

## Stainless Steel Speed Controller (Elbow Type) Series ASG

### Material:

### Stainless steel 316

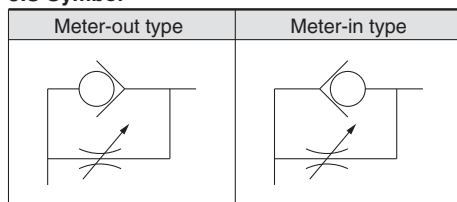
(Sealant: Special FKM  
 Seat ring: Stainless steel 303)

### Applicable tubing materials

- FEP
- PFA
- Nylon
- Soft nylon
- Polyurethane
- Polyolefin



### JIS Symbol



Conforms to Food Sanitation Laws  
 (Material of the component parts meets the apparatus  
 and container packaging standards.)

### Flow Rate and Effective Area

Model	ASG22□F-M5	ASG32□F-01	ASG42□F-02	ASG52□F-03	ASG62□F-04				
Tubing O.D. (mm)	ø4, ø6	ø4, ø6, ø8	ø6, ø8, ø10	ø8, ø10, ø12	ø12				
Controlled (free) flow	Flow rate (l/min (ANR))	100	180	230	390	460	790	920	1580
	Effective area (mm <sup>2</sup> )	1.5	2.7	3.5	6	7	12	14	24

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

### Model

Elbow type	Port size	Applicable tubing O.D. (mm)					Applicable cylinder bore size (mm)
		4	6	8	10	12	
ASG22□F-M5	M5 x 0.8	●	●				6, 10, 16, 20
ASG32□F-01	R1/8	●	●	●			20, 25, 32
ASG42□F-02	R1/4		●	●	●		20, 25, 32, 40
ASG52□F-03	R3/8			●	●	●	40, 50, 63
ASG62□F-04	R1/2					●	63, 80, 100

### Specifications

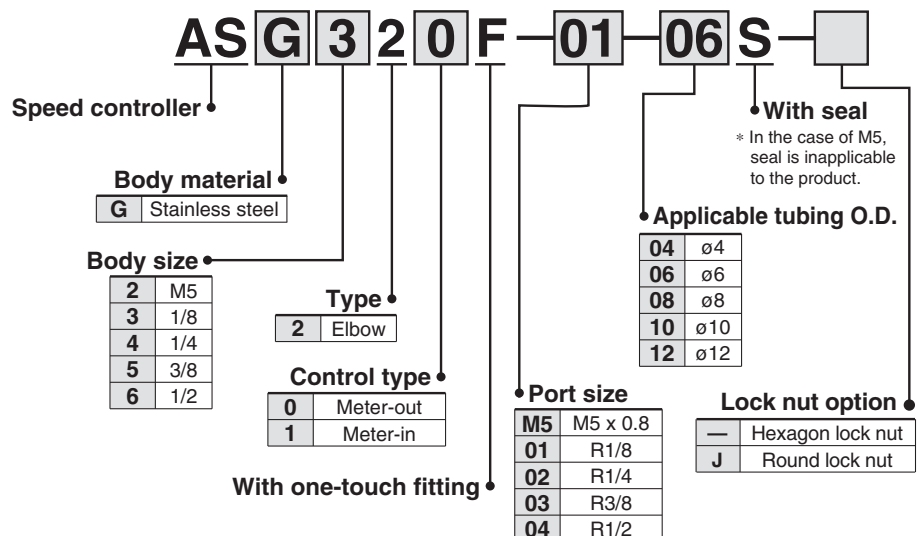
Fluid	Air
Proof pressure	1.5 MPa
Max. operating pressure	1 MPa
Min. operating pressure	0.1 MPa
Ambient and fluid temperature	-5 to 60°C (No freezing)
Number of needle rotations	10 turns (8 turns <sup>Note 1)</sup> )
Applicable tubing material	FEP, PFA, Nylon, Soft nylon, Polyurethane <sup>Note 3)</sup> , Polyolefin

Note 1) In case of ASG22□F-M5

Note 2) Please be cautious of the max. operating pressure when soft nylon or polyurethane tubing is used.

Note 3) When polyurethane tubing is used, please use an inner sleeve.

