

Speed Controller Adjustable by Flat Head Screwdriver with One-touch Fittings In-line Type

Series AS□□□1F-D



Model

Model	Applicable tubing O.D.												Applicable cylinder bore size (mm)	
	Metric size						Inch size							
	3.2	4	6	8	10	12	1/8"	5/32"	3/16"	1/4"	5/16"	3/8"		1/2"
AS1001F	●	●	●				●	●	●	●				6, 10, 16, 20
AS2001F		●	●					●	●	●				20, 25, 32
AS2051F			●	●					●	●	●			20, 25, 32, 40
AS3001F			●	●	●	●				●	●	●		40, 50, 63
AS4001F					●	●						●	●	63, 80, 100

Specifications

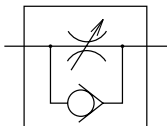
Fluid	Air
Proof pressure	1.5 MPa
Max. operating pressure	1 MPa
Min. operating pressure	0.1 MPa
Ambient and fluid temperature	-5 to 60°C (No freezing)
Number of needle rotations	10 turns (8 turns (1))
Applicable tubing material (2)	Nylon, Soft nylon, Polyurethane

Note 1) In the case of AS1001F type

Note 2) Use caution regarding the max. operating pressure when soft nylon or polyurethane tubing is used.
(Refer to pages 371 and 372 for details.)

Note 3) Brass parts are all electroless nickel plated.

JIS Symbol



Flow Direction Symbols on Body



Flow Rate and Effective Area

Model		AS1001F	AS2001F	AS2051F		AS3001F			AS4001F		
Tubing O.D.	Metric size	ø3.2, ø4, ø6	ø4	ø6	ø6	ø8	ø6	ø8	ø10, ø12	ø10	ø12
	Inch size	ø1/8", ø5/32" ø3/16", ø1/4"	ø5/32"	ø3/16", ø1/4"	ø3/16"	ø1/4", ø5/16"	ø1/4"	ø5/16"	ø3/8"	ø3/8"	ø1/2"
Controlled flow (Free flow)	Flow rate (l/min (ANR))	100	130	230	290	460	420	660	920	1050	1390
	Effective area (mm²)	1.5	2	3.5	4.5	7	6.5	10	14	16	21

Note) Flow rate values are measured at 0.5 MPa and 20°C

How to Order

AS 200 1F — 06 D —

Body size

100	M5 standard
200	1/8 standard
205	1/4 standard
300	3/8 standard
400	1/2 standard

With One-touch fittings

Type adjustable by flat head screwdriver

Made to Order

Refer to page 521 for details.

Applicable tubing O.D.

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

* Use ø1/8" tube.

