

Dual Speed Controller with One-touch Fitting Series ASD

Enables bi-directional flow control. Unrestricted 360° tube mounting



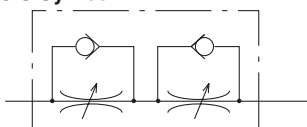
Model

Part no.	Port size	Applicable tubing O.D.													
		Metric size					Inch size								
		ø4	ø6	ø8	ø10	ø12	ø1/8"	ø5/32"	ø3/16"	ø1/4"	ø5/16"	ø3/8"			
ASD230F-M5	M5 x 0.8	●	●												
ASD330F-01	R 1/8		●	●											
ASD430F-02	R 1/4		●	●	●										
ASD530F-02	R 1/4		●	●	●	●									
ASD530F-03	R 3/8		●	●	●	●									
ASD630F-04	R 1/2				●	●									
ASD230F-U10/32	10-32 UNF						●	●	●	●					
ASD330F-N01	NPT 1/8								●	●	●				
ASD430F-N02	NPT 1/4									●	●	●			
ASD530F-N02	NPT 1/4									●	●	●			
ASD530F-N03	NPT 3/8									●	●	●			
ASD630F-N04	NPT 1/2											●			

Specifications

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)
Number of needle rotations	10 turns (8 turns ⁽¹⁾)
Applicable tubing material ⁽²⁾	Nylon, Soft nylon, Polyurethane
Option	Hexagonal lock nut

JIS Symbol



Flow Direction Symbols on Body

	Meter-out type	Meter-in type
Symbol		
JIS Symbol		

Note 1) In the case of ASD230F type
 Note 2) Use caution regarding the max. operating pressure when soft nylon or polyurethane tubing is used.
 (Refer to pages 15-6-3 to 15-6-5 for details.)

Flow Rate and Effective Area

Model	ASD230F	ASD330F	ASD430F		ASD530F			ASD630F		
			ø6	ø8, ø10	ø6	ø8	ø10, ø12	ø10	ø12	
Tubing O.D.	Metric size	ø4, ø6	ø6, ø8	ø6	ø8, ø10	ø6	ø8	ø10, ø12	ø10	ø12
	Inch size	ø1/8" ø5/32" ø3/16" ø1/4"	ø3/16" ø1/4"	—	ø1/4" ø5/16" ø3/8"	ø1/4"	ø5/16"	ø3/8"	—	ø3/8"
Controlled flow (Free flow)	Flow rate ℓ /min (ANR) (N R/min)	75	175	295	350	500	600	700	1200	1300
	Effective area (mm ²)	1.1	2.7	4.5	5.3	7.6	9.1	10.7	18.3	19.8

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

Dual Speed Controller with One-touch Fitting Series ASD

How to Order

ASD 3 30F — 01 — 06 S K

Body size

2	M5 standard
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

Thread type

Nil	Metric thread (M5)
	Unified thread (10-32 UNF)
N	R
	NPT

Option

Nil	None
K	Hexagonal lock nut

With seal

Applicable tubing O.D.

Metric size		Inch size	
04	ø4	01	ø1/8"
06	ø6	03	ø5/32"
08	ø8	05	ø3/16"
10	ø10	07	ø1/4"
12	ø12	09	ø5/16"
		11	ø3/8"

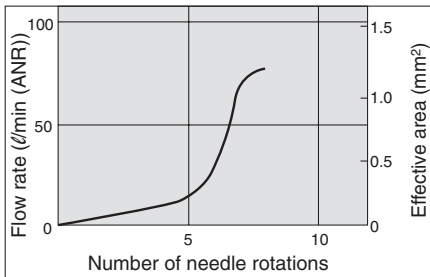
Bore size

M5	M5 x 0.8
U10/32	10-32 UNF
01	1/8
02	1/4
03	3/8
04	1/2

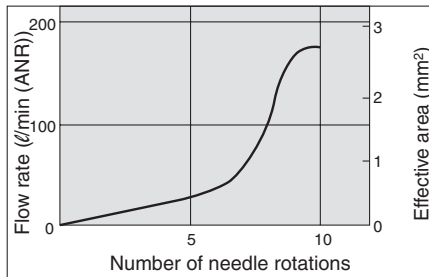
- AS
- ASP
- ASN
- AQ
- ASV
- AK
- ASS
- ASR
- ASF

