

Speed Controller with Pilot Check Valve with One-touch Fitting

Series ASP

Pilot check valve and speed controller are combined.

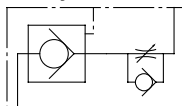
Realizes momentary intermediate stoppage of a cylinder and able to adjust speed control of it.

Tubing mount direction is 360° free.

Electroless nickel plated is provided as standard.



JIS Symbol



Model

Model	Port size	Pilot port	Applicable tubing O.D.										
			Metric size				Inch size						
			ø6	ø8	ø10	ø12	ø1/4"	ø5/16"	ø3/8"	ø1/2"			
ASP330F-01	R 1/8	M5 x 0.8	●	●									
ASP430F-02	R 1/4	Rc 1/8	●	●									
ASP530F-03	R 3/8	Rc 1/8		●	●								
ASP630F-04	R 1/2	Rc 1/4			●	●							
ASP430F-F02	R 1/4	G 1/8	●	●									
ASP530F-F03	R 3/8	G 1/8		●	●								
ASP630F-F04	R 1/2	G 1/4			●	●							
ASP330F-N01	NPT 1/8	10-32 UNF						●	●				
ASP430F-N02	NPT 1/4	NPT 1/8						●	●				
ASP530F-N03	NPT 3/8	NPT 1/8							●	●			
ASP630F-N04	NPT 1/2	NPT 1/4								●	●		

Note) Brass parts are all electroless nickel plated.

Specifications

Fluid	Air
Proof pressure	1.5 MPa
Max. operating pressure	1 MPa
Min. operating pressure	0.1 MPa
Pilot check valve operating pressure	More than 50% the operating pressure
Ambient and fluid temperature	-5 to 60°C (No freezing)
Number of needle rotations	10 turns
Applicable tubing material	Nylon, Soft nylon, Polyurethane

Note) Use caution regarding the max. operating pressure when soft nylon or polyurethane tubing is used. (Refer to pages 15-6-3 and 15-6-5 for details.)

Flow Rate and Effective Area

Model	ASP330F		ASP430F		ASP530F		ASP630F	
	Metric size	ASP330F	ASP430F	ASP430F	ASP530F	ASP530F	ASP630F	ASP630F
Tubing O.D.	Metric size	ø6, ø8	ø6	ø8	ø8	ø10	ø10	ø12
	Inch size	ø1/4" ø5/16"	—	ø1/4" ø5/16"	ø5/16"	ø3/8"	—	ø3/8" ø1/2"
Controlled flow (Free flow)	Flow rate (l/min(ANR))	180	330	350	600	750	1100	1190
	Effective area (mm ²)	2.9	5.2	5.4	9.3	11.6	17	18.4

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

⚠ Caution

Be sure to read before handling. Refer to pages 15-8-3 and 15-8-4 for Safety Instructions and Common Precautions on the products mentioned in this catalog, and refer to pages 15-8-6 to 15-8-8 for Precautions on every series.

AS

ASP

ASN

AQ

ASV

AK

ASS

ASR

ASF

Series ASP

How to Order

ASP 330F-01-06S

Pilot check valve

Body size

3	1/8 standard
4	1/4 standard
5	3/8 standard
6	1/2 standard

Type

3	Universal
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With One-touch fitting

With seal

Applicable tubing O.D.

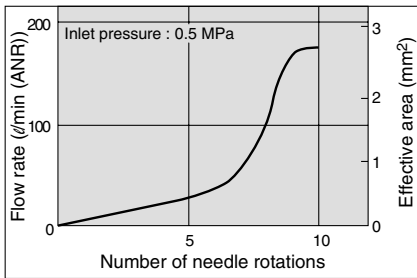
Metric size		Inch size	
06	ø6	07	ø1/4"
08	ø8	09	ø5/16"
10	ø10	11	ø3/8"
12	ø12	13	ø1/2"

Port size

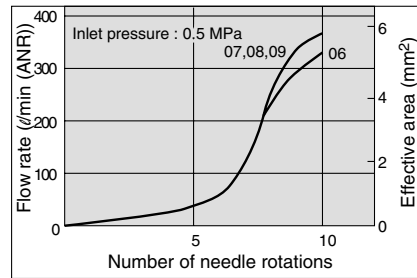
Symbol	Cylinder side	Pilot port
01	R 1/8	M5 x 0.8
02	R 1/4	Rc 1/8
03	R 3/8	Rc 1/8
04	R 1/2	Rc 1/4
F02	R 1/4	G 1/8
F03	R 3/8	G 1/8
F04	R 1/2	G 1/4
N01	NPT 1/8	10-32 UNF
N02	NPT 1/4	NPT 1/8
N03	NPT 3/8	NPT 1/8
N04	NPT 1/2	NPT 1/4

