



Speed Controller with One-touch Fittings

Series AS□□□□FG

Stainless Series

Uses SUS303 stainless steel for metal elements.

Suited for CRT production lines where copper free specifications are required, food processing machines which use water or saltwater during wash-down, clean room where contamination from discoloration and corrosion of copper material might occur.

Bright color tone to match with modern equipment.

Body and release button are made of white color resin.

Thread portion is available with or without sealant. Both are standard.

High flow capacity with compact, lightweight design.

Low profile height permits compact machine design.

Max. operating pressure is 1.0 MPa.

Applicable tubing material

Nylon, Soft nylon, Polyurethane

Retainer prevents accidental loss of needle

Increased number of needle rotations to 10 turns.



Indication of air flow direction on body

	Meter-out	Meter-in
Symbol		
JIS Symbol		

How to Order

Area Code

Nil	Japan, Asia, Australia, UK
N	U.S.A.

Body size

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

Type

2	Elbow
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Controlled method

0	Meter-out
1	Meter-in

Option

Nil	None
S	Sealant

Applicable tube O.D. (mm)

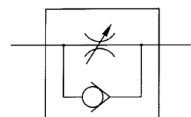
04	ø4
06	ø6
08	ø8
10	ø10
12	ø12

Port size

M5	M5 x 0.8
01	R1/8
02	R1/4
03	R3/8
04	R1/2

Stainless Series (SUS 303)

JIS Symbol



Specifications

Proof pressure	1.5MPa
Maximum operating pressure	1.0MPa
Minimum operating pressure	0.1MPa
Ambient and fluid temperature	-5° to 60°C (No freezing)
Number of needle rotation	10 turns (8 turns ^{Note 1)})
Applicable tubes ^{Note 2)}	Nylon, Soft nylon, Polyurethane
Option	Sealant ^{Note 3)}

Note 1) AS12□1FG

Note 2) Pay attention to the maximum operating pressure when soft nylon or polyurethane is used.

Note 3) Sealant option for port size M5 is not available.

Model

Elbow type	Port size	Applicable tube O.D. (mm)					Applicable cylinder bore size (mm)
		4	6	8	10	12	
AS12□1FG-M5	M5 x 0.8	●	●				6, 10, 16, 20
AS22□1FG-01	R1/8	●	●	●	●		20, 25, 32
AS22□1FG-02	R1/4	●	●	●	●		20, 25, 32, 40
AS32□1FG-03	R3/8		●	●	●	●	40, 50, 63
AS42□1FG-04	R1/2				●	●	63, 80, 100

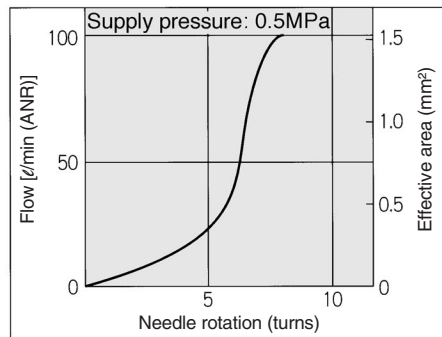
Air Flow/Effective Area

Model		AS12□1FG		AS22□1FG-01		AS22□1FG-02		AS32□1FG		AS42□1FG			
Tube O.D. (mm)		ø4, ø6		ø4	ø6, ø8, ø10	ø4	ø6	ø8, ø10	ø6	ø8	ø10, ø12	ø10	ø12
Controlled (Free) flow	Air [ℓ/min (ANR)]	100		180	230	260	390	460	660	790	920	1580	1710
	Effective area (mm²)	1.5		2.7	3.5	4	6	7	10	12	14	24	26

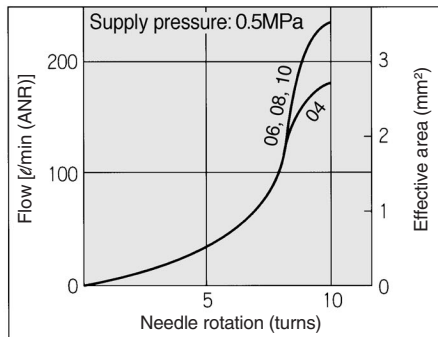
Note) Supply pressure: 0.5MPa, Temperature: 20°C.

