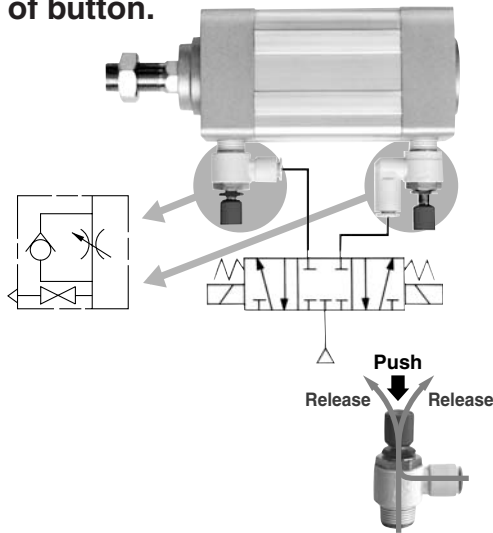


Speed Controller with Residual Pressure Release Valve with One-touch Fitting

Series AS□□□□FE

RoHS

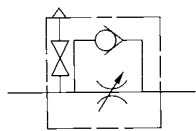
Residual pressure can be easily released with one push of button.



Eye-catching red color release button.



JIS Symbol



Flow Direction Symbols on Body

	Meter-out type	Meter-in type
Indication symbol		
Symbol		

Made to Order
(Refer to page 465 for details.)

Model

Elbow type	Universal type	Port size in the cylinder side	Applicable tubing O.D. (mm)					Applicable cylinder bore size (mm)
			ø4	ø6	ø8	ø10	ø12	
AS22□1FE-01	AS23□1FE-01	R 1/8	●	●	●	● ⁽¹⁾		20, 25, 32
AS22□1FE-02	AS23□1FE-02	R 1/4	●	●	●	●		20, 25, 32, 40
AS32□1FE-03	AS33□1FE-03	R 3/8		●	●	●	●	40, 50, 63
AS42□1FE-04	AS43□1FE-04	R 1/2				●	●	63, 80, 100

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)
Number of needle rotations	10 turns
Effective area of residual exhaust valve	0.8 mm ²
Applicable tubing material	Nylon, Soft nylon, Polyurethane

Flow Rate and Effective Area

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	ø4	ø6	ø8	ø6	ø8	ø10	ø10	ø12
Controlled flow	Flow rate (l/min (ANR))	180	230	260	390	460	660	790	920	1580	1710	
	Effective area (mm ²)	2.7	3.5	4	6	7	10	12	14	24	26	

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

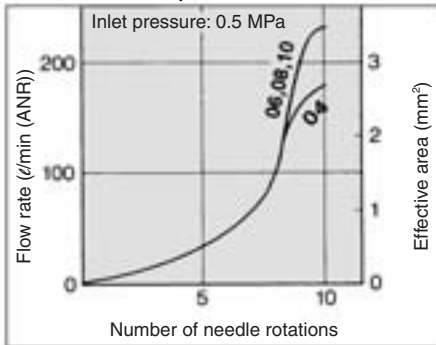
How to Order

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

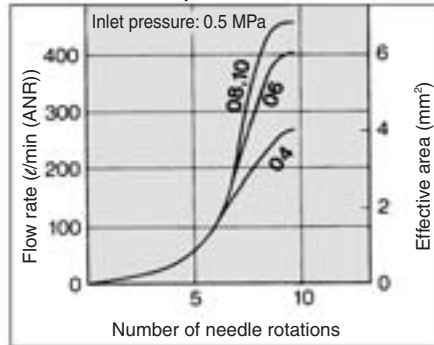
- Body size**
 - 2 1/8, 1/4 standard
 - 3 3/8 standard
 - 4 1/2 standard
- Type**
 - 2 Elbow
 - 3 Universal
- Control type**
 - 0 Meter-out
 - 1 Meter-in
- Port size**
 - 01 R 1/8
 - 02 R 1/4
 - 03 R 3/8
 - 04 R 1/2
- With residual pressure release valve**
- Applicable tubing O.D. (mm)**
 - 04 ø4
 - 06 ø6
 - 08 ø8
 - 10 ø10
 - 12 ø12
- With seal**
- Hexagonal lock nut**
- Made to Order**
Refer to page 465 for details.
- With One-touch fitting**

