



# Speed Controller Standard Type

## Series AS

In-line Type

Compact size saves space.

Speed may be accurately controlled even at low speeds.

Constant speed easily set.

Retainer prevents accidental loss of needle.



### How to Order

**N** **AS** **1** 000 — **M5**

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
5	1/2

Port size

Port size	Applicable model
M3	M3 x 0.5 AS1000
M5	M5 x 0.8 AS1000
01	Rc1/8 AS2000
02	Rc1/4 AS2000, 3000, 4000, 5000
03	Rc3/8 AS3000, 4000, 5000
04	Rc1/2 AS4000, 5000

Port thread

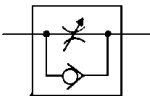
Nil	M3, M5
N	NPT
F	G

### Specifications

Proof pressure <sup>Note 1)</sup>	1.5MPa (1.05MPa)
Maximum operating pressure <sup>Note 1)</sup>	1MPa (0.7MPa)
Minimum operating pressure <sup>Note 1)</sup>	0.05MPa (0.1MPa)
Ambient and fluid temperature	-5° to 60°C (No freezing)
Number of needle rotation <sup>Note 1)</sup>	8 turns (10 turns)

Note 1) ( ): Values for AS1000.

### JIS Symbol



### Model

Model	Port size	Free flow		Controlled flow		Applicable cylinder bore size (mm)	Weight (g)
		Air flow [l/min (ANR)]	Effective area (mm <sup>2</sup> )	Air flow [l/min (ANR)]	Effective area (mm <sup>2</sup> )		
AS1000-M3	M3 x 0.5	20	0.3	20	0.3	2.5, 4, 6	4.7
AS1000-M5	M5 x 0.8	90	1.4	80	1.2	6, 10, 16, 20, 25	33
AS2000-01	1/8	340	5.2	250	3.8	20, 25, 32, 40	90
AS2000-02	1/4	340	5.2	250	3.8		115
AS3000-02	1/4	810	12.3	810	12.3	32, 40, 50, 63	130
AS3000-03	3/8	810	12.3	810	12.3		124
AS4000-02	1/4	1,670	25.5	1,670	25.5	40, 50, 63, 80, 100	221
AS4000-03	3/8	1,670	25.5	1,670	25.5		214
AS4000-04	1/2	1,670	25.5	1,670	25.5		205
AS5000-02	1/4	2,840	44	2,840	44	40, 50, 63, 80, 100	242
AS5000-03	3/8	4,270	66	4,270	66		233
AS5000-04	1/2	4,270	66	4,270	66		224