Needle Valve/Flow Characteristics (Inlet Pressure: 0.5 MPa)

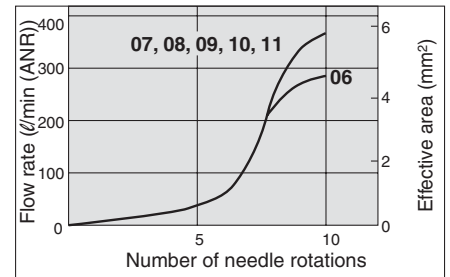
ASD230F



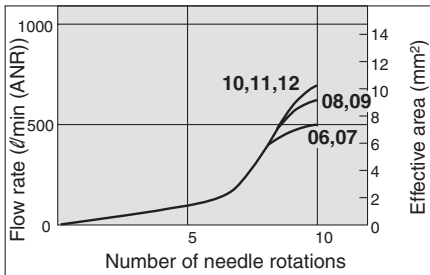
ASD330F



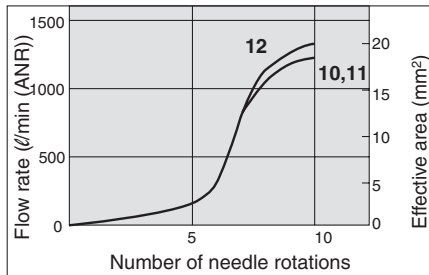
ASD430F



ASD530F



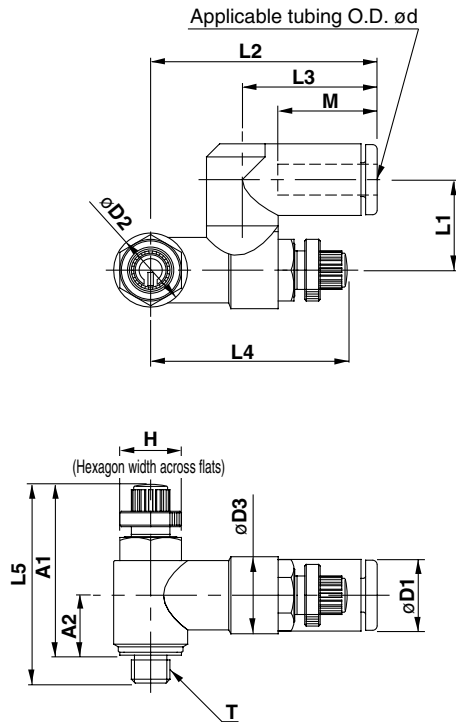
ASD630F



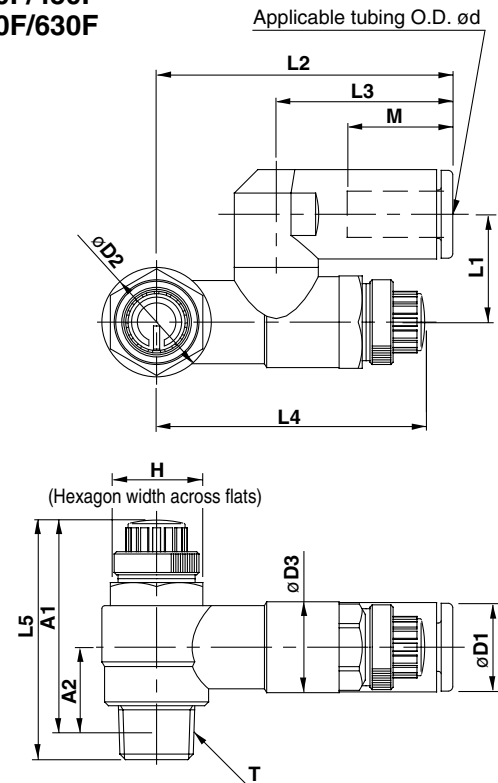
Series ASD

Dimensions: Metric Size

ASD230F



ASD330F/430F ASD530F/630F



Metric Size

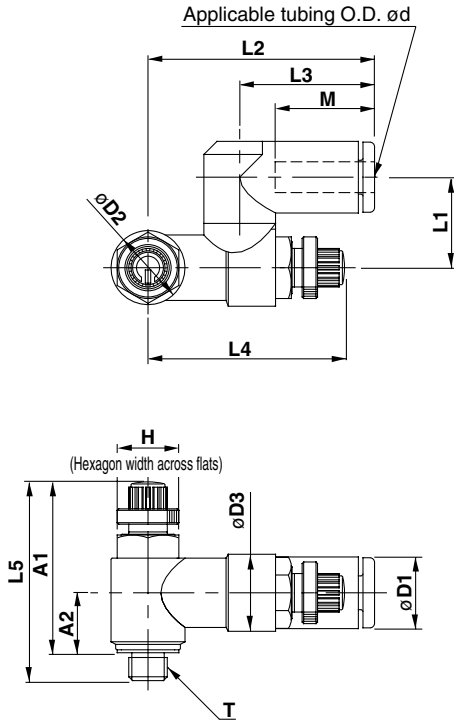
Model	d	T	H	D1	D2	D3	L1	L2	L3	L4		L5		A1*		A2*	M	Weight (g)	
										Max.	Min.	Max.	Min.	Max.	Min.				
ASD230F-M5-04	4	M5 x 0.8	8	9.3	9.6	10	11.7	29.4	17.5	28.3	25.5	28.6	25.8	25	22.2	7.8	12.9	12	
ASD230F-M5-06	6			11.6				20.6	13.7										13
ASD330F-01-06S	6	R 1/8	12	11.6	14.2	11.8	14	38.5	22.9	39.6	34.6	36.1	31.1	32.1	27.1	10.6	13.7	29	
ASD330F-01-08S	8			15.2				28.2	38.9										33.9
