

Series 10-AS-FM

Speed Controller for Low Speed Operation
with One-touch Fittings (In-line type)

How to Order

10 — **AS** **200** **1** **F** **M** — **06**

- Clean series**
- Body size**

| | |
|-----|--------------|
| 100 | M5 standard |
| 200 | 1/8 standard |
| 205 | 1/4 standard |
- With One-touch fittings**
- For low speed control**
- Lock nut option**

| | |
|-----|------------------|
| Nil | Hexagon lock nut |
| J | Round lock nut |
- Applicable tubing O.D. (Note)**
Metric size

| | |
|----|-------|
| 23 | ø3.2* |
| 04 | ø4 |
| 06 | ø6 |
| 08 | ø8 |

Note) Refer to the following Model list for selection of applicable tubing O.D.
* ø1/8 tubing should be used.



Model

| Model | Applicable tubing O.D | | | |
|-------------|-----------------------|---|---|---|
| | Metric size | | | |
| | 3.2 | 4 | 6 | 8 |
| 10-AS1001FM | ● | ● | ● | |
| 10-AS2001FM | | ● | ● | |
| 10-AS2051FM | | | ● | ● |

Directional Control Valves

Air Cylinders

Rotary Actuators

Air Grippers

Air Preparation Equipment

Modular F. R.

Pressure Control Equipment

Fittings & Tubing

Flow Control Equipment

Pressure Switches/
Pressure Sensors

Specifications

| | |
|--------------------------------------|---------------------------------|
| 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) |
| Applicable tubing material | Polyurethane ^{Note 1)} |
| Grease | Fluorine grease |
| Cleanliness class (ISO class) | Class 5 |

Note 1) The maximum operating pressure for polyurethane (at 20 °C) is 0.8 MPa.

(Refer to the **WEB catalog** for details.)

- * Brass parts are all electroless nickel plated.
- * The knob of the M5 type is black zinc chromated.

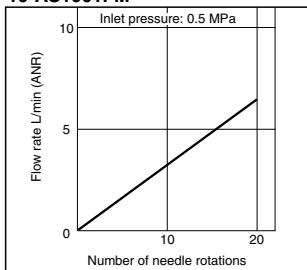
Flow Rate and Sonic Conductance

| Model | | 10-AS1001FM | | 10-AS2001FM | | 10-AS2051FM | |
|------------------------|--|--------------|-----|-------------|-----|-------------|-----|
| Tubing O.D. | Metric size | ø3.2, ø4, ø6 | | ø4 | ø6 | ø6 | ø8 |
| Controlled flow | Flow rate L/min (ANR) | 7 | | 12 | | 38 | |
| | Sonic conductance dm ³ /s/bar | 0.02 | | 0.04 | | 0.12 | |
| | Critical pressure ratio | 0.2 | | 0.2 | | 0.2 | |
| Free flow | Flow rate L/min (ANR) | 100 | 130 | 230 | 290 | 460 | 460 |
| | Sonic conductance dm ³ /s/bar | 0.3 | 0.4 | 0.7 | 0.9 | 1.4 | 1.4 |
| | Critical pressure ratio | 0.25 | | | | | |

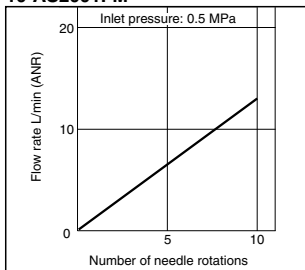
Note) Supply pressure: 0.5 MPa, Temperature: 20°C.

Needle Valve / Flow Rate Characteristics

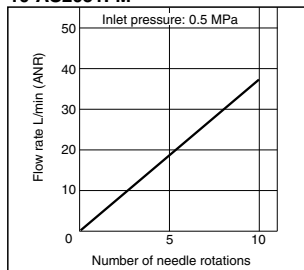
10-AS1001FM



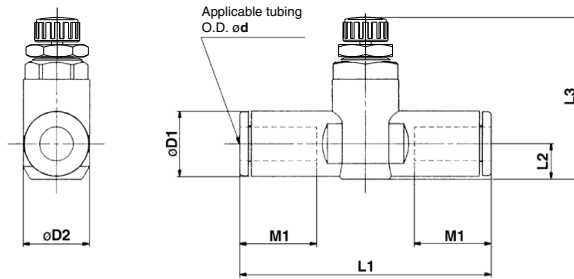
10-AS2001FM



10-AS2051FM



Dimensions



| Model | d | D1 | D2 | L1 | L2 | L3 | | M1 | Weight (g) |
|----------------|-----|------|------|------|-----|------|------|------|------------|
| | | | | | | MAX. | MIN. | | |
| 10-AS1001FM-23 | 3.2 | 8.4 | 10 | 38 | 4.5 | 27.7 | 24.9 | 12.7 | 6 |
| 10-AS1001FM-04 | 4 | 9.3 | | 39.2 | 5.2 | 28.5 | 25.5 | | 7 |
| 10-AS1001FM-06 | 6 | 11.6 | | 40.7 | 6.2 | 29.8 | 26.6 | 13.5 | 8 |
| 10-AS2001FM-04 | 4 | 9.3 | 11.8 | 44.8 | 5.2 | 32.6 | 27.6 | 12.7 | 12 |
| 10-AS2001FM-06 | 6 | 11.6 | | | 6.3 | 33.7 | 28.7 | 13.5 | 13 |
| 10-AS2051FM-06 | | 12.8 | 14.8 | 53.2 | 6.7 | 35.2 | 30.2 | 17 | 26 |
| 10-AS2051FM-08 | 8 | 15.2 | | 59.8 | 8.1 | 36.5 | 31.5 | 18 | 31 |

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