### How to Order

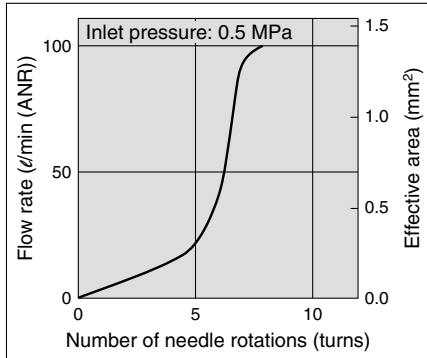


# Series ASG

## Needle Valve: Flow Characteristics

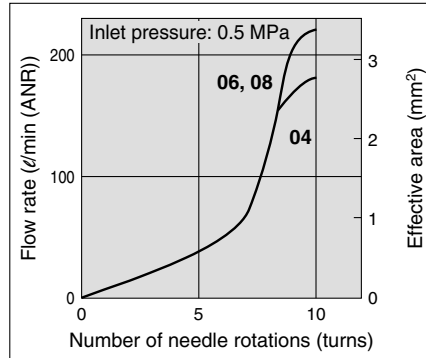
**ASG220F-M5**

**ASG221F-M5**



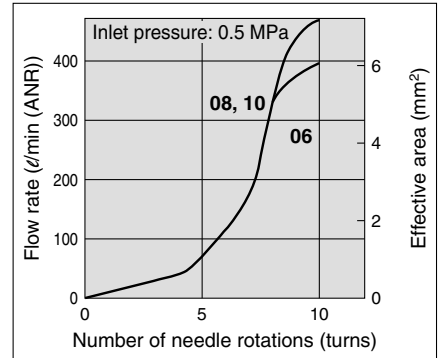
**ASG320F-01**

**ASG321F-01**



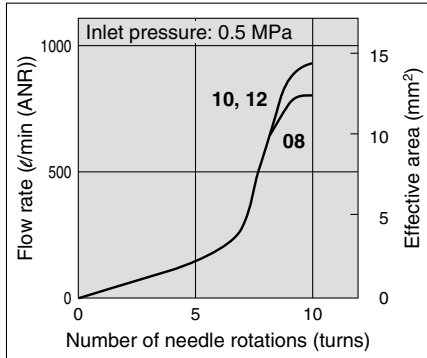
**ASG420F-02**

**ASG421F-02**



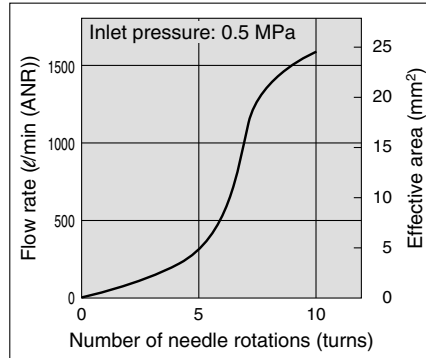
**ASG520F-03**

**ASG521F-03**



**ASG620F-04**

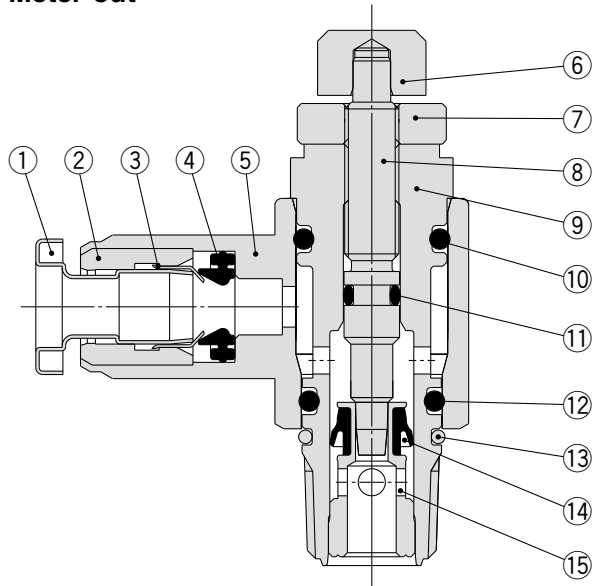
**ASG621F-04**



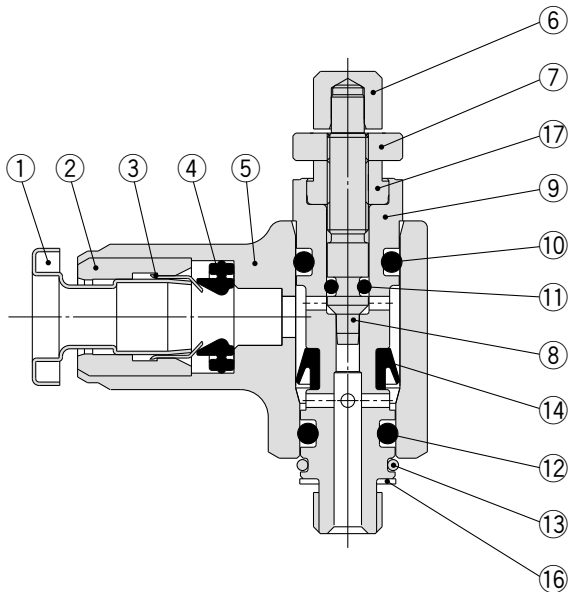
