	T	H ⁽¹⁾	D1	D2	L1	L2	L3	L4 ⁽³⁾	A ⁽²⁾	M1	Mass (g)
AS12□1F-M3-01	1/8"	M3 x 0.5	5.5	8.4	7.2	16.1	19.7	10.5	26.6	24.1	24	2.4
AS12□1F-M3-03	5/32"	M3 x 0.5	5.5	9.3	—	—	16.1	19.7	10	26.6	24.1	3
AS12□1F-M5-01	1/8"	M5 x 0.8	8	8.4	9.6	17.3	22.1	12.3	28.6	25.8	25	7
AS12□1F-U10/32-01	1/8"	10-32UNF	8	8.4	9.6	17.3	22.1	12.3	28.6	25.8	25	12.7
AS12□1F-M5-03	5/32"	M5 x 0.8	8	9.3	—	—	17.3	22.1	12.3	28.6	25.8	13.5
AS12□1F-U10/32-03	5/32"	10-32UNF	8	9.3	—	—	17.3	22.1	12.3	28.6	25.8	13.5
AS12□1F-M5-05	3/16"	M5 x 0.8	8	11.4	9.6	21.3	26.1	11.7	28.6	25.8	25	16.5
AS12□1F-U10/32-05	3/16"	10-32UNF	8	11.4	9.6	21.3	26.1	11.7	28.6	25.8	25	13.5
AS12□1F-M5-07	1/4"	M5 x 0.8	12	18.3	23.1	23.1	23.1	11.7	28.6	25.8	25	7
AS12□1F-U10/32-07	1/4"	10-32UNF	12	18.3	23.1	23.1	23.1	11.7	28.6	25.8	25	13.5
AS22□1F-01-01	1/8"	1/8	12	9.3	—	—	20.4	27.5	13.4	35.2	30.2	16
AS22□1F-01-03	5/32"	1/8	12	9.3	—	—	20.4	27.5	13.4	35.2	30.2	17
AS22□1F-01-05	3/16"	1/8	12	11.4	14.2	23.1	30.2	13.4	35.2	30.2	32.1	18.5
AS22□1F-01-07	1/4"	1/8	12	13.2	—	—	23.9	31	—	—	—	21
AS22□1F-01-09	5/16"	1/8	12	15.2	—	—	25.3	32.4	—	—	—	21
AS22□1F-02-03	5/32"	1/4	17	10.4	—	—	25.2	34.4	17.7	39.9	34.9	16
AS22□1F-02-05	3/16"	1/4	17	11.4	18.5	24.9	34.2	17.7	39.9	34.9	34.4	17
AS22□1F-02-07	1/4"	1/4	17	13.2	18.5	25.2	34.5	—	39.9	34.9	34.4	18.5
AS22□1F-02-09	5/16"	1/4	17	15.2	—	—	27.2	36.4	—	—	—	21
AS22□1F-02-11	3/8"	1/4	17	17.9	—	—	35.3	44.5	19.5	—	—	21
AS32□1F-02-07	1/4"	3/8	19	13.2	23	27.8	39.3	—	—	—	—	17
AS32□1F-02-09	5/16"	3/8	19	15.2	23	29.5	41	21.3	48.3	43.3	42.8	18.5
AS32□1F-02-11	3/8"	3/8	19	17.9	23	31.8	43.3	—	—	—	—	21
AS32□1F-03-07	1/4"	3/8	19	13.2	23	27.8	39.3	—	—	—	—	17
AS32□1F-03-09	5/16"	3/8	19	15.2	23	29.5	41	19.8	45.4	40.4	40.2	18.5
AS32□1F-03-11	3/8"	3/8	19	17.9	23	31.8	43.3	—	—	—	—	21
AS42□1F-04-11	3/8"	1/2	24	17.9	28.6	33.6	47.9	24.5	56.7	49.2	49.6	21
AS42□1F-04-13	1/2"	1/2	24	21.7	—	—	35.2	49.5	24.5	56.7	49.2	22

Note 1) () are the dimensions of NPT thread.

Note 2) Reference thread dimensions after installation.

Note 3) Reference dimensions