Needle Valve/Flow Characteristics

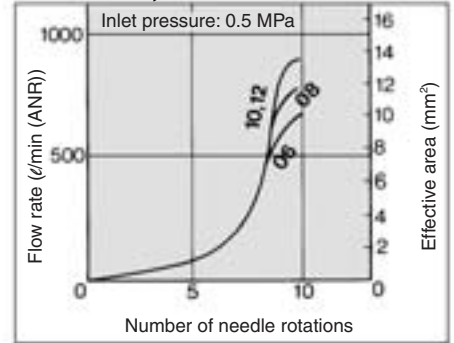
AS2201FE-01, AS2211FE-01
AS2301FE-01, AS2311FE-01



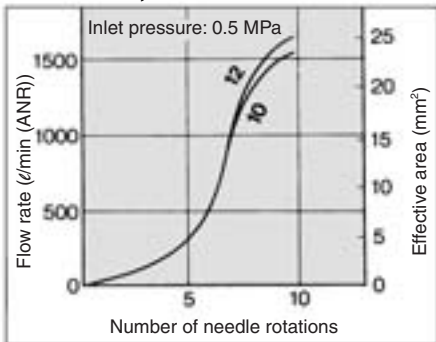
AS2201FE-02, AS2211FE-02
AS2301FE-02, AS2311FE-02



AS3201FE, AS3211FE
AS3301FE, AS3311FE



AS4201FE, AS4211FE
AS4301FE, AS4311FE



⚠ Caution

Be sure to read before handling.
Refer to front matters 58 and 59 for Safety Instructions and pages 412 to 414
for Flow Control Equipment Precautions.

Made to Order



Lubricant: Vaseline

X12

Ex.) AS2201FE-01-04SK-X12

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

X21

Ex.) AS2201FE-01-04SK-X21

Note 1) Not particle-free

Note 2) Throttle valve is only compatible with the part no. of the meter-out type.

Throttle Valve (Without Check Valve)

X214

Ex.) AS2201FE-01-04SK-X214

Note) Throttle valve is only compatible with the part no. of the meter-out type.

AS

ASP

ASN

AQ

ASV

AK

VCHC

ASS

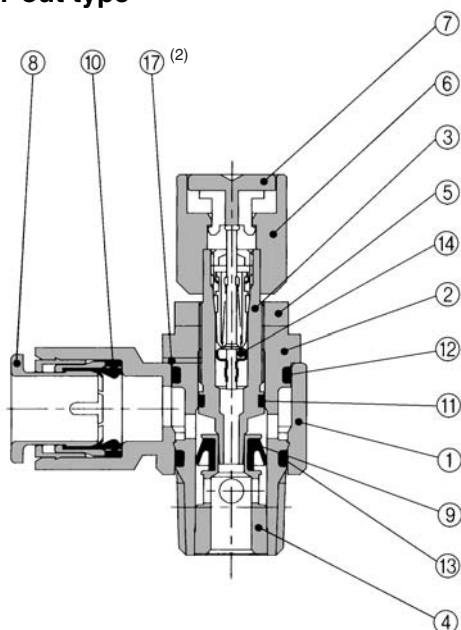
ASR
ASQ

KE

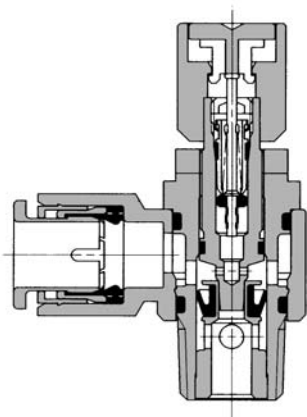
TMH

Construction

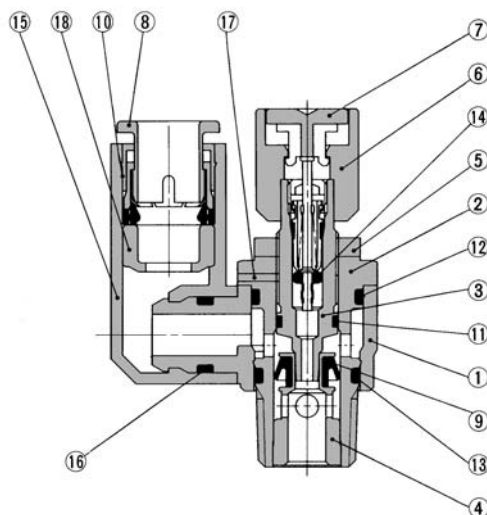
Elbow type Meter-out type



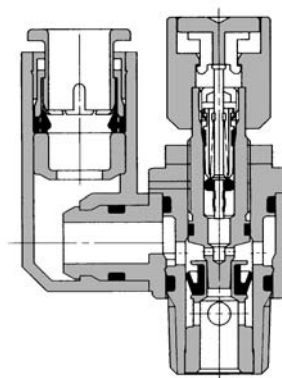
Meter-in type



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)	Zinc chromated (2) (3)
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 (3)
18	Spacer	—	

