



# Speed Controller Standard Type

# Series AS

Threaded Elbow Type (Metal Body Version)

**Minimizes installation time and cost**

**Body swivels 360°**

Swivel type allows free setting of piping.

**Speed can be accurately controlled even at low speeds.**

**Constant speed control is possible.**

**Retainer prevents accidental loss of needle.**



JIS Symbol



## How to Order

**N AS 2 2 0 0 — 01 S**

### Area Code

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

### Body size

1	M3, M5
2	1/8, 1/4
3	3/8
4	1/2

### Type

2	Direct connection elbow
4	Direct connection flat elbow

### Controlled method

0	Meter-out
1	Meter-in

### Port Thread

Symbol	Port Thread	
	Cylinder side	Tubing side
Nil	R	Rc
	Metric thread (M3, M5)	
	Unified thread (10-32UNF)	
N	NPT	

### Option

Nil	None
S	Sealant
K	Hexagonal lock nut
N	Electroless nickel plated

\*Indicate symbols in alphabetical order if two options or more desired.

### Port size

Symbol	Port size	Model
M3	M3 x 0.5	AS1200-M3 AS1400-M3
M5	M5 x 0.8	AS12□0-M5
U10/32	10-32UNF	AS12□0-U10/32
01	R1/8	AS22□0-01
02	R1/4	AS22□0-02
03	R3/8	AS32□0-03
04	R1/2	AS42□0-04

## Specifications

Specifications	Model	AS1200-M3	AS1400-M3	AS12□0-M5	AS12□0-U10/32	AS22□0-01	AS22□0-02	AS32□0-03	AS42□0-04
Port size		M3 x 0.5	M5 x 0.8	10-32UNF	1/8	1/4	3/8	1/2	
Applicable cylinder bore size (mm)		2.5, 4, 6	6, 10, 15, 20, 25	20, 25, 32, 40	32, 40, 50, 63	80, 100			
Proof pressure		1.05MPa	1.5MPa						
Maximum operating pressure		0.7MPa	1MPa						
Minimum operating pressure		0.1MPa	0.1MPa						
Ambient and fluid temperature		-5° to 60°C (No freezing)							
Number of needle rotations		10 turns	8 turns	10 turns					
Option		—				Sealant, Hexagonal lock nut, Nickel plated			
Weight (g)		3	6	10	29	64	106	181	
Controlled flow (Free flow)	Air flow [ℓ/min (ANR)]	20		105	230	460	920	1700	
	Effective area (mm <sup>2</sup> )	0.3		1.6	3.5	7	14	26	

Note 1) Supply pressure: 0.5MPa. Temperature: 20°C.

Note 2) Meter-in type not available on AS1200-M3, AS1400-M3

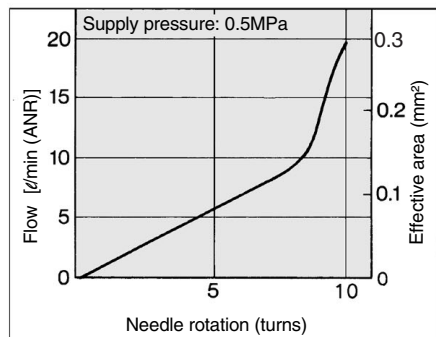
Note 3) Distinction between meter-out/meter-in types by appearance.

They are distinguished by the lock nut. The meter-out types is electroless nickel plated, while the meter-in type is black zinc chromate plated.

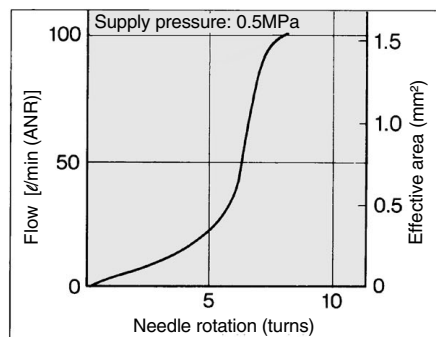
Note 4) AS1200, AS1400, AS22□0: Electroless nickel plated (N specification).

