

Speed Controller with One-touch Fitting Elbow Type Series AS

RoHS

Model



Model	Port size	Seal method	Applicable tubing O.D.													
			Metric size							Inch size						
			2 Note 2)	3.2	4	6	8	10	12	16	1/8"	5/32"	1/4"	5/16"	3/8"	1/2"
AS12□1F-M5	M5 x 0.8	Gasket seal	●	●	●	●					●	●	●			
AS12□1F-U10/32	10-32 UNF		●	●	●	●					●	●	●			
AS22□1F-□01	R NPT	Sealant Note 1)		●	●	●	●	●			●	●	●	●		
AS22□1F-□02				●	●	●	●	●			●	●	●	●	●	
AS32□1F-□03						●	●	●	●				●	●	●	
AS42□1F-□04								●	●	●					●	●

Note 1) Non-sealant type can be selected as a standard option.

Note 2) Only polyurethane tubing is applicable for ø2.

Specifications

Flow Direction Symbols on Body

	Meter-out type	Meter-in type
Indication symbol		

Fluid	Air
Proof pressure	218 psi (1.5 MPa)
Max. operating pressure	145 psi (1 MPa)
Min. operating pressure	14.5 psi (0.1 MPa)
Ambient and fluid temperature	23 to 140°F (–5 to 60°C) (No freezing)
Applicable tubing material	Nylon, Soft nylon, Polyurethane Note)

Note) Use caution at the max. operating pressure when using soft nylon or polyurethane tubing.
(Refer to Best Pneumatics No. 6 for details.)

Flow Rate and Sonic Conductance

⚠ Caution


Be sure to read before handling.
Refer to back cover for Safety
Instructions and "Handling
Precautions for SMC Products"
(M-E03-3) for Flow Control
Equipment Precautions.

Model		AS12□1F-M5		AS22□1F-01		AS22□1F-02			AS32□1F-03			AS42□1F-04		
Tubing O.D.	Metric size	ø2	ø3.2 ø4 ø6	ø3.2	ø4	ø6 ø8 ø10	ø4	ø6	ø8 ø10	ø6	ø8	ø10 ø12	ø10	ø12 ø16
	Inch size	—	ø1/8" ø1/4" ø5/32"	ø1/8"	ø5/32"	ø1/4" ø5/16"	ø5/32"	—	ø1/4" ø5/16" ø3/8"	ø1/4"	ø5/16"	ø3/8"	ø3/8"	ø1/2"
C values: Sonic conductance dm³/(s·bar)	Free flow	0.2	0.3	0.4	0.6	0.6	1.0	1.3	1.5	1.6	1.7	2.5	4.4	4.8
	Controlled flow	0.2	0.3	0.4	0.7	0.8	0.9	1.3		2.1	2.4	3.3	4.4	4.9
b values: Critical pressure ratio	Free flow	0.3		0.2		0.3	0.3	0.4		0.4		0.3	0.3	
	Controlled flow	0.2	0.4	0.2		0.3	0.3			0.3			0.3	

Note 1) 10-32 UNF has the same specification as M5.

Note 2) C values and b values for controlled flow direction are with the needle fully open, the values for free flow direction are with the needle fully closed.

How to Order



M5	M5 x 0.8
U10/32	10-32 UNF

Applicable tubing O.D. Note 1)

Metric size	Inch size
02	ø2
23	ø3.2 <small>Note 2)</small>
04	ø4
06	ø6

Note 1) For selecting applicable tubing O.D., refer to Series Variations (Features 1).
For metric size and inch size types can be visually identified by color of the release button.
Metric size: White
Inch size: Orange
Note 2) Use ø1/8" tubing.

Body size 1

Body size 2/3/4

AS 1 2 0 1 F - M5 - 06 A

AS 2 2 0 1 F - 01 - 06 S A

Body size

1	M5 x 0.8 10-32 UNF
2	1/8, 1/4
3	3/8
4	1/2

Thread type

Nil	R
N	NPT

Port size

01	1/8
02	1/4
03	3/8
04	1/2

Elbow

Control type Note)

0	Meter-out
1	Meter-in

Note) For meter-out and meter-in types can be visually identified by color of the handle.
Meter-out: Gray
Meter-in: Light blue

Push-lock type

Seal method

Nil	Without sealant
S	With sealant

Applicable tubing O.D. Note 1)

Metric size	Inch size
23	ø3.2 <small>Note 2)</small>
04	ø4
06	ø6
08	ø8
10	ø10
12	ø12
16	ø16
01	ø1/8"
03	ø5/32"
07	ø1/4"
09	ø5/16"
11	ø3/8"
13	ø1/2"

Note 1) For selecting applicable tubing O.D., refer to Series Variations (Features 1).
Note 2) Use ø1/8" tubing.