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

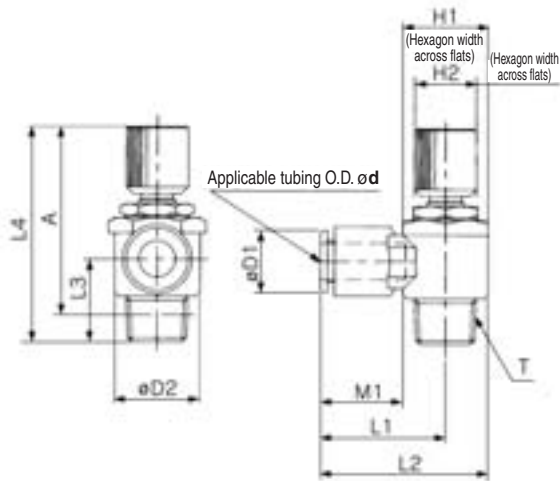
Note 2) Brass parts of AS2201FE-01 are electroless nickel plated.

Note 3) Meter-in type is black zinc chromate plated.

Note 4) Only for AS2□□1FE-01.

Dimensions

Elbow type



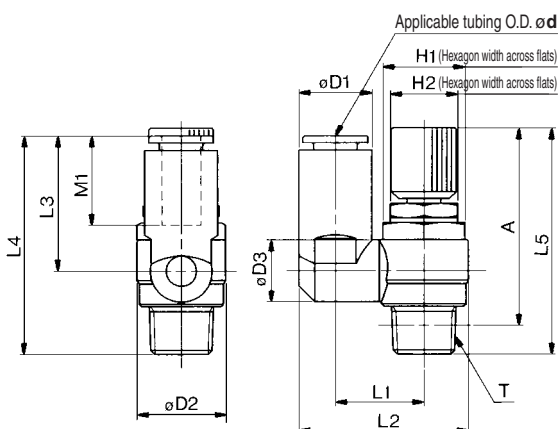
Model	Applicable tubing o.d.	T	H1	H2	D1	D2	L1	L2	L3	L4 (1)		A (2)		M1	Mass (g)
										Max.	Min.	Max.	Min.		
AS22□1FE-01-04SK	4	R 1/8	12	12	9.3	14.2	20.4	27.5	13.4	53	48	49.9	44.9	12.7	26
AS22□1FE-01-06SK	6				11.6		20.4	27.5						13.5	27
AS22□1FE-01-08SK	8				15.2		25.3	32.4						18.5	29
AS22□1FE-01-10SK	10				18.5		33.1	40.2						14.1	21
AS22□1FE-02-04SK	4	R 1/4	17	14	10.4	18.5	25.2	34.4	17.7	51.7	46.7	46.2	41.2	16	36
AS22□1FE-02-06SK	6				12.8		25.2	34.4						17	37
AS22□1FE-02-08SK	8				15.2		27.2	36.4						18.5	39
AS22□1FE-02-10SK	10				18.5		35.3	44.5						19.5	21
AS32□1FE-03-06SK	6	R 3/8	19	14	12.8	23	27.8	39.3	19.8	56.7	51.7	51.5	46.5	16	57
AS32□1FE-03-08SK	8				15.2		29.5	41						18.5	60
AS32□1FE-03-10SK	10				18.5		31.8	43.3						21	62
AS32□1FE-03-12SK	12				20.9		32.8	44.3						22	64
AS42□1FE-04-10SK	10	R 1/2	24	17	18.5	28.6	33.6	47.9	24.5	63.8	58.8	56.5	51.5	21	103
AS42□1FE-04-12SK	12				20.9		34.6	48.9						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	Mass (g)
												Max.	Min.	Max.	Min.		
AS23□1FE-01-04SK	4	R 1/8	12	12	9.3	14.2	9.3	13.1	24.9	17.5	30.9	53	48	49.9	44.9	12.7	26
AS23□1FE-01-06SK	6				11.6		10.9	14	26.9	22.9	36.3					13.5	27
AS23□1FE-01-08SK	8				15.2		12.9	16.2	30.9	28.2	40.8					18.5	29
AS23□1FE-02-04SK	4	R 1/4	14	14	10.4	18.5	10.9	16.2	30.6	21.9	39.6	51.7	46.7	46.2	41.2	16	36
AS23□1FE-02-06SK	6				12.8		18.4	34	25.2	42.1	17					37	
AS23□1FE-02-08SK	8				15.2		12.9	18.3	35.2	28.2	45.1					18.5	39
AS23□1FE-02-10SK	10				18.5		20.2	38.7	31	47.9	21					42	
AS33□1FE-03-06SK	6	R 3/8	19	14	12.8	23	12.9	20.6	38.5	25.2	45	56.7	51.7	51.5	46.5	17	57
AS33□1FE-03-08SK	8				15.2		18.3	39.7	28.2	48	18.5					60	
AS33□1FE-03-10SK	10				18.5		16.2	23	43.7	32.6	52.4					21	62
AS33□1FE-03-12SK	12				20.9		44.9	34.4	54.2	22	64						
AS43□1FE-04-10SK	10	R 1/2	24	17	18.5	28.6	16.2	25.8	49.4	32.6	57.1	63.8	58.8	56.5	51.5	21	103
AS43□1FE-04-12SK	12				21.7		19.4	26.8	52	36.3	60.8					22	105

