

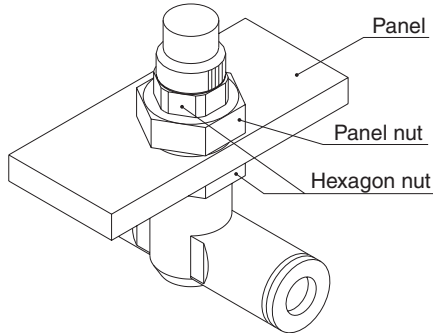
Speed Controller with One-touch Fittings Panel Mount Type

Series AS 1F-3 In-line Type

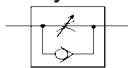
**Panel mount thickness:
35 mm at the maximum**

Easy installation and removal

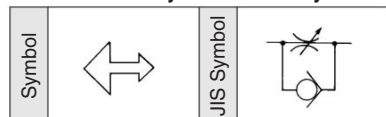
Installation of hexagon nuts on panel nuts up and down in two locations enables user to mount or remove it depending upon the situation.



JIS Symbol



Flow Direction Symbols on Body



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) ⁽¹⁾
Number of needle rotations ⁽²⁾	10 turns (8 turns)
Applicable tubing material	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 15-6-3 to 15-6-5 for details.)

Flow Rate and Effective Area

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

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

How to Order

AS 200 1 F - 06 - 3

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

Panel mount type

Applicable tubing O.D.

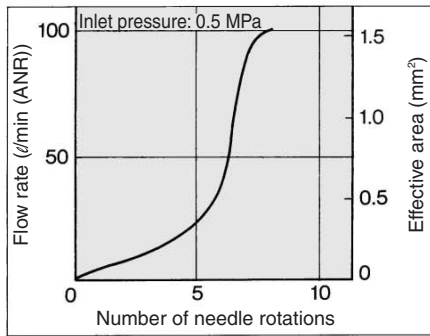
Metric size	Inch size
23	ø3.2 *
04	ø4
06	ø6
08	ø8
10	ø10
12	ø12
01	ø1/8"
03	ø5/32"
05	ø3/16"
07	ø1/4"
09	ø5/16"
11	ø3/8"
13	ø1/2"

* Use ø1/8" tube.

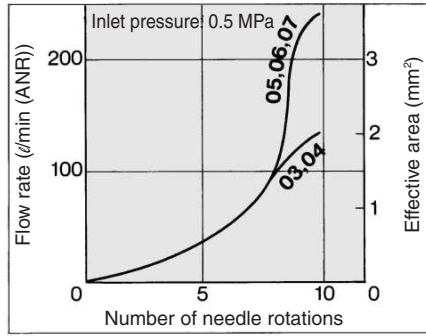
Speed Controller with One-touch Fittings Panel Mount Type, In-line Type

Needle Valve/Flow Characteristics

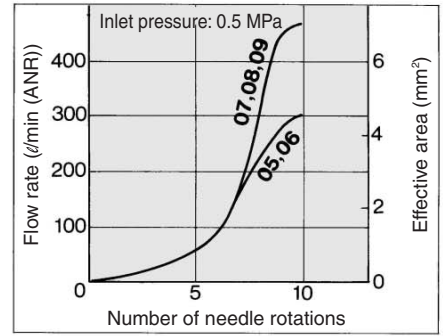
AS1001F



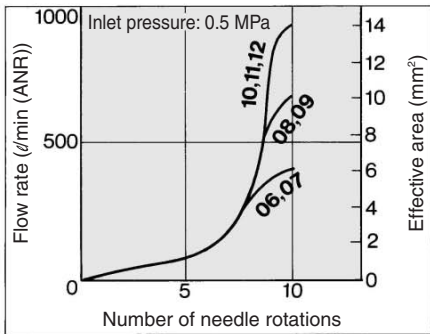
AS2001F



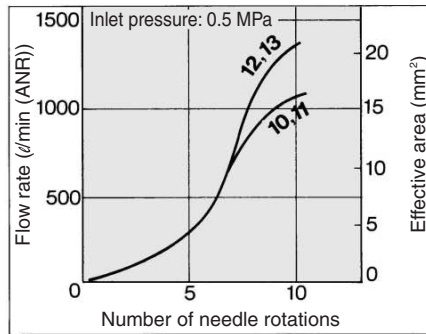
AS2051F



AS3001F



AS4001F



⚠ Caution

Be sure to read before handling. Refer to pages 15-18-3 to 15-18-4 for Safety Instructions and Common Precautions on the products mentioned in this catalog, and refer to pages 15-8-6 to 15-8-8 for Precautions on every series.