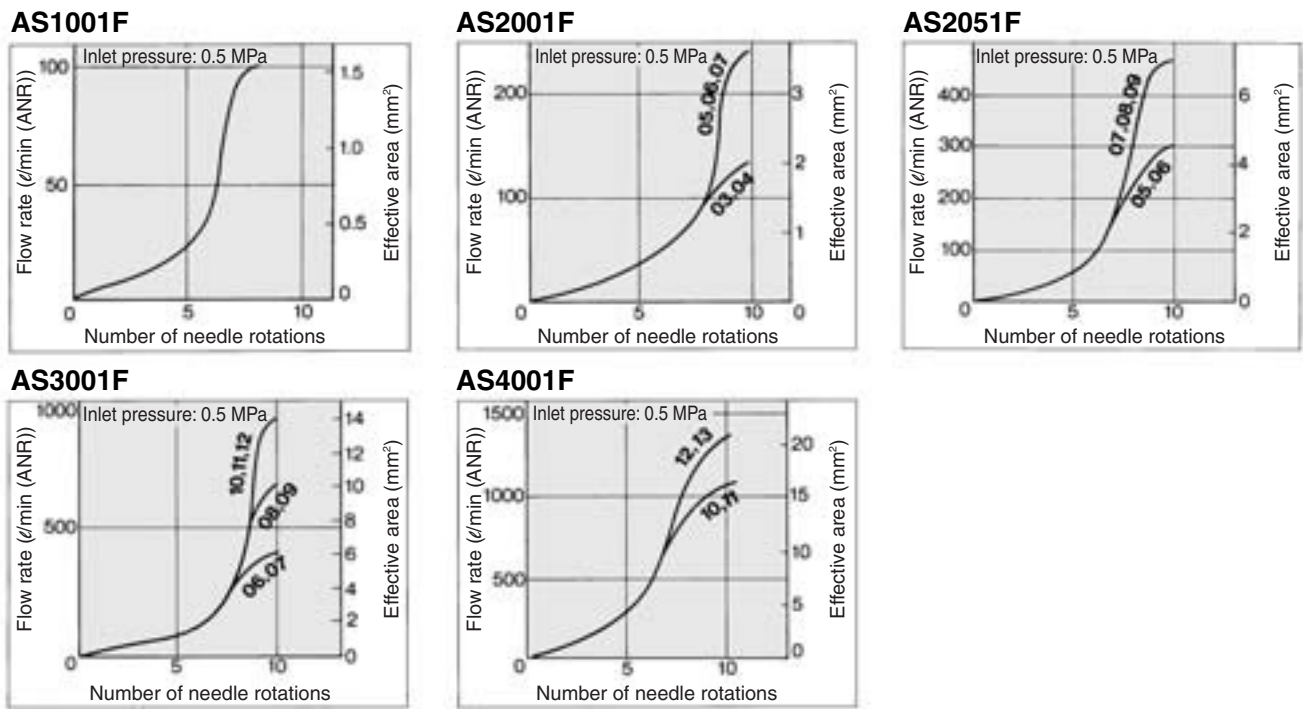


Made to Order
(Refer to page 521 for details.)

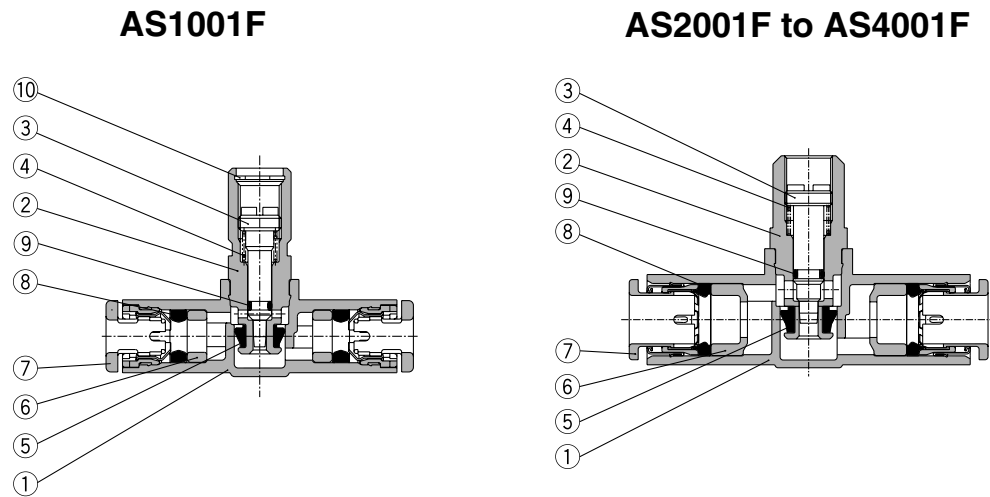
Caution

Be sure to read before handling.
Refer to front matters 58 and 59 for
Safety Instructions and pages 412 to 414
for Flow Control Equipment Precautions.