Note 1) Reference dimensions

Note 2) Reference dimensions of R thread after installation.

AS

ASP

ASN

AQ

ASV

AK

VCHC

ASS

ASR
ASQ

KE

TMH

Speed Controller with Residual Pressure Release Valve: Standard Type

Series AS□□□□E

RoHS

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

Eye-catching red color release button.



Model/Flow Rate and Effective Area

Model	Port size	Free flow		Controlled flow		Applicable cylinder bore size (mm)	Mass (g)
		Flow rate (l/min (ANR))	Effective area (mm ²)	Flow rate (l/min (ANR))	Effective area (mm ²)		
AS2000E-01	1/8	340	5.2	250	3.8	20, 25, 32, 40	90
AS2000E-02	1/4						115
AS3000E-02	1/4	810	12.3	810	12.3	32, 40, 50, 63	130
AS3000E-03	3/8						
AS4000E-02	1/4	1670	25.5	1670	25.5	40, 50, 63, 80, 100	225
AS4000E-03	3/8						
AS4000E-04	1/2						

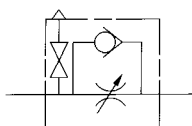
Note) Flow rate values are measured at 0.5 MPa and 20°C.

Specifications

Fluid	Air
Proof pressure	1.5 MPa
Max. operating pressure	1.0 MPa
Min. operating pressure	0.05 MPa
Ambient and fluid temperature	-5 to 60°C (No freezing)
Number of needle rotations	8 turns
Effective area of residual exhaust valve	0.8 mm ²

How to Order

JIS Symbol



AS 2 000 E - □ 01

Body size

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

With residual pressure release valve

Thread type

Nil	Rc
N	NPT
F	G

Port size

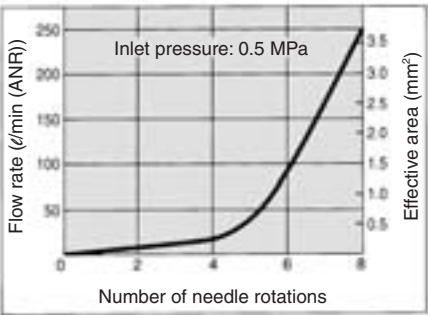
Port size	Applicable series
01	1/8 AS2000E
02	1/4 AS2000E, 3000E, 4000E
03	3/8 AS3000E, 4000E
04	1/2 AS4000E

⚠ Caution

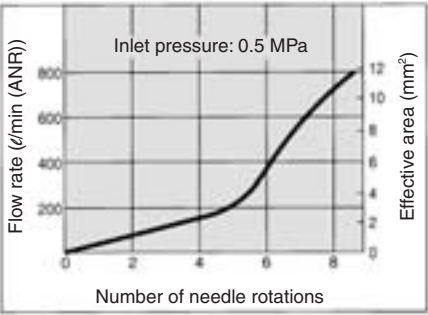
Be sure to read before handling.
Refer to front matters 58 and 59 for Safety Instructions and pages 412 to 414 for Flow Control Equipment Precautions.