Flow Characteristics

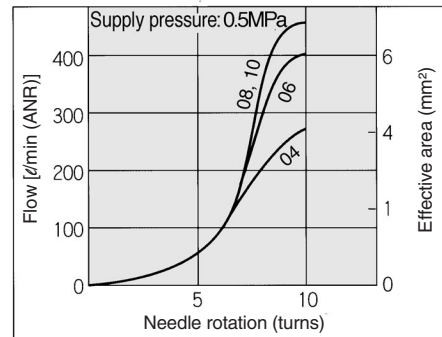
AS1201FG, AS1211FG



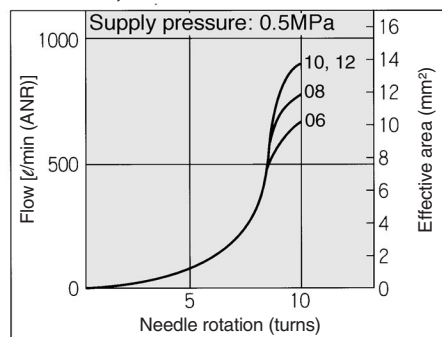
AS2201FG-01, AS2211FG-01



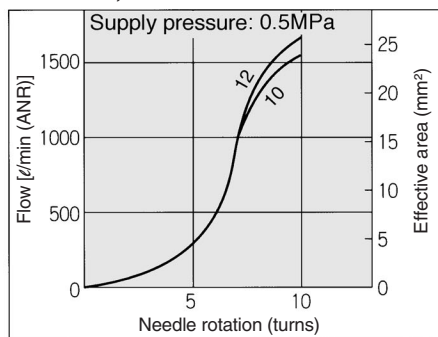
AS2201FG-02, AS2211FG-02



AS3201FG, AS3211FG



AS4201FG, AS4211FG

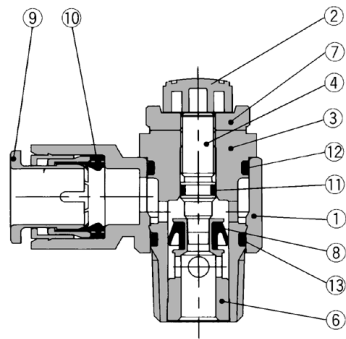


⚠ Caution

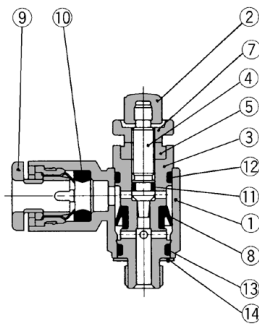
Be sure to read before handling.
 Refer to page 64 and 65 for Safety Instructions and common precautions on the products mentioned in this catalog, and refer to pages 66 through 68 for precautions on every series.

Construction

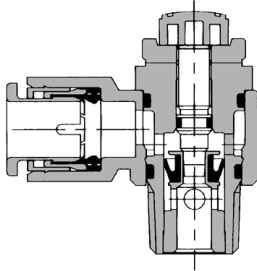
Meter-out



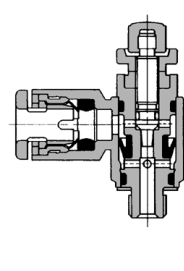
M5 port



Meter-in



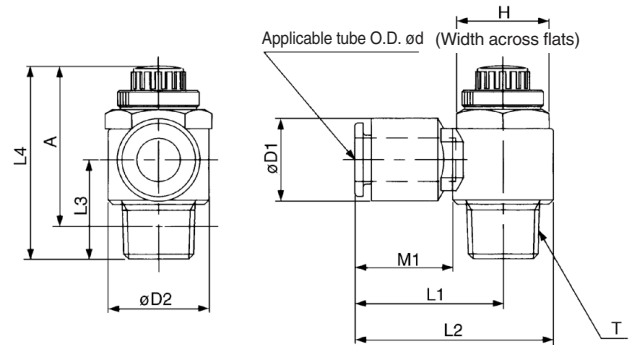
M5 port



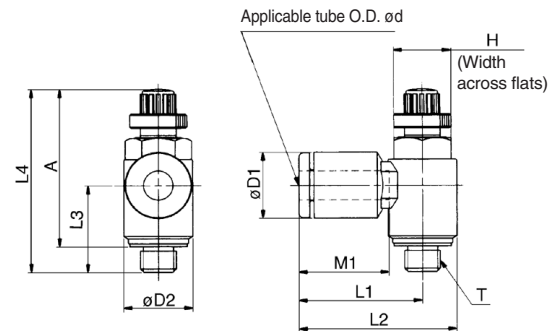
Component Parts

No.	Description	Material	Note
①	Body A	PBT	
②	Handle	PBT	
③	Body B	SUS303	
④	Needle	SUS303	
⑤	Needle guide	SUS303	
⑥	Seat ring	SUS303	
⑦	Lock nut	SUS303	
⑧	U-packing	NBR	
⑨	Cassette	POM, Stainless steel	
⑩	Packing	NBR	
⑪	O-ring	NBR	
⑫	O-ring	NBR	
⑬	O-ring	NBR	
⑭	Gasket	NBR/SUS304	M5 port only

Dimensions



M5 port



Model	Tube O.D. d	T	H	D1	D2	L1	L2	L3	L4		A*		M1	Weight (g)
									Max.	Min.	Max.	Min.		
AS12□1FG-M5-04	4	M5 x 0.8	8	9.3	9.6	17.3	22.1	12.3	28.6	25.8	25	22.2	12.7	7
AS12□1FG-M5-06	6			11.6		18.1	22.9	11.7					13.5	
AS22□1FG-01-04	4	R1/8	12	9.3	14.2	20.4	27.5	14.3	36.1	31.1	32.1	27.1	12.7	17
AS22□1FG-01-06	6			11.6		20.4	27.5						13.5	
AS22□1FG-01-08	8			15.2		25.3	32.4						18.5	
AS22□1FG-01-10	10			18.5		33.1	40.2	15					21	
AS22□1FG-02-04	4	R1/4	17	10.4	18.5	25.2	34.4	18.2	40.4	35.4	34.4	29.4	16	32
AS22□1FG-02-06	6			12.8		25.2	34.4						17	
AS22□1FG-02-08	8			15.2		27.2	36.4						18.5	
AS22□1FG-02-10	10			18.5		33.9	43.2	20					21	
AS32□1FG-03-06	6	R3/8	19	12.8	23	27.8	39.3	20.9	46.5	41.5	40.2	35.2	17	55
AS32□1FG-03-08	8			15.2		29.5	41						18.5	
AS32□1FG-03-10	10			18.5		31.8	43.3						21	
AS32□1FG-03-12	12			20.9		32.8	44.3						22	
AS42□1FG-04-10	10	R1/2	24	18.5	28.6	33.6	47.9	25.4	57.6	50.1	49.6	42.1	21	100
AS42□1FG-04-12	12			20.9		34.6	48.9						22	

*Reference thread dimensions after screwed in.