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

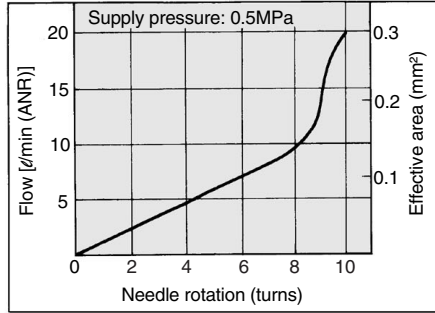
### Accessories

Description	Part No.	Applicable model
Nipple	M-5N	AS1000

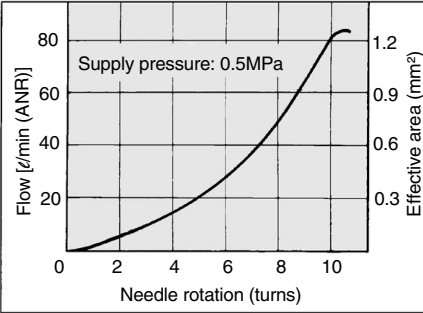
Note) AS1000 with nipple: AS1000-M5-N

## Flow Characteristics

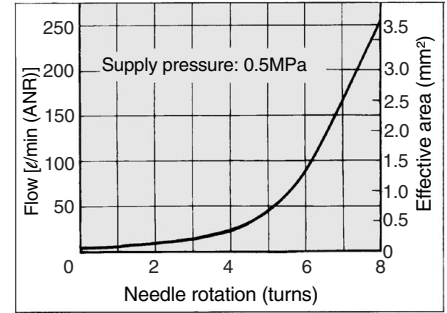
**AS1000-M3**



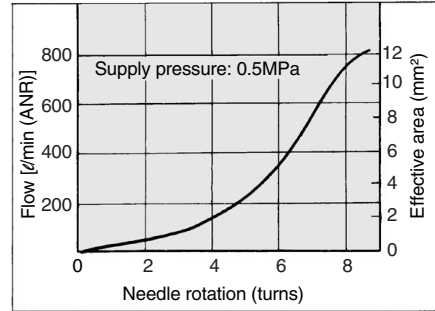
**AS1000-M5**



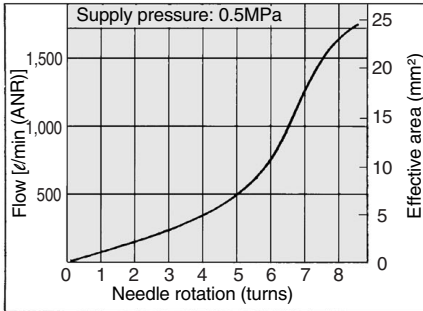
**AS2000**



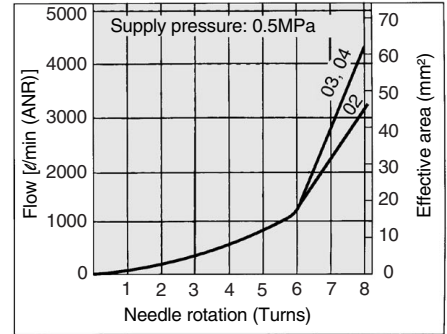
**AS3000**



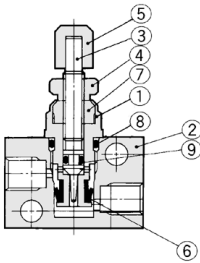
**AS4000**



**AS5000**



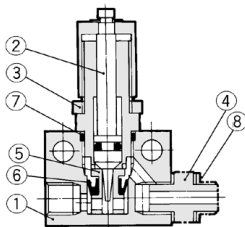
### AS1000-M3/Construction



#### Component Parts

No.	Description	Material	Note
①	Body B	Brass	Electroless nickel plated
②	Body	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	4.5 x 3 x 0.75
⑨	O-ring	NBR	2.2 x 0.8 x 0.7

### AS1000-M5/Construction



#### Component Parts

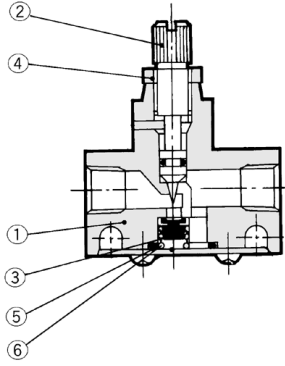
No.	Description	Material
①	Body	Zinc alloy
②	Needle	Stainless steel
③	Lock nut*	Brass
④	Nipple	Stainless steel

\*Electroless nickel plated

#### Replacement Parts

No.	Description	Material	Part no.
⑤	Valve seat	Brass	1429138
⑥	U-packing	NBR	142964
⑦	O-ring	NBR	ø9 x ø7 x ø1
⑧	Gasket	PVC	M-5G1

## AS2000, 3000/Construction



### Component Parts

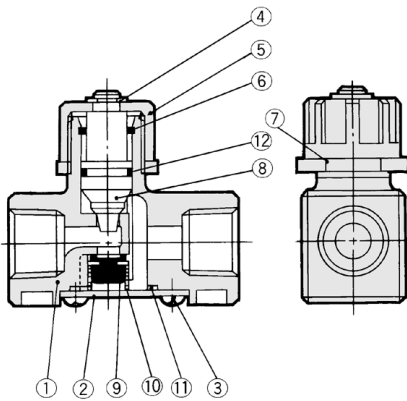
No.	Description	Model	
		AS2000	AS3000
①	Body	Zinc alloy	Aluminum alloy
②	Needle*	Brass	Brass
④	Lock nut*	Brass	Carbon steel

### Replacement Parts

No.	Description	Model	
		AS2000	AS3000
③	Valve	143022	14283
⑤	O-ring	143021	14284
⑥	Spring	143023	14282

\*Electroless nickel plated

## AS4000/Construction



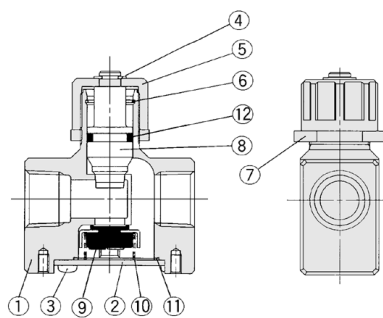
### Component Parts

No.	Description	Material	Note
①	Body	Aluminum alloy	Chromated
②	Cap	Rolled steel	Zinc chromate
③	Head cap screw	Steel wire	4 x 0.7 x 8
④	E type snap ring	Stainless steel	JIS B2805 Nominal 6
⑤	Handle	Zinc alloy	
⑥	Ring	Steel wire	Zinc chromated
⑦	Lock nut	Zinc alloy	
⑧	Needle	Aluminum alloy	
⑫	O ring	NBR	143112