## Construction

### Elbow type

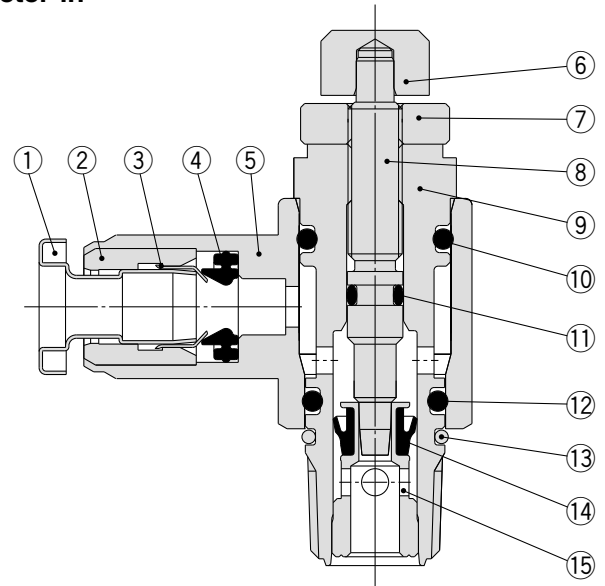
#### Meter-out



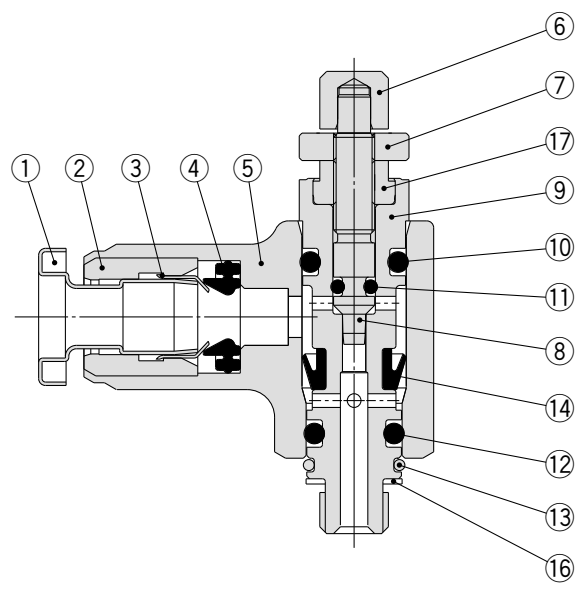
#### M5 port



#### Meter-in



#### M5 port



## Component Parts

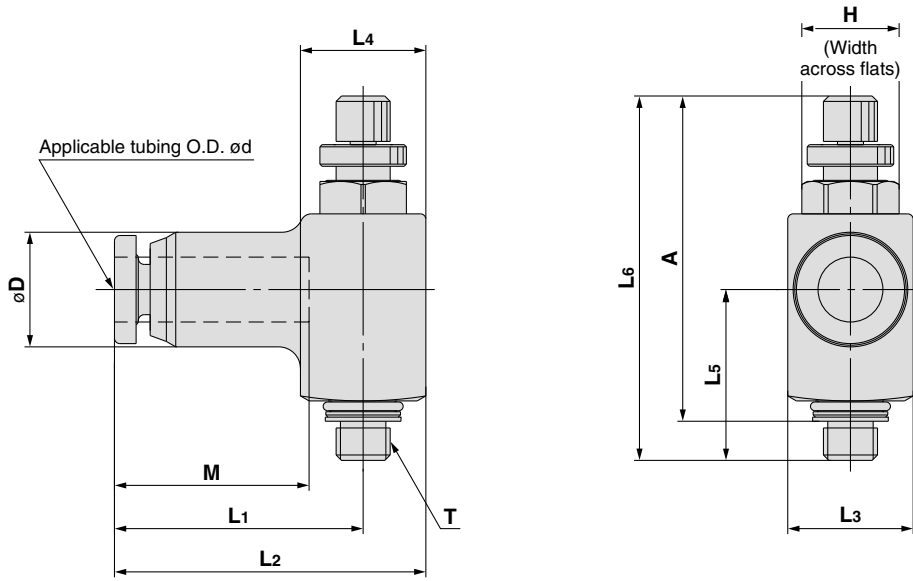
No.	Description	Material
1	Release button	Stainless steel 316
2	Guide	Stainless steel 316
3	Chuck	Stainless steel 316
4	Seal	Special FKM
5	Body A	Stainless steel 316
6	Handle	Stainless steel 316
7	Lock nut	Stainless steel 316
8	Needle	Stainless steel 316
9	Body B	Stainless steel 316