ASD430F-02-06S	6	R 1/4	17	12.8	18.5	15	18	43.5	25.2	41.7	36.7	40.4	35.4	34.4	29.4	11	17	53	
ASD430F-02-08S	8			15.2				28.2	18.5										21
ASD430F-02-10S	10			18.5				31	21										58
ASD530F-02-06S	6	R 1/4	19	12.8	23	19.8	20.3	48.3	25.2	46.9	41.9	48.8	43.8	42.8	37.8	15.4	17	74	
ASD530F-02-08S	8			15.2				28.2	18.5										21
ASD530F-02-10S	10			18.5				32.6	21										80
ASD530F-02-12S	12			20.9				34.4	22										83
ASD530F-03-06S	6	R 3/8	19	12.8	23	19.8	20.3	48.3	25.2	46.9	41.9	46.5	41.5	40	35	14	17	74	
ASD530F-03-08S	8			15.2				28.2	18.5										21
ASD530F-03-10S	10			18.5				32.6	21										98
ASD530F-03-12S	12			20.9				34.4	22										101
ASD630F-04-10S	10	R 1/2	24	18.5	28.6	26.5	25.9	64.3	32.6	64.8	57.3	57.6	50.1	49.6	42.1	18.6	21	177	
ASD630F-04-12S	12			20.9				34.4	22										179

* Reference dimensions of M5 x 0.8, R threads after installation.

