

Tamper Proof Speed Controller Standard Type Elbow Type (Metal Body)

AS□2□0-T Series

RoHS

Model/ Specifications



Specifications	Model	AS12□-0-M5	AS12□-0-U10/32	AS22□-0-01	AS22□-0-02	AS32□-0-02	AS32□-0-03	AS42□-0-04
Port size		M5 x 0.8	10-32 UNF	1/8	1/4	1/4, 3/8 (Note 4)	3/8	1/2
Fluid		Air						
Proof pressure		1.5 MPa						
Max. operating pressure		1 MPa						
Min. operating pressure		0.1 MPa						
Ambient and fluid temperature		-5 to 60°C (No freezing)						
Controlled flow	Flow rate (L/min (ANRI))	105	230	460	920	1700		
Free flow	Sonic conductance (dm ³ /s/bar)	0.32	0.7	1.4	2.8	5.2		
	Controlled flow	0.2	0.25	0.3	0.25	0.25		
Critical pressure ratio	Controlled flow	0.4	0.2	0.3	0.2	0.2		
	Free flow	0.4	0.2	0.3	0.2	0.2		

Note 1) Flow rate values are measured at 0.5 MPa and 20°C.

Note 2) Meter-out and meter-in types can be visually differentiated by the flow direction symbol on the metal body.

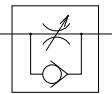
Note 3) Brass parts are all electroless nickel plated, provided as standard.

Note 4) Female thread port size (valve side) is 3/8 for AS32□0-□02.

How to Order

AS **2** **2** **0** **0** - **01** - **S** **T**

Symbol



Flow Direction Symbols on Body

	Meter-out type	Meter-in type
Indication symbol		
Symbol		

Body size

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

Elbow

Control

0	Meter-out
1	Meter-in

Tamper proof

Note) Speed controller requires a special tool for flow adjustment. Order separately with part number, AS-T-1.

With seal

Note) When connecting port is either M5 or 10-32 UNF thread, it is not available with seal. With gasket is provided as standard.

Port size

Symbol	Cylinder side	In the side of solenoid valve
M5	M5 x 0.8	M5 x 0.8
01	R 1/8	Rc 1/8
		Rc 1/4 (Note 1)
02	R 1/4	Rc 3/8 (Note 2)
		Rc 3/8
03	R 3/8	Rc 3/8
04	R 1/2	Rc 1/2
F01	R 1/8	G 1/8
		G 1/4 (Note 1)
F02	R 1/4	G 3/8 (Note 2)
		G 3/8
F03	R 3/8	G 3/8
F04	R 1/2	G 1/2
U10/32	10-32 UNF	10-32 UNF
N01	NPT 1/8	NPT 1/8
		NPT 1/4 (Note 1)
N02	NPT 1/4	NPT 3/8 (Note 2)
		NPT 3/8
N03	NPT 3/8	NPT 3/8
		NPT 1/2
N04	NPT 1/2	NPT 1/2

Note 1) AS22□0-□02

Note 2) AS32□0-□02

Caution

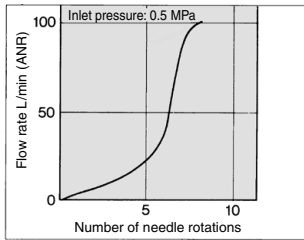
Be sure to read this before handling the products. Refer to back page 50 for Safety Instructions and pages 543 to 546 for Flow Control Equipment Precautions.

Tamper Proof Speed Controller Standard Type, Elbow Type (Metal Body) **AS□2□0-T Series**

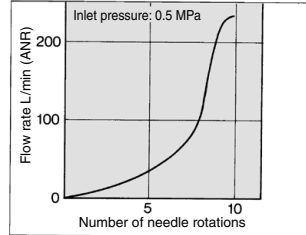
Needle Valve/Flow Rate Characteristics

Note) The flow rate characteristics are representative values.