Needle Valve/Flow Characteristics

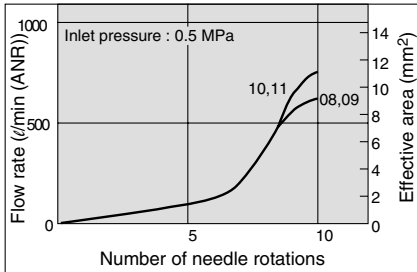
ASP330F



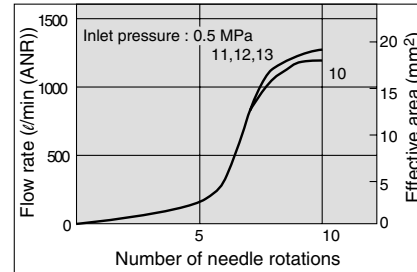
ASP430F



ASP530F



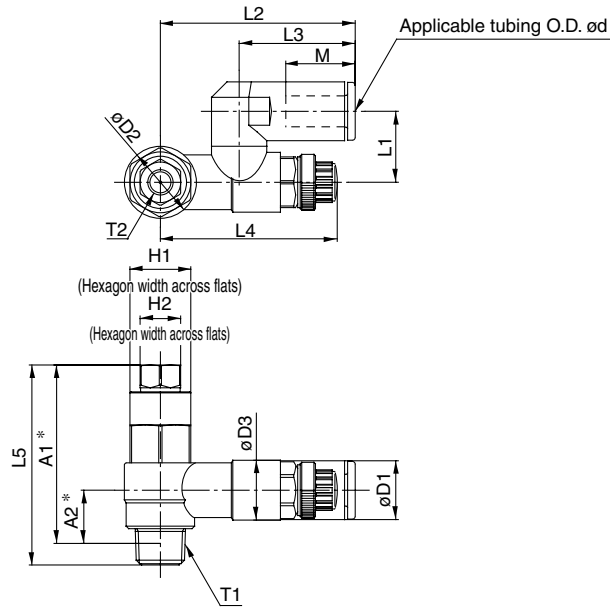
ASP630F



Speed Controller with Pilot Check Valve with One-touch Fitting Series ASP

Dimensions

Metric size

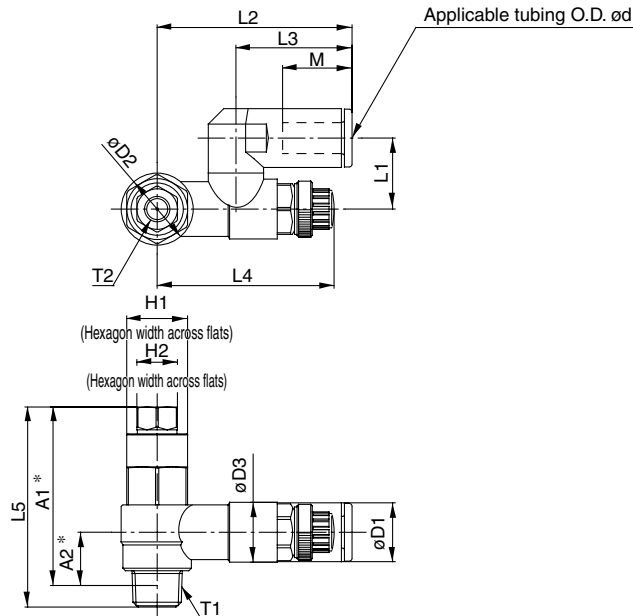


Metric Size

Model	d	T1	T2	H1	H2	D1	D2	D3	L1	L2	L3	L4		L5	A1 *	A2 *	M	Weight (g)
												Max.	Min.					
ASP330F-01-06S	6	R 1/8	M5 x 0.8	12	8	11.6	14.2	11.8	14	38.4	22.9	39.6	34.6	39.5	35.2	10.5	13.7	32
ASP330F-01-08S	8					15.2						38.9	33.9					18.7
ASP430F-02-06S	6	R 1/4	1/8	17	12	12.8	18.5	15	18	43.4	25.2	41.7	36.7	48.7	42.4	10.9	16.8	65
ASP430F-02-08S	8					15.2												19.7
ASP530F-03-08S	8	R 3/8	1/8	19	12	15.2	23	19.8	20.3	51.3	28.2	46.9	41.9	56.2	50	14.4	18.7	107
ASP530F-03-10S	10					18.5												23.1
ASP630F-04-10S	10	R 1/2	1/4	24	17	18.5	28.6	26.5	25.9	64.2	32.6	64.8	57.3	70.3	61.8	18.3	20.8	212
ASP630F-04-12S	12					20.9												66

* Reference dimensions of R thread after installation.

