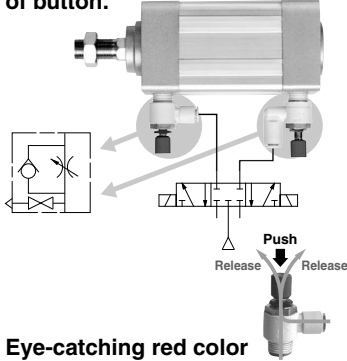


Speed Controller with Residual Pressure Release Valve with One-touch Fitting

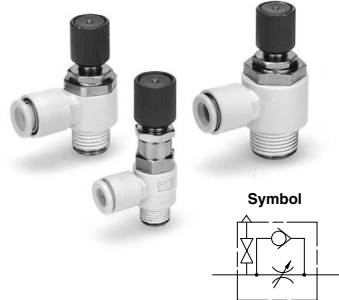
AS□□□□FE Series

RoHS

Residual pressure can be easily released with one push of button.



Eye-catching red color release button.



Model

Elbow type	Universal type	Port size in the cylinder side	Applicable tubing O.D. (mm)				
			ø4	ø6	ø8	ø10 ⁽¹⁾	ø12
AS22□1FE-01	AS23□1FE-01	R 1/8	●	●	●	●	
AS22□1FE-02	AS23□1FE-02	R 1/4	●	●	●	●	
AS32□1FE-03	AS33□1FE-03	R 3/8		●	●	●	●
AS42□1FE-04	AS43□1FE-04	R 1/2				●	●

Note 1) Elbow type only

Note 2) 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.

Specifications

Fluid	Air
Proof pressure	1.5 MPa
Max. operating pressure	1.0 MPa
Min. operating pressure	0.1 MPa
Ambient and fluid temperature	-5 to 60°C (No freezing)
Sonic conductance of residual pressure release valve	0.16 dm ³ /(s·bar)
Applicable tubing material	Nylon, Soft nylon, Polyurethane

Flow Rate and Sonic conductance

Model		AS22□1FE-01 AS23□1FE-01		AS22□1FE-02 AS23□1FE-02		AS32□1FE AS33□1FE			AS42□1FE AS43□1FE		
Tubing O.D.	Metric size	ø4	ø6 ø8 ø10	ø4	ø6 ø8 ø10	ø6	ø8 ø10 ø12	ø10	ø12		
Controlled flow	Flow rate (L/min (ANR))	180	230	260	390	460	660	790	920	1580	1710
Free flow	Sonic conductance dm ³ /(s·bar)	0.5	0.64	0.72	1.1	1.3	1.8	2.2	2.6	4.4	4.8
Critical pressure ratio	Controlled flow	0.25		0.3		0.25			0.25		
	Free flow	0.2		0.3		0.2			0.3		

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

Flow Direction Symbols on Body

	Meter-out type	Meter-in type
Indication symbol		
Symbol		

Made to Order

Made to Order
(For details, refer to page 659.)

Symbol	Specifications
-X12	Lubricant: Vaseline
-X21	Grease-free (Seal: Fluorine-coated) + Throttle valve (Without check valve)
-X214	Throttle valve (Without check valve)

How to Order

AS 2 2 1 1 FE - 01 - 06 SK -

- Body size**
 - 2 1/8, 1/4 standard
 - 3 3/8 standard
 - 4 1/2 standard
- Type**
 - 2 Elbow
 - 3 Universal
- Control type**
 - 0 Meter-out
 - 1 Meter-in
- Port size**
 - 01 R 1/8
 - 02 R 1/4
 - 03 R 3/8
 - 04 R 1/2
- Hexagonal lock nut**
 - With seal
- Applicable tubing O.D. (mm)** (Note)
 - 04 ø4
 - 06 ø6
 - 08 ø8
 - 10 ø10
 - 12 ø12

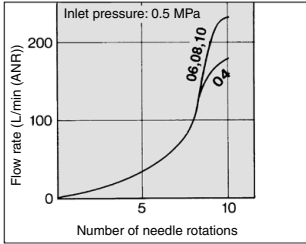
Note) For applicable tubing O.D. selection, refer to the Model.
- With residual pressure release valve**
- With One-touch fitting**

Made to Order
Refer to page 659 for details.

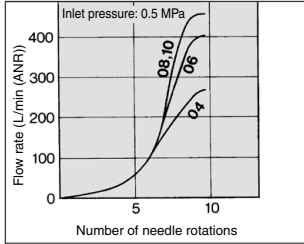
Needle Valve/Flow Rate Characteristics

Note) The flow rate characteristics are representative values.

