

# Speed Controller: Standard Type

## Series AS

### Elbow Type (Metal Body)

#### Minimizes installation time and cost

Fittings and tubing are not necessary because this type screws directly into the actuator. Thus, piping labor and cost can be eliminated.

#### Body swivels 360°

Swivel type allows free setting of piping.

#### Speed may be accurately controlled even at low speeds.

#### Able to control and set a constant speed easily.

#### Retainer prevents accidental loss of needle.



#### Model/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		1.05 MPa	1.5 MPa						
Max. operating pressure		0.7 MPa	1 MPa						
Min. operating pressure		0.1 MPa	0.1 MPa						
Ambient and fluid temperature		-5 to 60°C (No freezing)							
Number of needle rotation		10 turns	8 turns	10 turns					
Option		—		Hexagonal lock nut	With seal, Hexagonal lock nut, Nickel plated				
Weight (g)		3	6	10	29	64	106	181	
Controlled flow (Free flow)	Flow rate 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) Flow rate values are measured at 0.5 MPa and 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. Those are distinguished by the lock nut. The meter-out type is electroless nickel plated, while the meter-in type is black zinc chromate plated.  
 Note 4) AS1200, AS1400, AS22□0 are electroless nickel plated as standard. (N specifications)

#### How to Order

**AS 2 2 0 0 — □ 01 — S**

**Body size**

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

**Type**

2	Direct cylinder elbow type
4	Direct cylinder flat elbow type

**Control type**

0	Meter-out
1	Meter-in

**Thread type**

Symbol	Cylinder side	Tube side
Nil	R	Rc
	Metric thread (M3, M5) Unified thread (10-32UNF)	
N	NPT	
F	G*	

**Option**

Nil	None
S	With seal
K	Hexagonal lock nut
N	Electroless nickel plated

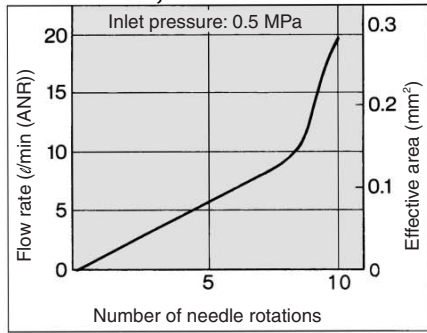
\* If more than one option is required, write option part numbers in the order of "S", "K", "N".

**Bore size**

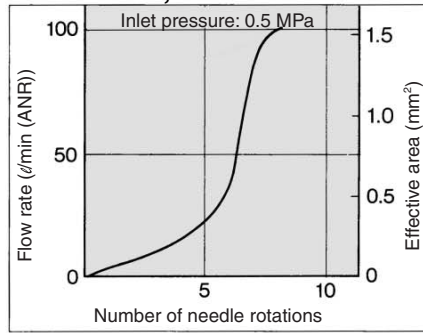
Symbol	Bore size	Applicable series
M3	M3 x 0.5	AS1200-M3 AS1400-M3
M5	M5 x 0.8	AS12□0-M5
U10/32	10-32UNF	AS12□0-U10/32
01	1/8	AS22□0-01
02	1/4	AS22□0-02
03	3/8	AS32□0-03
04	1/2	AS42□0-04

**Needle Valve/Flow Characteristics**

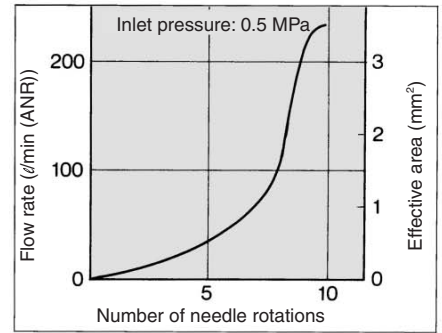
**AS1200-M3, AS1400-M3**



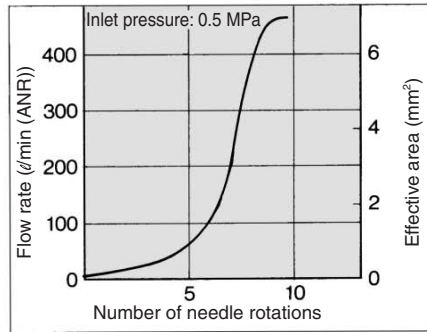
**AS12□0-M5, AS12□0-U10/32**



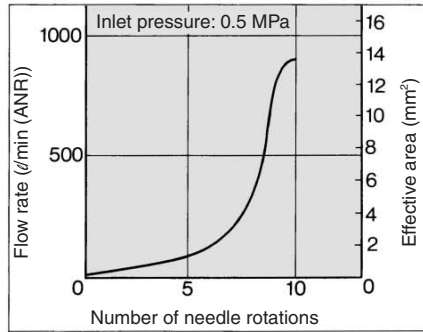
**AS22□0-01**



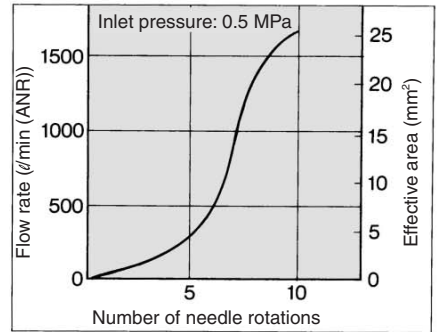
**AS22□0-02**



**AS32□0**



**AS42□0**



**⚠ Caution**

Be sure to read before handling. Refer to pages 15-18-3 to 15-18-4 for Safety Instructions and Common Precautions on the products mentioned in this catalog, and refer to pages 15-8-6 to 15-8-8 for Precautions on every series.

- AS
- ASP
- ASN
- AQ
- ASV
- AK
- ASS
- ASR
- ASF