

Flame Resistant (Equivalent to UL-94 Standard V-0) Speed Controller with One-touch Fittings Elbow Type

AS Series

Minimizes installation time and cost

Tube swivels 360°

Application to inch size tubing

- Metric size
ø6, ø8, ø10, ø12

Maximum operating pressure
1 MPa max.

Applicable tubing materials

FR double layer, FR soft nylon

Comes standard with seal.

Model

Elbow type	Port size	Applicable tubing O.D. (mm)			
		6	8	10	12
AS12□1F-M5-W2	M5	⊙			
AS22□1F-01-□W2	R1/8	⊙	⊙	⊙	
AS22□1F-02-□W2	R1/4	⊙	⊙	⊙	
AS32□1F-02-□W2	R1/4	⊙	⊙	⊙	⊙
AS32□1F-03-□W2	R3/8	⊙	⊙	⊙	⊙
AS42□1F-04-□W2	R1/2			●	●

Note 1) Meter-out and meter-in types can be visually differentiated by the lock nut.

The lock nut on the meter-out type is zinc chromated, while the meter-in type is black zinc chromate plated.

Note 2) ⊙: Brass parts are electroless nickel plated, provided as standard. (N specifications)

Specifications

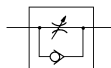
Fluid	Air
Proof pressure	1.5 MPa
Max. operating pressure	1 MPa
Mini. operating pressure	0.1 MPa
Ambient and fluid temperature	-5 to 60°C (No freezing)
Applicable tubing material ^(Note)	FR double layer, FR Three-layer, FR soft nylon, Nylon, Soft nylon, Polyurethane

Note) Use caution regarding the max. tubing operating pressure.
(Refer to pages 701 and 702 for details.)

Elbow type



Symbol



Flow Direction Symbols on Body

	Meter-out type	Meter-in type
Indication symbol		
Symbol		

Flow Rate and Sonic Conductance

Model	AS12□1F-M5		AS22□1F-01		AS22□1F-02		AS32□1F			AS42□1F			
	ø6		ø6, ø8, ø10		ø6, ø8, ø10		ø6, ø8, ø10, ø12			ø10, ø12			
Tubing O.D. (mm)	ø6		ø6, ø8, ø10		ø6, ø8, ø10		ø6, ø8, ø10, ø12			ø10, ø12			
Controlled flow	Flow rate L/min (ANR)		100		230		390		460		660		
	Sonic conductance dm ³ /(s·bar)		0.28		0.64		1.1		1.3		1.8		
Free flow	Flow rate L/min (ANR)		0.2		0.25		0.3		0.25			0.25	
	Sonic conductance dm ³ /(s·bar)		0.4		0.2		0.3		0.2			0.3	

Note) Flow rate values are measured at 0.5 MPa and 20°C.

⚠ Caution

Be sure to read this before handling the products.
Refer to page 11 for safety instructions and pages 19 to 22 for flow control equipment precautions.

How to Order

AS 2 2 0 1F - 01 - 06 W2

Body size

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

Elbow

Control type

0	Meter-out
1	Meter-in

With One-touch fitting

Applicable tubing O.D. (Note)

Metric size

06	ø6
08	ø8
10	ø10
12	ø12

Note) For applicable tubing O.D. selection, refer to the Model on page 1014.

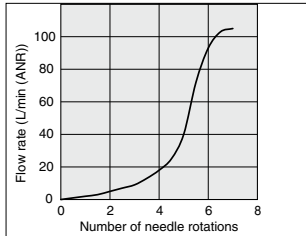
Port size

M5	M5
01	R 1/8
02	R 1/4
03	R 3/8
04	R 1/2

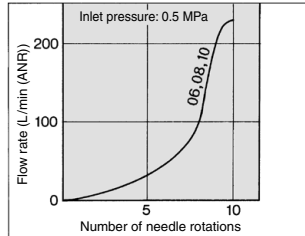
Needle Valve/Flow Rate Characteristics

Note) The flow rate characteristics are representative values.