AS

ASP

ASN

AQ

ASV

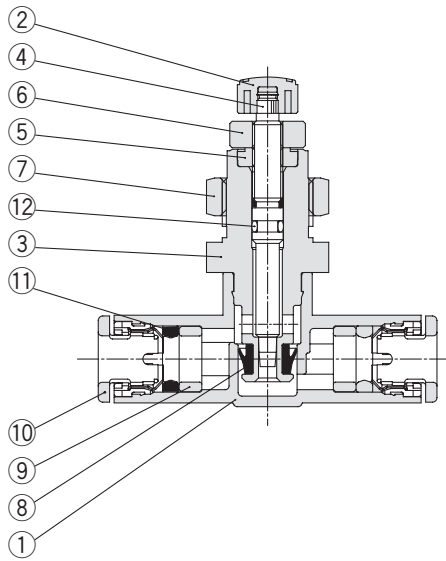
AK

ASS

ASR

ASF

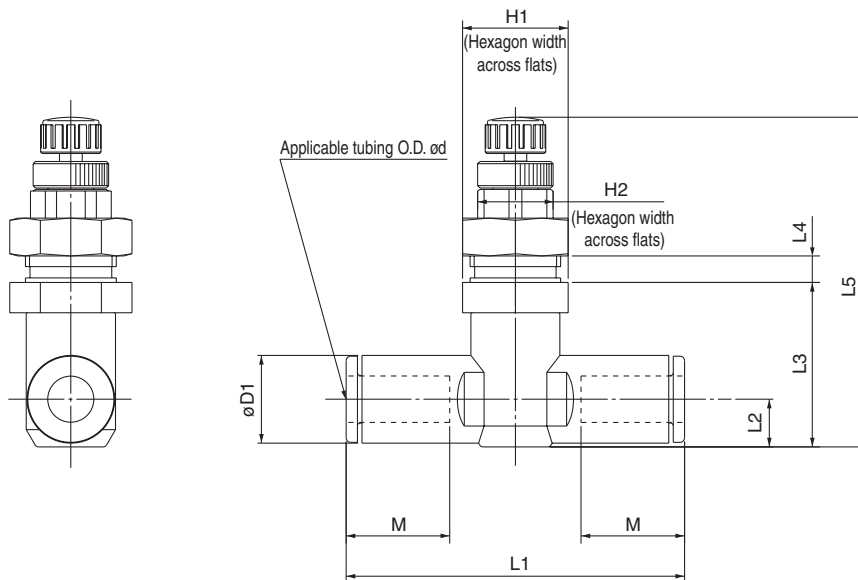
Construction



No.	Description	Material	Note
①	Body A	PBT	
②	Handle	PBT	
③	Body B	Brass	Electroless nickel plated
④	Needle	Brass	Electroless nickel plated
⑤	Needle guide	Brass	Electroless nickel plated
⑥	Lock nut	Brass	Electroless nickel plated
⑦	Panel nut	Brass	Electroless nickel plated
⑧	U seal	HNBR	
⑨	Spacer	PBT ^(Note)	
⑩	Cassette	POM, Stainless steel	
⑪	Packing	NBR	
⑫	O-ring	NBR	

(Note) AS1001F($\phi 3.2$, $\phi 4$, $\phi 6$, $\phi 1/8"$, $\phi 5/32"$, $\phi 1/4"$), AS2001F($\phi 4$, $\phi 6$, $\phi 5/32"$) are made of POM. $\phi 3/16"$, $\phi 3/8"$, $\phi 1/2"$ are made of brass (Electroless nickel plated).

Dimensions



Metric Size

Model	d		H1	H2	L1	L2	L3	L4 Max.	L5		M	Panel-cut dimensions	
	Max.	Min.							Max.	Min.			
AS1001F-23-3	3.2	8.4	12	8	38	4.5	16.8	3.5	37.6	34.4	12.7	10.5	
AS1001F-04-3	4	9.3			39.2	5.2	17.4		38.2	35			
AS1001F-06-3	6	11.6			40.7	6.2	18.5		39.3	36.1			13.5
AS2001F-04-3	4	9.3	14	10	40.7	5.2	20.7	3.5	48	42.5	12.7	12.5	
AS2001F-06-3	6	11.6			44.8	6.3	21.8		49.1	43.6			13.5
AS2051F-06-3	6	12.8	17	13	53.2	6.7	25.7	3.5	53.5	48.1	17	15.5	
AS2051F-08-3	8	15.2			59.8	8.1	27		54.8	49.4			18
AS3001F-06-3	6	12.8	21	16	59	7.4	31.3	3.5	60.1	54.7	17	18.5	
AS3001F-08-3	8	15.2			64.4	8.2	32.1		60.9	55.5			18
AS3001F-10-3	10	18.5			71.6	9.8	33.7		62.5	57.1			21
AS3001F-12-3	12	20.9			76	11	34.9		63.7	58.3			22
AS4001F-10-3	10	18.5	27	21	82	11.3	35	3.5	69.3	61	21	24.5	
AS4001F-12-3	12	20.9			76	11	34.9		63.7	58.3			22

Inch Size

Model	d		H1	H2	L1	L2	L3	L4 Max.	L5		M	Panel-cut dimensions	
	Max.	Min.							Max.	Min.			
AS1001F-01-3	1/8"	8.4	12	8	38	4.5	16.8	3.5	37.6	34.4	12.7	10.5	
AS1001F-03-3	5/32"	9.3			39.2	5.2	17.4		38.2	35			
AS1001F-05-3	3/16"	11.4			48.7	6.2	18.5		39.3	36.1			16.5
AS1001F-07-3	1/4"	12			40.7	6.2	18.5		39.3	36.1	13.7		
AS2001F-03-3	5/32"	9.3	14	10	40.7	5.2	20.7	3.5	48	42.5	12.7	12.5	
AS2001F-05-3	3/16"	11.4			50	6.2	21.6		48.9	43.4			16.5
AS2001F-07-3	1/4"	13.2			52.2	7.1	22.5		49.8	44.3	17		
AS2051F-05-3	3/16"	11.4	17	13	52.2	6.2	25.2	3.5	53	47.6	16.5	15.5	
AS2051F-07-3	1/4"	13.2			54.4	7.1	26		53.8	48.4			17
AS2051F-09-3	5/16"	15.2			59.8	8.1	27		54.8	49.4	18		
AS3001F-07-3	1/4"	13.2	21	16	59	7.4	31.3	3.5	60.1	54.7	17	18.5	
AS3001F-09-3	5/16"	15.2			64.4	8.2	32.1		60.9	55.5			18
AS3001F-11-3	3/8"	17.2			70.8	9.5	33.3		62.1	56.7			21
AS4001F-11-3	3/8"	17.9			76.9	10.3	34.9		69.2	60.9			21
AS4001F-13-3	1/2"	21.7	27	21	83.1	11.6	36.3	3.5	70.6	62.3	22	24.5	