

# Stainless Steel Type Speed Controller with One-touch Fittings (In-line Type)

## 10-AS-FG Series



RoHS

### Model

| Model       | Applicable tubing O.D. |   |   |   |    |    |           |       |      |       |      |      |
|-------------|------------------------|---|---|---|----|----|-----------|-------|------|-------|------|------|
|             | Metric size            |   |   |   |    |    | Inch size |       |      |       |      |      |
|             | 3.2                    | 4 | 6 | 8 | 10 | 12 | 1/8"      | 5/32" | 1/4" | 5/16" | 3/8" | 1/2" |
| 10-AS1002FG | ●                      | ● |   |   |    |    | ●         |       | ●    |       |      |      |
| 10-AS2002FG |                        | ● | ● |   |    |    |           | ●     | ●    |       |      |      |
| 10-AS2052FG |                        |   | ● | ● |    |    |           |       | ●    | ●     |      |      |
| 10-AS3002FG |                        |   |   | ● | ●  | ●  |           |       |      |       | ●    | ●    |
| 10-AS4002FG |                        |   |   |   | ●  | ●  |           |       |      |       | ●    | ●    |

### Specifications

|                                |   |
|--------------------------------|---|
| Fluid                          | Air   |
| Proof pressure                 | 1.5 MPa                                     |
| Max. operating pressure        | 1 MPa                                       |
| Min. operating pressure        | 0.1 MPa                                     |
| Ambient and fluid temperatures | -5 to 60°C (No freezing)                    |
| Applicable tubing material     | Nylon, Soft nylon, Polyurethane*1, FEP, PFA |
| Grease                         | Fluorine grease                             |
| Cleanliness class (ISO class)  | Class 5                                     |

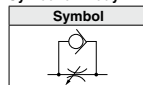
\*1 Use caution at the max. operating pressure when using soft nylon or polyurethane tubing. (Refer to the **Web Catalog** for details.)

### Flow Rate and Sonic Conductance

| Model  | 10-AS1002FG-□A  | 10-AS2002FG-□A | 10-AS2052FG-□A | 10-AS3002FG-□A |        |       |       | 10-AS4002FG-□A |       |        |       |     |       |       |
|--|-----------------|----------------|----------------|----------------|--------|-------|-------|----------------|-------|--------|-------|-----|-------|-------|
| Tubing O.D.  | Metric size     | ø3.2           | ø4             | ø6             | ø4     | ø6    | ø6    | ø8             | ø6    | ø8     | ø10   | ø12 | ø10   | ø12   |
|  | Inch size       | ø1/8"          | ø5/32"         | ø1/4"          | ø5/32" | ø1/4" | ø1/4" | ø5/16"         | ø1/4" | ø5/16" | ø3/8" | —   | ø3/8" | ø1/2" |
| C values: Sonic conductance (dm <sup>3</sup> /(s·bar)) | Free flow       | 0.3            | 0.4            | 0.6            | 0.4    | 0.6   | 1.0   | 1.2            | 1.1   | 1.6    | 2.2   | 2.6 | 2.4   | 3.5   |
|  | Controlled flow | 0.3            |                |                | 0.4    | 0.6   | 1.0   | 1.2            | 1.3   | 1.9    | 2.7   | 3.3 | 2.8   | 4.1   |
| b values: Critical pressure ratio                      | Free flow       | 0.3            | 0.2            |                | 0.3    | 0.1   | 0.2   |                | 0.2   |        |       | 0.3 | 0.2   |       |
|  | Controlled flow | 0.2            | 0.3            | 0.4            | 0.2    |       | 0.2   | 0.3            | 0.1   | 0.2    |       | 0.1 | 0.2   |       |

\* C and b values are for controlled flow with the needle fully open and free flow with the needle fully closed.

Flow Direction  
Symbol on Body



### How to Order

10-AS **200** 2FG-**06** A

Body size ●

|     |              |
|-----|--------------|
| 100 | M5 standard  |
| 200 | 1/8 standard |
| 205 | 1/4 standard |
| 300 | 3/8 standard |
| 400 | 1/2 standard |

With One-touch fittings ●

Stainless steel type ●  
(Stainless steel 303)

Push-lock type

Applicable tubing O.D.\*1

| Metric size | Inch size |
|-------------|-----------|
| 23          | ø3.2*2    |
| 04          | ø4        |
| 06          | ø6        |
| 08          | ø8        |
| 10          | ø10       |
| 12          | ø12       |
| 01          | ø1/8"     |
| 03          | ø5/32"    |
| 07          | ø1/4"     |
| 09          | ø5/16"    |
| 11          | ø3/8"     |
| 13          | ø1/2"     |

\*1 For selecting applicable tubing O.D., refer to the "Model" shown above.

\*2 Use ø1/8" tubing.

Dimensions and flow rate characteristics are the same as standard product (pages 5 to 7).