

Tamper Proof Speed Controller with One-touch Fittings

Series AS□□□1F-T

In-line Type



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 15-6-3 to 15-6-5 for details.)

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

AS

ASP

ASN

AQ

ASV

AK

ASS

ASR

ASF

Flow Rate and Effective Area

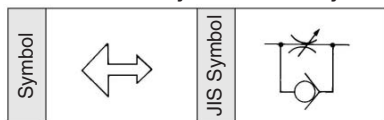
Model		AS1001F	AS2001F	AS2051F	AS3001F		AS4001F				
Tubing O.D.	Metric size	ø3.2, ø4, ø6	ø4	ø6	ø6	ø8	ø6	ø8	ø10, ø12	ø10	ø12
	Inch size	ø1/8", ø5/32", ø3/16", ø1/4"	ø5/32"	ø3/16", ø1/4"	ø3/16"	ø1/4", ø5/16"	ø1/4"	ø5/16"	ø3/8"	ø3/8"	ø1/2"
Controlled flow (Free flow)	Flow rate (l/min (ANR))	100	130	230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

Flow Direction Symbols on Body



Body size

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

Tamper proof

Note) Speed controller requires a special tool for flow adjustment. Order separately with part number, AS-T-1.

With One-touch fittings

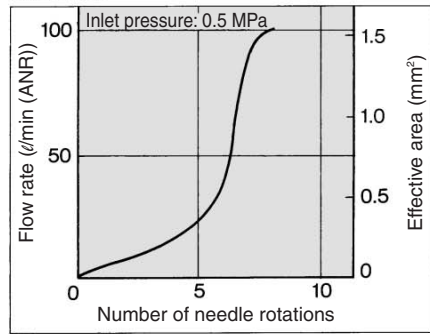
Applicable tubing O.D.

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"

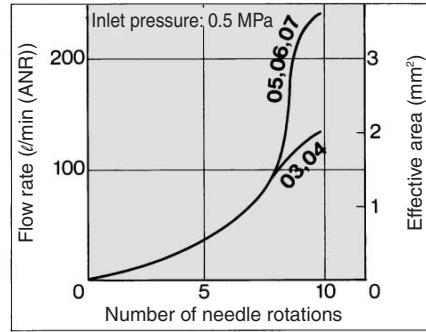
* Use ø1/8" tube.