Needle Valve/Flow Characteristics



Construction



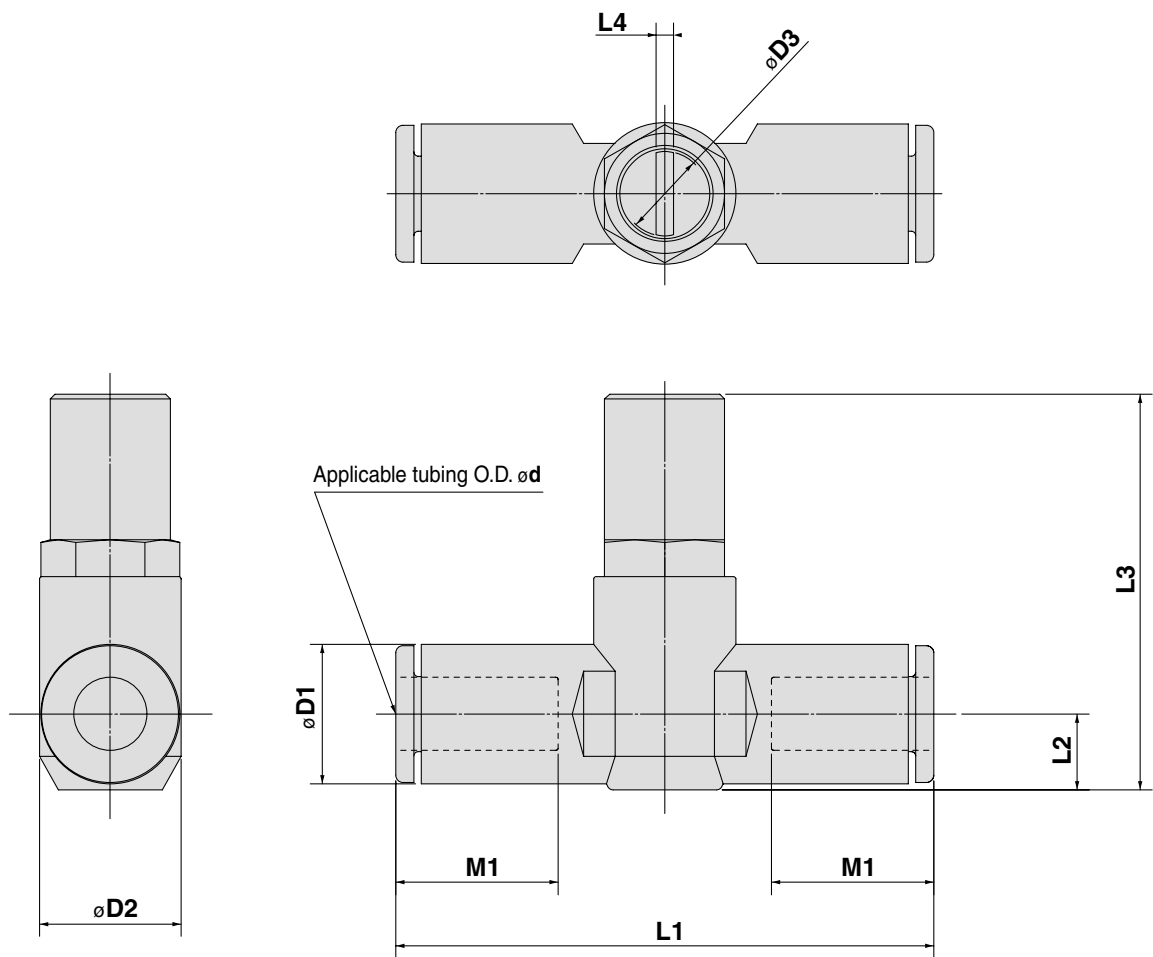
Component Parts

No.	Description	Material	Note
1	Body A	PBT	
2	Body B	Brass	Electroless nickel plated
3	Needle	Brass	Electroless nickel plated
4	Spring	Steel wire	
5	U seal	HNBR	
6	Spacer	—	
7	Cassette	—	
8	Seal	NBR	
9	O-ring	NBR	
10	Retaining ring for hole type C	Tool steel	

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

Series AS□□□1F-D

Dimensions



Metric Size

Model	d	D1	D2	D3	L1	L2	L3	L4	M1	Mass (g)
AS1001F-23D	3.2	8.4	10	4.7	38	4.5	26	0.7	12.7	8
AS1001F-04D	4	9.3			39.2	5.2	26.6		12.7	9
AS1001F-06D	6	11.6			40.7	6.2	27.7		13.5	10
AS2001F-04D	4	9.3	11.8	7.2	40.7	5.2	31.9	1.2	12.7	15
AS2001F-06D	6	11.6			44.8	6.3	33		13.5	16
AS2051F-06D	6	12.8			53.2	6.7	35.2		17	33
AS2051F-08D	8	15.2	14.8	7.2	59.8	8.1	36.5	1.2	18	36
AS3001F-06D	6	12.8			59	7.4	45		17	56
AS3001F-08D	8	15.2			64.4	8.2	45.8		18	60
AS3001F-10D	10	18.5	19.8	9.8	71.6	9.8	47.3	1.2	21	64
AS3001F-12D	12	20.9			76	11	48.5		22	68
AS4001F-10D	10	18.5			77.7	11.3	55.4		21	121
AS4001F-12D	12	20.9	26.5	12.4	82.1		56.4	1.2	22	125

Inch Size

Model	d	D1	D2	D3	L1	L2	L3	L4	M1	Mass (g)
AS1001F-01D	1/8"	8.4	10	4.7	38	4.5	26	0.7	12.7	8
AS1001F-03D	5/32"	9.3			39.2	5.2	26.6		12.7	9
AS1001F-05D	3/16"	11.4			48.7	6.2	27.7		16.5	14
AS1001F-07D	1/4"	12	11.8	7.2	40.7	5.2	31.9	1.2	13.7	11
AS2001F-03D	5/32"	9.3			40.7	5.2	31.9		12.7	15
AS2001F-05D	3/16"	11.4			50	6.2	32.8		16.5	21
AS2001F-07D	1/4"	13.2	14.8	7.2	52.2	7.1	33.7	1.2	17	19
AS2051F-05D	3/16"	11.4			52.2	6.2	34.9		16.5	35
AS2051F-07D	1/4"	13.2			54.4	7.1	35.7		17	33
AS2051F-09D	5/16"	15.2	19.8	9.8	59.8	8.1	36.7	1.2	18	36
AS3001F-07D	1/4"	13.2			59	7.4	45.2		17	56
AS3001F-09D	5/16"	15.2			64.4	8.2	46		18	60
AS3001F-11D	3/8"	17.9	26.5	12.4	70.8	9.5	47.2	1.2	21	72
AS4001F-11D	3/8"	17.9			76.9	10.3	55.5		21	129
AS4001F-13D	1/2"	21.7			83.1	11.6	56.9		22	142