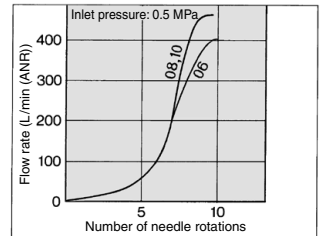
AS1201F-M5, AS1211F-M5



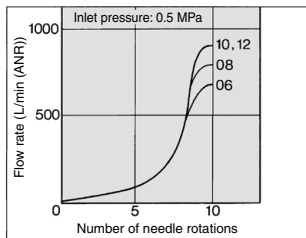
AS2201F-01, AS2211F-01



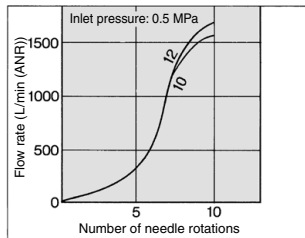
AS2201F-02, AS2211F-02



AS3201F, AS3211F

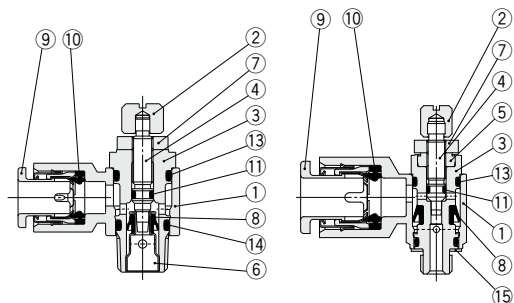


AS4201F, AS4211F



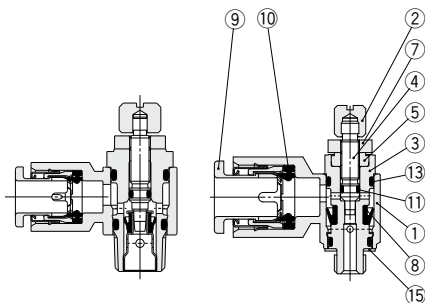
Meter-out type

M5 type



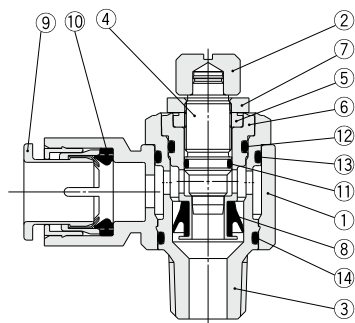
Meter-in type

M5 type

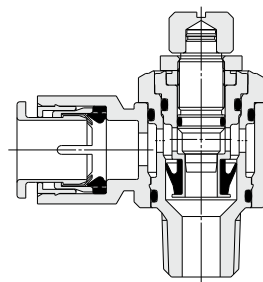


AS32□1F-02

Meter-out type AS3201F-02



Meter-in type AS3211F-02



Component Parts

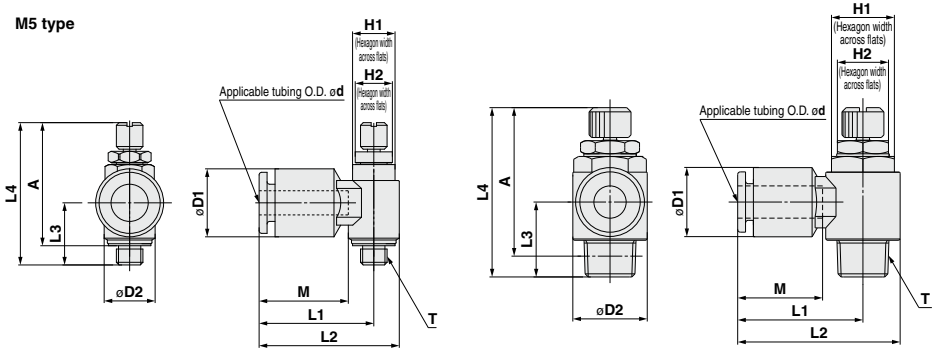
No.	Description	Material	Note
1	Body A	Flame-resistant PBT	
2	Handle	Brass	Electroless nickel plated
3	Body B	Brass	Electroless nickel plated
4	Needle	Brass	Electroless nickel plated
5	Needle guide	Brass	Electroless nickel plated
6	Seat ring	Brass	(1)
7	Lock nut	Steel	Meter-out Zinc chromate plated Meter-in Black zinc chromate plated
8	U-packing	HNBR	
9	Cassette	—	
10	Seal	NBR	
11	O-ring	NBR	
12	O-ring	NBR	
13	O-ring	NBR	
14	O-ring	NBR	
15	Gasket	Stainless steel, NBR	