Inch size



Inch Size

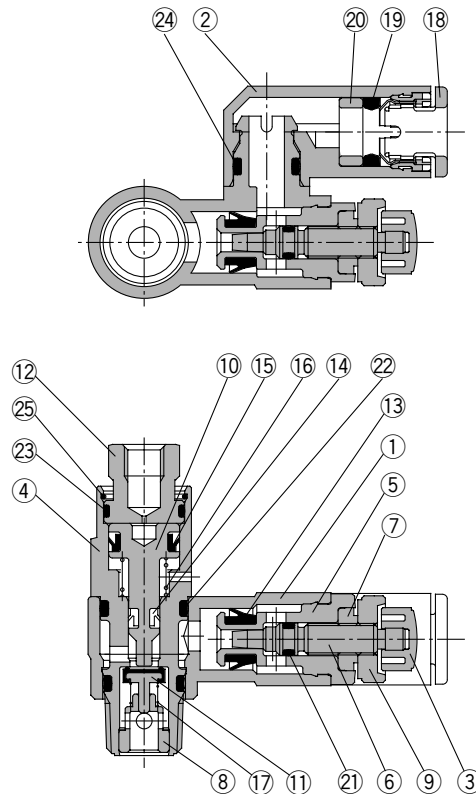
Model	d *	T1	T2	H1	H2	D1	D2	D3	L1	L2	L3	L4		L5	A1 *	A2 *	M	Weight (g)
												Max.	Min.					
ASP330F-N01-07S	1/4"	NPT 1/8	10-32 UNF	1/2"	8	13.2	14.2	11.8	15.8	42.2	25.6	38.9	33.9	39.5	35.1	10.5	17	35
ASP330F-N01-09S	5/16"					15.2						44.7	28.2					18.7
ASP430F-N02-07S	1/4"	NPT 1/4	NPT 1/8	11/16"	1/2"	13.2	18.5	15	18	43.9	25.6	41.7	36.7	48.7	42.6	10.9	17	68
ASP430F-N02-09S	5/16"					15.2												19.7
ASP530F-N03-09S	5/16"	NPT 3/8	NPT 1/8	19	1/2"	15.2	23	19.8	20.3	51.3	28.2	46.9	41.9	56.2	50.3	14.4	18.7	107
ASP530F-N03-11S	3/8"					18.5												23.1
ASP630F-N04-11S	3/8"	NPT 1/2	NPT 1/4	15/16"	11/16"	18.5	28.6	26.5	25.9	64.2	32.6	64.8	57.3	70.3	61.8	18.3	20.8	220
ASP630F-N04-13S	1/2"					21.7												66.3

* Reference dimensions of NPT thread after installation.

- AS
- ASP
- ASN
- AQ
- ASV
- AK
- ASS
- ASR
- ASF

Series ASP

Construction



Component Parts

No.	Description	Material	Note
①	Body A	PBT	
②	Elbow body	PBT	
③	Handle	PBT	
④	Pilot body	Brass	Electroless nickel plated
⑤	Body B	Brass	Electroless nickel plated
⑥	Needle	Brass	Electroless nickel plated
⑦	Needle guide	Brass	Electroless nickel plated
⑧	Guide	Brass	Electroless nickel plated
⑨	Lock nut	Brass	Electroless nickel plated
⑩	Piston	Brass	Electroless nickel plated
⑪	Valve	Stainless steel, NBR	
⑫	Cover	Brass	Black zinc chromated
⑬	U seal	HNBR	

No.	Description	Material	Note
⑭	DY seal	NBR	
⑮	DY seal	NBR	
⑯	Spring	Stainless steel	
⑰	Spring	Stainless steel	
⑱	Cassette	POM, Stainless steel ⁽¹⁾	
⑲	Seal	NBR	
⑳	Spacer	POM ⁽²⁾	
㉑	O-ring	NBR	
㉒	O-ring	NBR	
㉓	O-ring	NBR	
㉔	O-ring	NBR	
㉕	Ring	Stainless steel	

Note 1) $\phi 10$, $\phi 12$, $\phi 3/8$ ", $\phi 1/2$ " are made of POM, stainless steel and brass (electroless nickel plated).

Note 2) $\phi 1/4$ ", $\phi 3/8$ ", $\phi 1/2$ " are made of brass (electroless nickel plated).