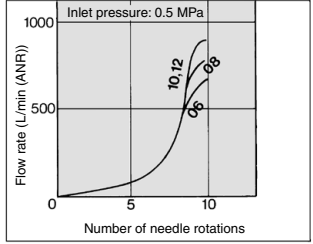
**AS2201FE-01, AS2211FE-01
AS2301FE-01, AS2311FE-01**



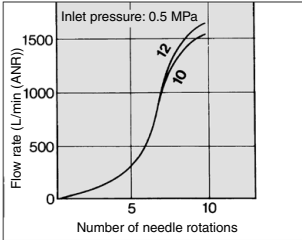
**AS2201FE-02, AS2211FE-02
AS2301FE-02, AS2311FE-02**



**AS3201FE, AS3211FE
AS3301FE, AS3311FE**



**AS4201FE, AS4211FE
AS4301FE, AS4311FE**



⚠ Caution

Be sure to read this before handling the products.
Refer to back page 50 for Safety Instructions and pages 543 to 546 for Flow Control Equipment Precautions.

Made to Order



Lubricant: Vaseline

X12

Ex.) AS2201FE-01-04SK-X12

Grease-free (Seal: Fluorine Coated) + Throttle Valve (Without Check Valve)

X21

Ex.) AS2201FE-01-04SK-X21

Note 1) Not particle-free
Note 2) This product is a restrictor without a check valve (no control direction). Be aware that all part numbers are for a meter-out type; there is no part number for a meter-in type.

Throttle Valve (Without Check Valve)

X214

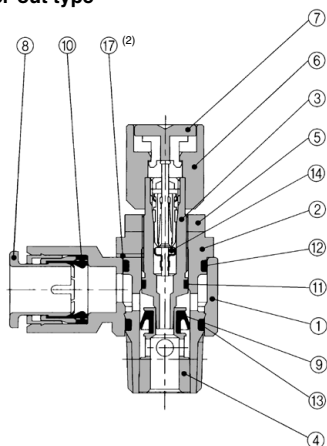
Ex.) AS2201FE-01-04SK-X214

Note) This product is a restrictor without a check valve (no control direction). Be aware that all part numbers are for a meter-out type; there is no part number for a meter-in type.

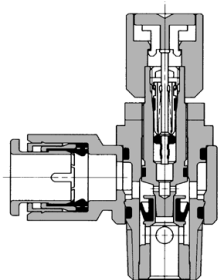
- AS-F
- TMH
- ASD
- AS
- AS-FE
- KE
- AS-FG
- AS-FP
- AS-FM
- AS-D
- AS-T
- ASP
- ASN
- AQ
- ASV
- AK
- VCHC
- ASR
- ASQ

Construction

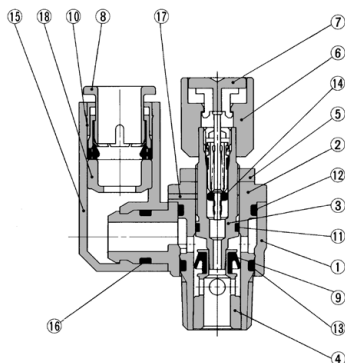
Elbow type Meter-out type



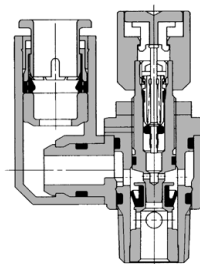
Meter-in type



Universal type Meter-out type



Meter-in type



Component Parts

No.	Description	Material	Note
1	Body A	PBT	White
2	Body B	Brass	Electroless nickel plated
3	Needle	Brass	Electroless nickel plated
4	Seat ring	Brass	⁽¹⁾
5	Lock nut	Steel ⁽²⁾	
6	Handle	Aluminum alloy	Red painted
7	Push button	POM	Red
8	Cassette	—	
9	U seal	HNBR	
10	Seal	NBR	
11	O-ring	NBR	
12	O-ring	NBR	
13	O-ring	NBR	
14	Valve core	—	
15	Elbow body	PBT	
16	O-ring	NBR	
17	Accidental release prevention screw	Stainless steel	AS2□□1FE-01 only ⁽³⁾
18	Spacer	—	

Note 1) AS2□□1FE type is electroless nickel plated.

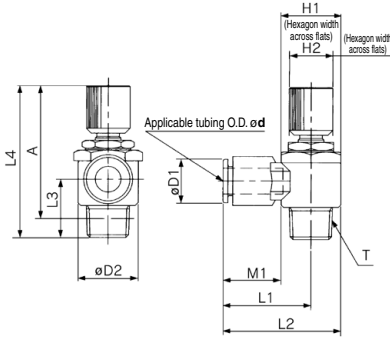
Note 2) Brass parts of AS2201FE-01 are electroless nickel plated.