# Flow Characteristics

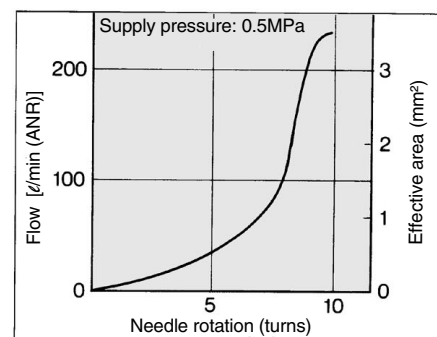
**AS1200-M3, AS1400-M3**



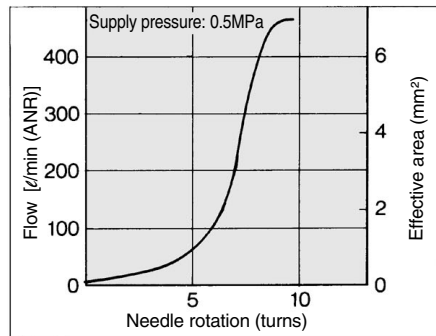
**AS12□0-M5, AS12□0-U10/32**



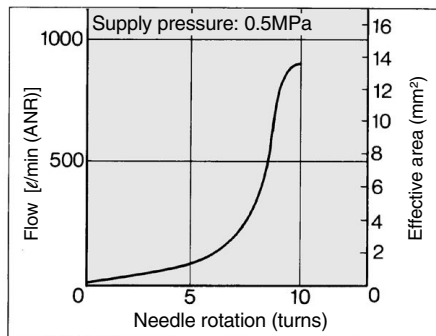
**AS22□0-01**



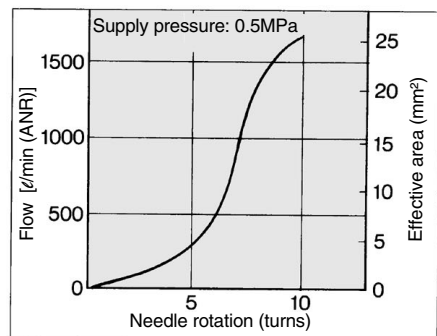
**AS22□0-02**



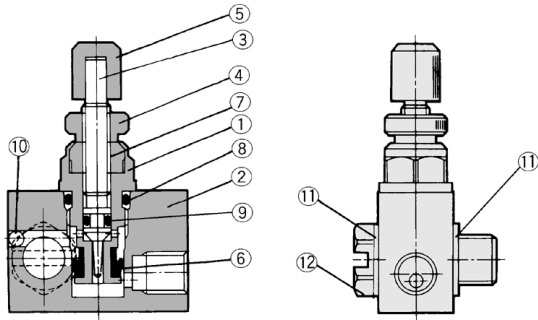
**AS32□0**



**AS42□0**



## AS1400-M3/Construction



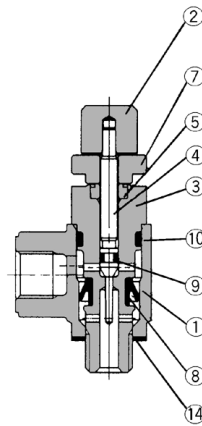
### Component Parts

No.	Description	Material	Note
①	Body B	Brass	Electroless nickel plated
②	Body A	Brass	Electroless nickel plated
③	Needle	Brass	Electroless nickel plated
④	Lock nut	Brass	Electroless nickel plated
⑤	Handle	Brass	Electroless nickel plated
⑥	U-packing	NBR	
⑦	Needle guide	Brass	Electroless nickel plated
⑧	O-ring	NBR	
⑨	O-ring	NBR	
⑩	Steel ball	Chromium bearing steel	
⑪	Gasket	PVC	
⑫	Joint	Brass	Electroless nickel plated

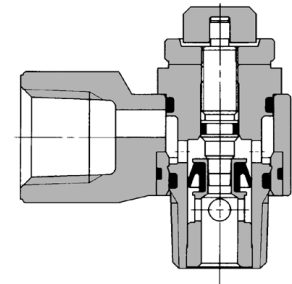
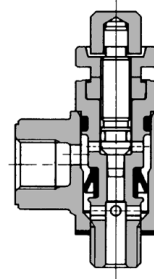
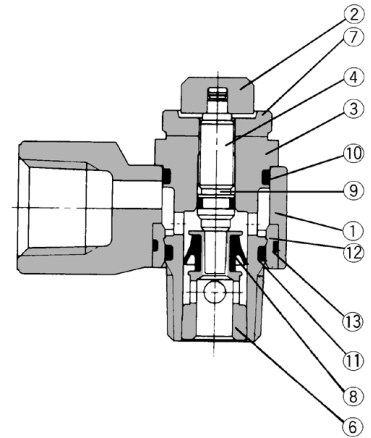
## AS1200-M3, AS12□0-M5, AS22□0/32□0/42□0/Construction