Needle Valve/Flow Characteristics

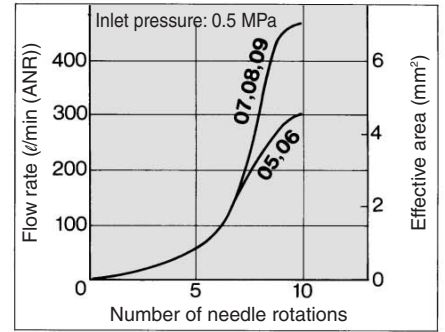
AS1001F



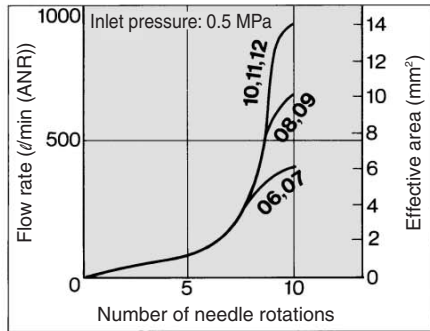
AS2001F



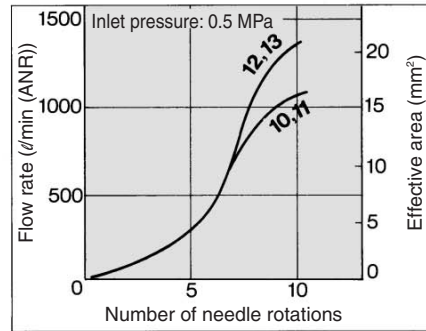
AS2051F



AS3001F

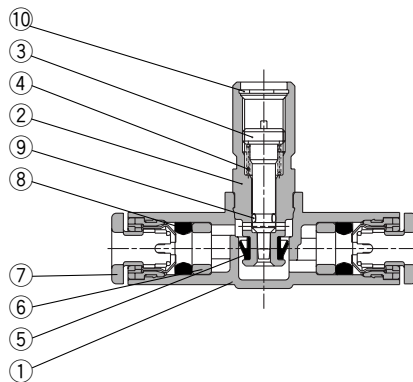


AS4001F

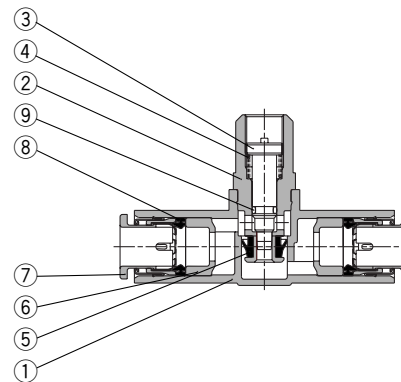


Construction

AS1001F



AS2001F to AS4001F



Component Parts

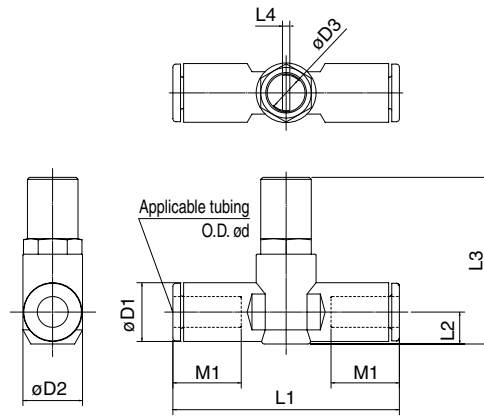
No.	Description	Material	Note
①	Body A	PBT	
②	Body B	Brass	Electroless nickel plated
③	Needle	Brass	Electroless nickel plated
④	Spring	Steel wire	
⑤	U seal	HNBR	
⑥	Spacer	POM ⁽¹⁾	
⑦	Cassette	POM, Stainless steel ⁽²⁾	
⑧	Seal	NBR	
⑨	O-ring	NBR	
⑩	Retaining ring for hole type C	Tool steel	

Note 1) $\phi 3/16"$, $\phi 3/8"$, $\phi 1/2"$ are made of brass (Electroless nickel plated).

Note 2) $\phi 3/16"$, $\phi 5/16"$, $\phi 3/8"$, $\phi 1/2"$ are made of POM, stainless steel, brass (Electroless nickel plated).

Tamper Proof Speed Controller With One-touch Fittings, In-line Type

Dimensions



Metric Size

Model	d	D1	D2	D3	L1	L2	L3	L4	M1
AS1001F-23T	3.2	8.4	10	4.5	38	4.5	26	0.7	12.7
AS1001F-04T	4	9.3			39.2	5.2	26.6		13.5
AS1001F-06T	6	11.6	11.8	7	40.7	6.2	27.7	1.5	12.7
AS2001F-04T	4	9.3			44.8	6.3	31.9		13.5
AS2001F-06T	6	11.6	14.8	7	53.2	6.7	35.2	1.5	17
AS2051F-06T	6	12.8			59.8	8.1	36.5		18
AS2051F-08T	8	15.2	19.8	9.5	59	7.4	45	1.5	17
AS3001F-06T	6	12.8			64.4	8.2	45.8		18
AS3001F-08T	8	15.2	26.5	12	71.6	9.8	47.3	1.5	21
AS3001F-10T	10	18.5			76	11	48.5		22
AS3001F-12T	12	20.9	26.5	12	82	11.3	55.4	1.5	21
AS4001F-10T	10	18.5							56.4
AS4001F-12T	12	20.9							22

Inch Size

Model	d	D1	D2	D3	L1	L2	L3	L4	M1
AS1001F-01T	1/8"	8.4	10	4.5	38	4.5	26	0.7	12.7
AS1001F-03T	5/32"	9.3			39.2	5.2	26.6		13.5
AS1001F-05T	3/16"	11.4	11.8	7	40.7	6.2	27.7	1.5	12.7
AS1001F-07T	1/4"	12			44.8	6.3	31.9		13.5
AS2001F-03T	5/32"	9.3	14.8	7	53.2	6.7	35.2	1.5	17
AS2001F-05T	3/16"	11.4			59.8	8.1	36.5		18
AS2001F-07T	1/4"	13.2	19.8	9.5	59	7.4	45	1.5	17
AS2051F-05T	3/16"	11.4			64.4	8.2	45.8		18
AS2051F-07T	1/4"	13.2	26.5	12	71.6	9.8	47.3	1.5	21
AS2051F-09T	5/16"	15.2			76	11	48.5		22
AS3001F-07T	1/4"	13.2	26.5	12	82	11.3	55.4	1.5	21
AS3001F-09T	5/16"	15.2							56.4
AS3001F-11T	3/8"	17.9							21
AS4001F-11T	3/8"	17.9							21
AS4001F-13T	1/2"	21.7							22

AS

ASP

ASN

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