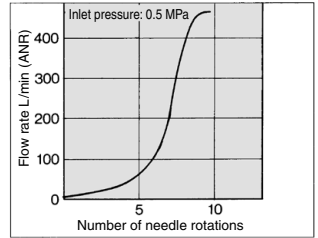
AS12□0-M5·AS12□0-U10/32



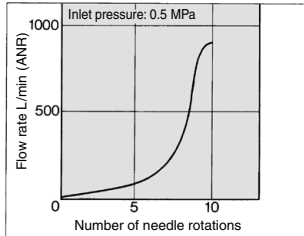
AS22□0-01



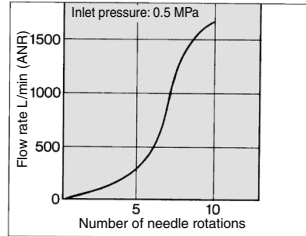
AS22□0-02



AS32□0



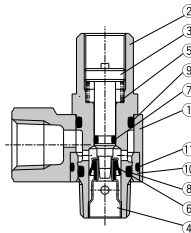
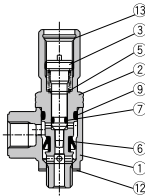
AS42□0



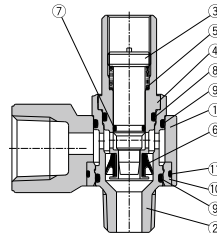
Construction

Meter-out type

M5 type
U10/32 type

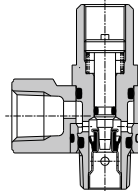
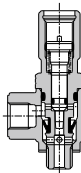


AS3200-02

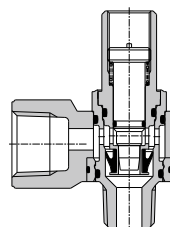


Meter-in type

M5 type
U10/32 type



AS3210-02



Component Parts

No.	Description	Material	Note
1	Body A	Zinc alloy	Chromate plated
2	Body B	Brass	Electroless nickel plated
3	Needle	Brass	Electroless nickel plated
4	Seat ring	Brass	Electroless nickel plated
5	Spring	Steel wire ⁽¹⁾	
6	U seal	HNBR	
7	O-ring	NBR	

Component Parts

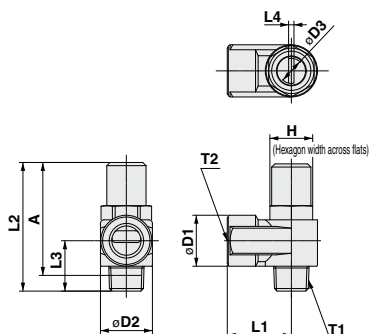
No.	Description	Material	Note
8	O-ring	NBR	
9	O-ring	NBR	
10	Bushing	PBT	
11	O-ring	NBR	
12	Gasket	NBR, Stainless steel	
13	Retaining ring for hole type C	Tool steel	

Note 1) M5 and U10/32 type: Stainless steel

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

AS□2□0-T Series

Dimensions



Dimensions

Model	T1	T2	H	D1	D2	D3	L1	L2	L3	L4	A*	Weight (g)
AS12□0-M5-T	M5 x 0.8	M5 x 0.8	8	9	9	4.5	10	31	10.3	0.7	27.4	13
AS12□0-U10/32-T	10-32 UNF	10-32 UNF										
AS22□0-01-ST	R 1/8	Rc 1/8	12	14.3	14.6	7	18	34.7	13.2	1.5	31.6	33
AS22□0-F01-ST		G 1/8										
AS22□0-N01-ST	NPT 1/8	NPT 1/8	12.7									
AS22□0-02-ST	R 1/4	Rc 1/4	17	18	19.5	7	27.2	40.2	17.5	1.5	36.7	72
AS22□0-F02-ST		G 1/4										
AS22□0-N02-ST	NPT 1/4	NPT 1/4	17.5									
AS32□0-02-ST	R 1/4	Rc 3/8	19	22.5	24.3	9.5	30	54.8	21.9	1.5	49.3	123
AS32□0-F02-ST		G 3/8										
AS32□0-N02-ST	NPT 1/4	NPT 3/8										
AS32□0-03-ST	R 3/8	Rc 3/8	19	22.5	24.3	9.5	30	52.6	19.7	1.5	47.4	128
AS32□0-F03-ST		G 3/8										
AS32□0-N03-ST	NPT 3/8	NPT 3/8										
AS42□0-04-ST	R 1/2	Rc 1/2	24	27.5	28.5	12	38.5	62.9	25.8	1.5	55.8	222
AS42□0-F04-ST		G 1/2										
AS42□0-N04-ST	NPT 1/2	NPT 1/2	23.8									

* Reference thread dimensions after installation.