### Meter-out

AS1200-M3, M5, U10/32

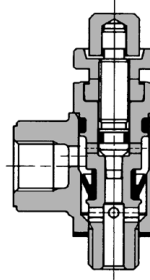


AS2200/3200/4200

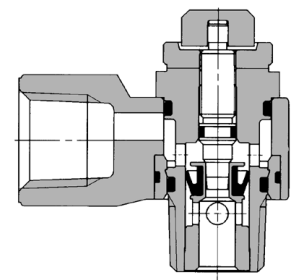


### Meter-in

AS1210-M5, U10/32



AS2210/3210/4210



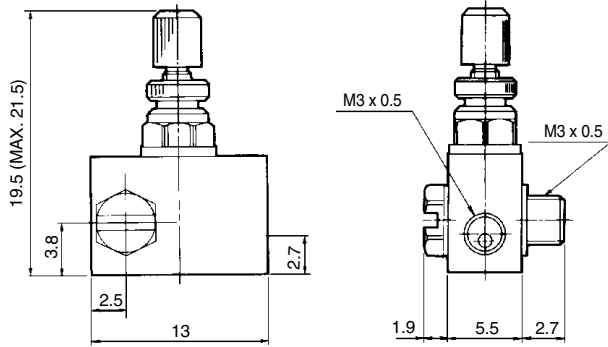
### Component Parts

No.	Description	Material	Note
①	Body A	Zinc alloy	
②	Handle	Brass	Electroless nickel plated
③	Body B	Brass	Electroless nickel plated
④	Needle	Brass	Electroless nickel plated
⑤	Needle guide	Brass	Electroless nickel plated
⑥	Seat ring	Brass	
⑦	Lock nut	Brass <sup>Note 1)</sup>	Electroless nickel plated <sup>Note 2)</sup>
⑧	U-packing	NBR	
⑨	O-ring	NBR	
⑩	O-ring	NBR	
⑪	O-ring	NBR	
⑫	Bush	PBT	01 to 04 type
⑬	O-ring	NBR	01 to 04 type
⑭	Gasket	PVC	M3 type
		NBR, Stainless steel	M5, U10/32 types

Note 1) AS22□0: Steel

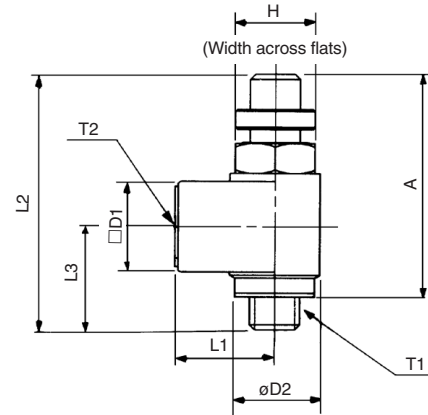
Note 2) Meter-in type: Black zinc chromated

**AS1400-M3/Dimensions**

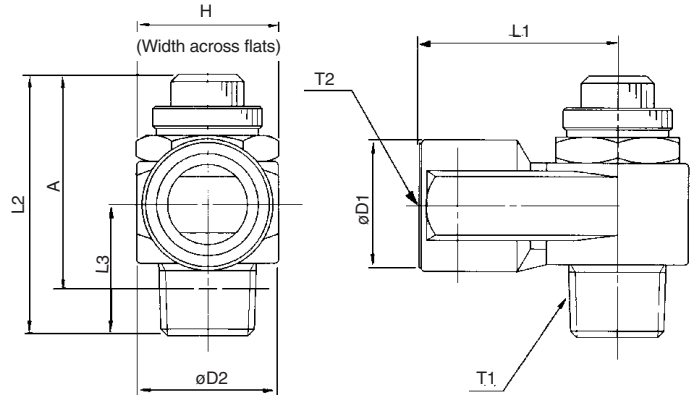


**AS-1200-M3, AS12□0-M5, AS22□0, 32□0, 42□0/Dimensions**

**AS1200-M3  
AS12□0-M5**



**AS22□0/32□0/42□0**



**Dimensions**

Model	T1	T2	H <sup>Note 1)</sup>	L1	L2		L3	D1	D2	A	
					Max.	Min.				Max.	Min.
<b>AS1200-M3</b>	M3 x 0.5	M3 x 0.5	4.5	6.6	23.5	21.5	8	5	5	20.5	18.5
<b>AS1200-M5</b>	M5 x 0.8	M5 x 0.8	8	10	28.3	25.5	10.3	9	9	25	22.2
<b>AS1200-U10/32</b>	10-32UNF	10-32UNF									
<b>AS22□0-01</b>	1/8	1/8	12(12.7)	18	36.4	31.4	14.1	14.3	14.6	32.4	27.4
<b>AS22□0-02</b>	1/4	1/4	17(17.5)	27.2	40.8	35.8	18	18	19.5	34.8	29.8
<b>AS32□0-03</b>	3/8	3/8	19	30	46.9	41.9	20.8	22.5	24.3	40.6	35.6
<b>AS42□0-04</b>	1/2	1/2	24(23.8)	38.5	55.6	50.6	26.7	27.5	28.5	47.4	42.4

Note 1) ( ) are the dimensions of "NPT" thread.