Note 3) Only for AS2□□1FE-01.

Speed Controller with Residual Pressure Release Valve with One-touch Fitting **AS□□□□FE Series**

Dimensions

Elbow type



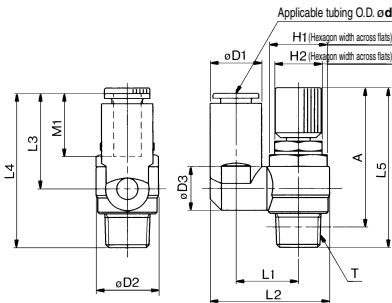
Model	Applicable tubing O.D. ød	T	H1	H2	D1	D2	L1	L2	L3	L4 (1)		A (2)		M1	Weight (g)	
										Max.	Min.	Max.	Min.			
AS22□□FE-01-04SK	4				9.3		20.4	27.5						12.7	26	
AS22□□FE-01-06SK	6	R 1/8	12	12	11.6	14.2	20.4	27.5	13.4		53	48	49.9	44.9	13.5	27
AS22□□FE-01-08SK	8				15.2		25.3	32.4						18.5	29	
AS22□□FE-01-10SK	10				18.5		33.1	40.2	14.1					21	31	
AS22□□FE-02-04SK	4				10.4		25.2	34.4						16	36	
AS22□□FE-02-06SK	6	R 1/4	17	14	12.8	18.5	25.2	34.4	17.7		51.7	46.7	46.2	41.2	17	37
AS22□□FE-02-08SK	8				15.2		27.2	36.4						18.5	39	
AS22□□FE-02-10SK	10				18.5		35.3	44.5	18.8					21	42	
AS32□□FE-03-06SK	6				12.8		27.8	39.3						17	57	
AS32□□FE-03-08SK	8				15.2		29.5	41						18.5	60	
AS32□□FE-03-10SK	10	R 3/8	19	14	18.5	23	31.8	43.3	19.8	56.7	51.7	51.5	46.5	21	62	
AS32□□FE-03-12SK	12				20.9		32.6	44.3						22	64	
AS42□□FE-04-10SK	10				18.5		33.6	47.9						21	103	
AS42□□FE-04-12SK	12	R 1/2	24	17	20.9	28.6	35.2	49.5	24.5	63.8	58.8	56.5	51.5	22	105	

Note 1) Reference dimensions

Note 2) Reference dimensions of R thread after installation.

Dimensions

Universal type



Model	Applicable tubing O.D. ød	T	H1	H2	D1	D2	D3	L1	L2	L3	L4	L5 (1)		A (2)		M1	Weight (g)
												Max.	Min.	Max.	Min.		
AS23□□FE-01-04SK	4				9.3		9.3	13.1	24.9	17.5	30.9					12.7	26
AS23□□FE-01-06SK	6	R 1/8	12	12	11.6	14.2	10.9	14	26.9	22.9	36.3	53	48	49.9	44.9	13.5	27
AS23□□FE-01-08SK	8				15.2		12.9	16.2	30.9	28.2	40.8					18.5	29
AS23□□FE-02-04SK	4				10.4		10.9	16.2	30.6	21.9	39.6					16	36
AS23□□FE-02-06SK	6	R 1/4	14	14	12.8	18.5	18.4	34	25.2	42.1	51.7	46.7	46.2	41.2	17	37	
AS23□□FE-02-08SK	8				15.2		12.9	18.3	35.2	28.2	45.1					18.5	39
AS23□□FE-02-10SK	10				18.5		20.2	38.7	31	47.9					21	42	
AS33□□FE-03-06SK	6				12.8		12.9	20.6	38.5	25.2	45				17	57	
AS33□□FE-03-08SK	8	R 3/8	19	14	15.2	23	16.2	23	39.7	28.2	48	56.7	51.7	51.5	46.5	18.5	60
AS33□□FE-03-10SK	10				18.5				43.7	32.6	52.4				21	62	
AS33□□FE-03-12SK	12				20.9				44.9	34.4	54.2				22	64	
AS43□□FE-04-10SK	10				18.5		16.2	25.8	49.4	32.6	57.1				21	103	
AS43□□FE-04-12SK	12	R 1/2	24	17	21.7	28.6	19.4	26.8	52	36.3	60.8	63.8	58.8	56.5	51.5	22	105

Note 1) Reference dimensions

Note 2) Reference dimensions of R thread after installation.

- AS-F
- TMH
- ASD
- AS
- AS-FE
- KE
- AS-FG
- AS-FP
- AS-FM
- AS-D
- AS-T
- ASP
- ASN
- AQ
- ASV
- AK
- VCHC
- ASR
- ASQ