Needle Valve/Flow Characteristics

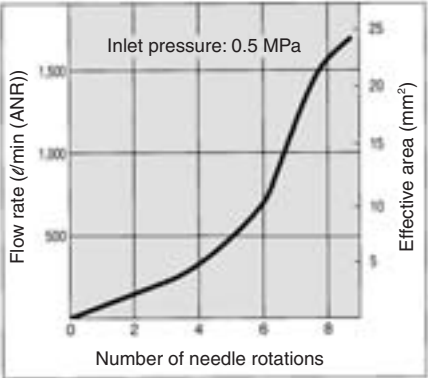
AS2000E



AS3000E

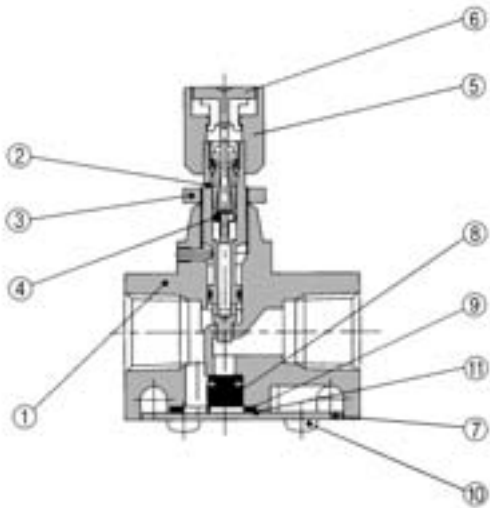


AS4000E



Construction

AS2000E/3000E



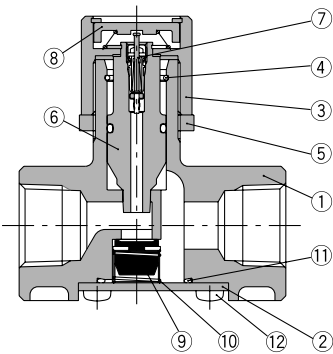
Component Parts

No.	Description	Model	
		AS2000	AS3000
1	Body	Zinc alloy	Aluminum alloy
2	Needle	Brass	Brass
3	Lock nut	Brass	Brass
4	Valve core	—	—
5	Handle	Aluminum alloy (Red painted)	Aluminum alloy (Red painted)
6	Push button	POM (Red)	POM (Red)
7	Cap	Stainless steel	Stainless steel

Replacement Parts

No.	Description	Material	Part no.	
			AS2000	AS3000
8	Valve	NBR	143022	14283
9	Spring	Stainless steel	143023	14282
10	Cross-recessed head cap screw	Stainless steel	M3 x 0.5 x 6	M4 x 0.7 x 8
11	O-ring	NBR	143021	14284

AS4000E



Component Parts

No.	Description	Material	Note
1	Body	Aluminum alloy	Chromated
2	Cap	SPC	Nickel plated
3	Handle	Zinc alloy	Chromated (Red painted)
4	Ring	Spring steel	Zinc chromated
5	Lock nut	Zinc alloy	Chromated
6	Needle	Aluminum alloy	Chromated
7	Valve core	—	
8	Push button	POM	Red

Replacement Parts

No.	Description	Material	Part no.
9	Valve	NBR/Brass	143145
10	Spring	Stainless steel	143146
11	O-ring	NBR	143147
12	Cross-recessed head cap screw	Steel wire	M4 x 0.7 x 8

AS

ASP

ASN

AQ

ASV

AK

VCHC

ASS

ASR

ASQ

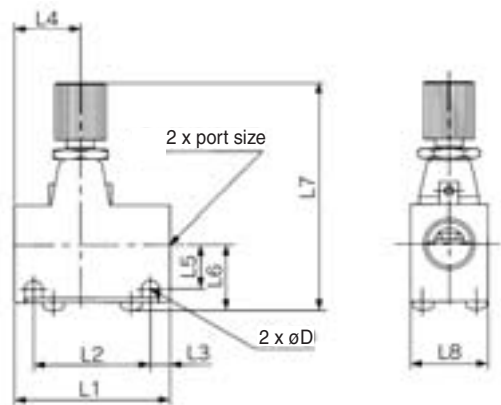
KE

TMH

Series **AS**□□□□**E**

Dimensions

AS2000E/3000E



Model	Port size	L1	L2	L3	L4	L5	L6	L7 ⁽¹⁾		L8	D
								Max.	Min.		
AS2000E-01	1/8	40	30	5	17	10	15.5	61.5	57	16	4.5
AS2000E-02	1/4	40	30	5	23	12	17	63.5	59	20	4.5
AS3000E-02, 03	1/4, 3/8	56	45.5	5.25	25	13.25	20.6	76	69	26	5.5

Note 1) Reference dimensions

AS4000E