### Replacement Parts

No.	Description	Material	Part No.
⑨	Valve	NBR, Brass	143145
⑩	Spring	Stainless steel	143146
⑪	O-ring	NBR	143147

## AS5000/Construction



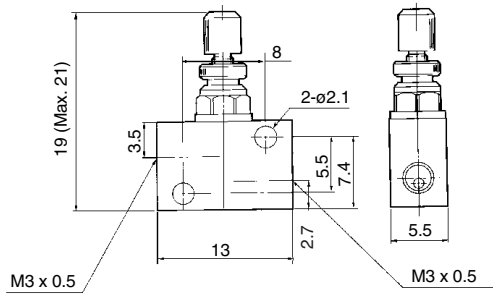
### Component Parts

No.	Description	Material	Note
①	Body	Aluminum alloy	Chromated
②	Cap	Rolled steel	Nickel plated
③	Head cap screw	Steel wire	M4 x 0.7 x 8 Nickel plated
④	E type snap ring	Stainless steel	JIS B 2805 Nominal 6
⑤	Handle	Zinc alloy	Chromated
⑥	Ring	Stainless steel	
⑦	Lock nut	Zinc alloy	Chromated
⑧	Needle	Aluminum alloy	Chromated
⑫	O-ring	NBR	JIS B2401 P12

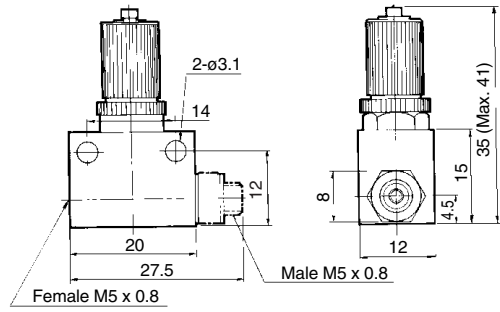
### Replacement Parts

No.	Description	Material	Part No.
⑨	Valve	NBR, Stainless steel	14143
⑩	Spring	Stainless steel	14144
⑪	Packing	NBR	14147

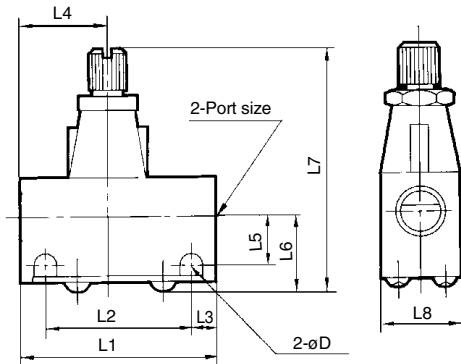
AS1000-M3/Dimensions



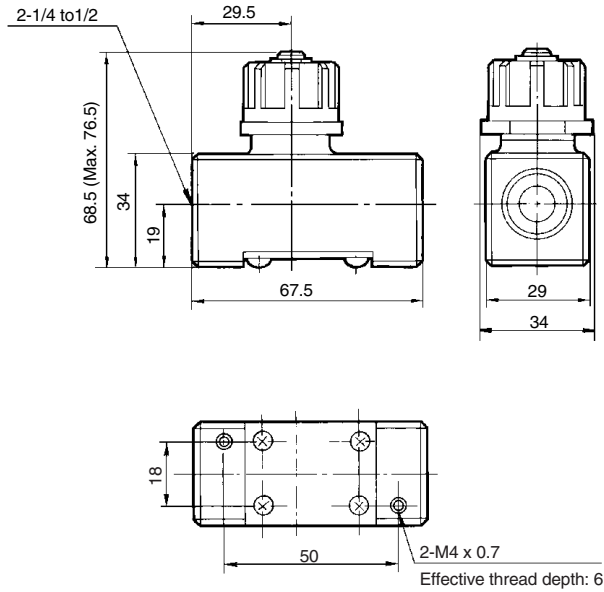
AS1000-M5/Dimensions



AS2000, 3000/Dimensions



AS4000/Dimensions



Dimensions

Model	Port size	L1	L2	L3	L4	L5	L6	L7		L8	D
								Max.	Min.		
AS2000-01	Rc1/8	40	30	5	17	10	15.5	54.5	50	16	4.5
AS2000-02	Rc1/4	40	30	5	23	11.5	17	56	51.5	20	4.5
AS3000-02, 03	Rc1/4, 3/8	56	45.5	5.25	25	13.2	20.6	68	61	26	5.5

- AS1000-M3.....SAS001, #1
- AS1000-M5.....SAS001, #2
- AS2000-01 .....SAS001, #3
- AS2000-02 .....SAS001, #4
- AS3000-02 to 03 ...SAS001, #5
- AS4000-02 to 04 ...SAS001, #7

AS5000/Dimensions