No.	Description	Material
10	O-ring	Special FKM
11	O-ring	Special FKM
12	O-ring	Special FKM
13	Ring	Stainless steel 316
14	U-seal	FKM
15	Seat ring	Stainless steel 303
16	Gasket	Stainless steel 316, Special FKM
17	Needle guide	Stainless steel 316

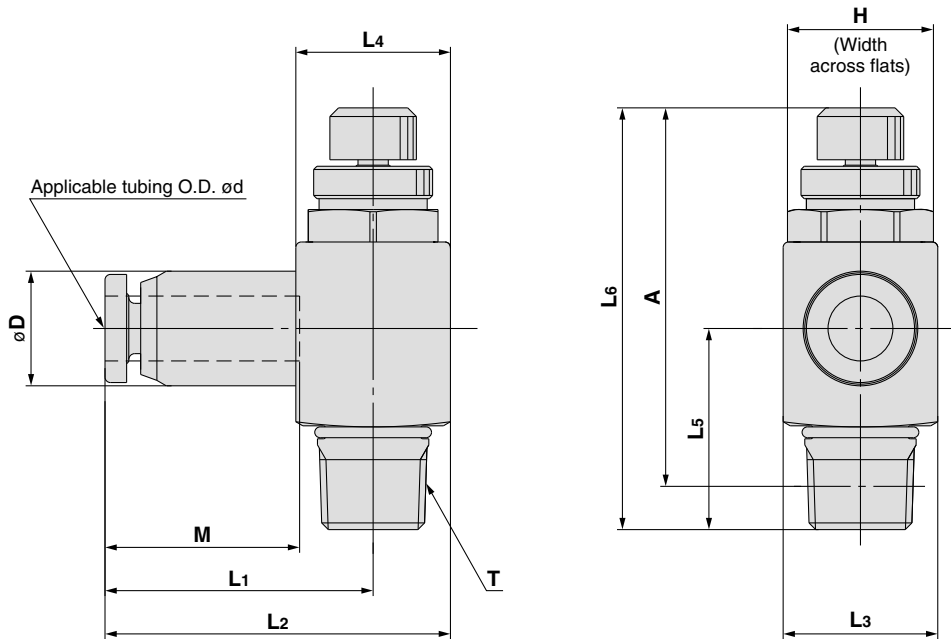
# Series ASG

## Dimensions

### ASG22□F-M5



### ASG32□F-01 ASG42□F-02 ASG52□F-03 ASG62□F-04



Model	Applicable tubing O.D. øD	T	H	D	L1	L2	L3	L4	L5	L6		A <sup>Note)</sup>		M	Weight (g)
										Max.	Min.	Max.	Min.		
ASG22□F-M5-04	4	M5 x 0.8	8	10.6	23	28.8	11.6		15.8	37.2	33.7	33.7	30.2	18.2	25.2
ASG22□F-M5-06	6			13	23.6	30.6								14	18.8
ASG32□F-01-04S	4	1/8	12	10.6	24.8	32	14.3		18.6	44	39	40	35	18.2	39.4
ASG32□F-01-06S	6			13	25.4	32.6								14.3	18.8
ASG32□F-01-08S	8	1/4	17	15	27.5	35.5	16		24.2	53.5	48.5	47.5	42.5	20.9	52.4
ASG42□F-02-06S	6			13	27.3	36.2								17.9	18.8
ASG42□F-02-08S	8	1/2	24	15	29.4	38.3	17.9		26.5	58.7	53.7	52.7	47.7	20.9	80.3
ASG42□F-02-10S	10			18	31.9	41.4								19	23
ASG52□F-03-08S	8	3/8	19	15	31.1	41.7	21.2		30	65.9	58.4	54.3	46.8	20.9	117.0
ASG52□F-03-10S	10			18	33.6	44.2								21.2	23
ASG52□F-03-12S	12	1/2	24	20.8	35.4	46.3	21.8		30	65.9	58.4	54.3	46.8	24.8	137.8
ASG62□F-04-12S	12			20.8	37.6	50.5								25.8	24.8

Note) Reference thread dimensions after installation.