Note 1) AS22□1F, AS32□1F: Electroless nickel plated.



Elbow Type

M5 type



Metric Size

Model	Applicable tubing O.D. ød	T	H1	H2	D1	D2	L1	L2	L3	L4 ⁽¹⁾		A ⁽²⁾		M	Weight (g)				
										Max.	Min.	Max.	Min.						
AS12□1F-M5-06W2	6	M5 x 0.8	8	6	11.6	9.6	18.1	22.9	11.7	28.8	26	25.2	22.4	13.5	9				
AS22□1F-01-06W2	6	R 1/8	12	10	13.2	14.2	23.9	31	13.4	36.4	31.4	33.3	28.3	17	19				
AS22□1F-01-08W2	8				15.2		32.4	18.5						32.1	39.2	15.2	18.5	21	23
AS22□1F-01-10W2	10	R 1/4	17	12	13.2	18.5	25.2	34.4	17.7	41.1	36.1	35.6	30.6	17	34				
AS22□1F-02-06W2	6				15.2		36.4	18.5						35.3	44.5	18.3	18.5	36	
AS22□1F-02-08W2	8				13.2		27.8	39.3	21.3					49.9	44.9	44.4	39.4	17	63
AS22□1F-02-10W2	10				15.2		29.5	41										18.5	65
AS32□1F-02-06W2	6	R 3/8	19	14	13.2	23	27.8	39.3	19.8	47.4	42.4	42.4	37.4	21	67				
AS32□1F-02-08W2	8				15.2		29.5	41						18.5	60				
AS32□1F-02-10W2	10	13.2	27.8	39.3	20.9	32.8	44.3	19.8	47.4	42.4	42.4	37.4	21	62					
AS32□1F-03-08W2	8	15.2	29.5	41									20.9	32.8	44.3	22	64		
AS32□1F-03-10W2	12	13.2	27.8	39.3	18.5	33.6	47.9	24.5	58.7	51.2	51.4	43.9	21	101					
AS42□1F-04-10W2	10	15.2	29.5	41									20.9	32.8	44.3	22	107		
AS42□1F-04-12W2	12	13.2	27.8	39.3	18.5	33.6	47.9	24.5	58.7	51.2	51.4	43.9	22	107					

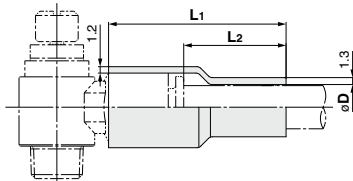
Note 1) Reference dimensions

Note 2) Reference thread dimensions after installation.

Related Equipment

Flame Resistant (Equivalent to UL-94 Standard V-0) Spatter Cover

(Applicable tubing: FR double layer/TRB, TRBU FR three layer/TRTU)



Model	Applicable tubing O.D.	øD	L1	L2
KR-06C-X1807	6	8.5	33.3	19.2
KR-08C-X1807	8	10.5	34.5	19.3
KR-10C-X1807	10	12.5	37.2	20.2
KR-12C-X1807	12	14.5	37.9	20.2

Note) Sales unit: 10 pcs.