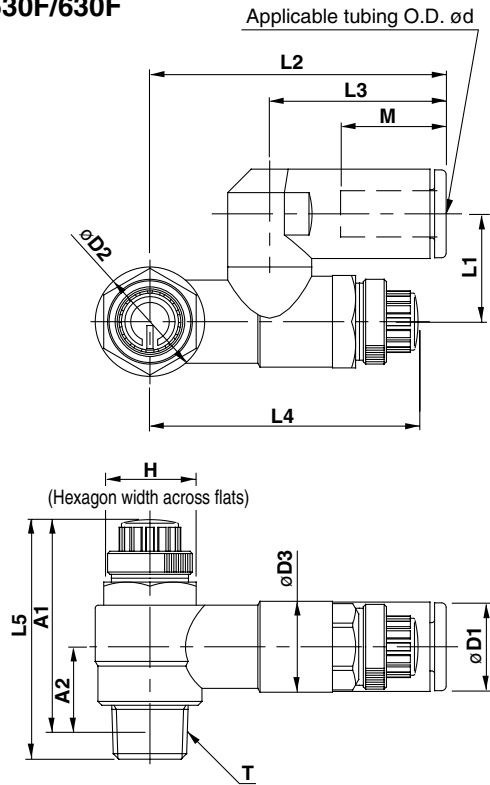
Dual Speed Controller with One-touch Fitting Series ASD

Dimensions: Inch Size

ASD230F



ASD330F/430F ASD530F/630F



Inch Size

Model	d	T	H	D1	D2	D3	L1	L2	L3	L4		L5		A1*		A2*	M	Weight (g)
										Max.	Min.	Max.	Min.	Max.	Min.			
ASD230F-U10/32-01	1/8"	10-32 UNF	8	8.4	9.6	10	11.7	29.4	17.5	28.3	25.5	28.6	25.8	25	22.2	7.8	12.9	12
ASD230F-U10/32-03	5/32"			9.3														13
ASD230F-U10/32-05	3/16"	10-32 UNF	8	11.4	9.6	10	11.7	35.2	23.3	28.3	25.5	28.6	25.8	25	22.2	7.8	16.5	15
ASD230F-U10/32-07	1/4"			12				32.6	20.7								13.5	13
ASD330F-N01-05S	3/16"	NPT 1/8	12.7	11.6	14.2	11.8	14	39.5	23.9	39.6	34.6	36.1	31.1	32	27	10.6	16.5	30
ASD330F-N01-07S	1/4"			15.8			42.2	25.6	38.9	33.9	17						31	
ASD330F-N01-09S	5/16"			15.2			44.8	28.2	18.5	31								
ASD430F-N02-07S	1/4"	NPT 1/4	17.5	13.2	18.5	15	18	43.9	25.6	41.7	36.7	40.4	35.4	34.6	29.6	11	17	55
ASD430F-N02-09S	5/16"			15.2			46.5	28.2	18.5								31	
ASD430F-N02-11S	3/8"			18.5			19.7	49.3	21								62	
ASD530F-N02-07S	1/4"	NPT 1/4	19	13.2	23	19.8	20.3	48.7	25.6	46.9	41.9	48.8	43.8	43	38	15.4	17	76
ASD530F-N02-09S	5/16"			15.2			51.3	28.2	18.5								76	
ASD530F-N02-11S	3/8"			18.5			23.1	54.1	21								84	
ASD530F-N03-07S	1/4"	NPT 3/8	19	13.2	23	19.8	20.3	48.7	25.6	46.9	41.9	46.5	41.5	40.3	35.3	14	17	93
ASD530F-N03-09S	5/16"			15.2			51.3	28.2	18.5								93	
ASD530F-N03-11S	3/8"			18.5			23.1	54.1	21								102	
ASD630F-N04-11S	3/8"	NPT 1/2	23.8	18.5	28.6	26.5	25.9	64.3	32.6	64.8	57.3	57.6	50.1	49.6	42.1	18.6	21	180

* Reference dimensions of U10/32 and NPT threads after installation.

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

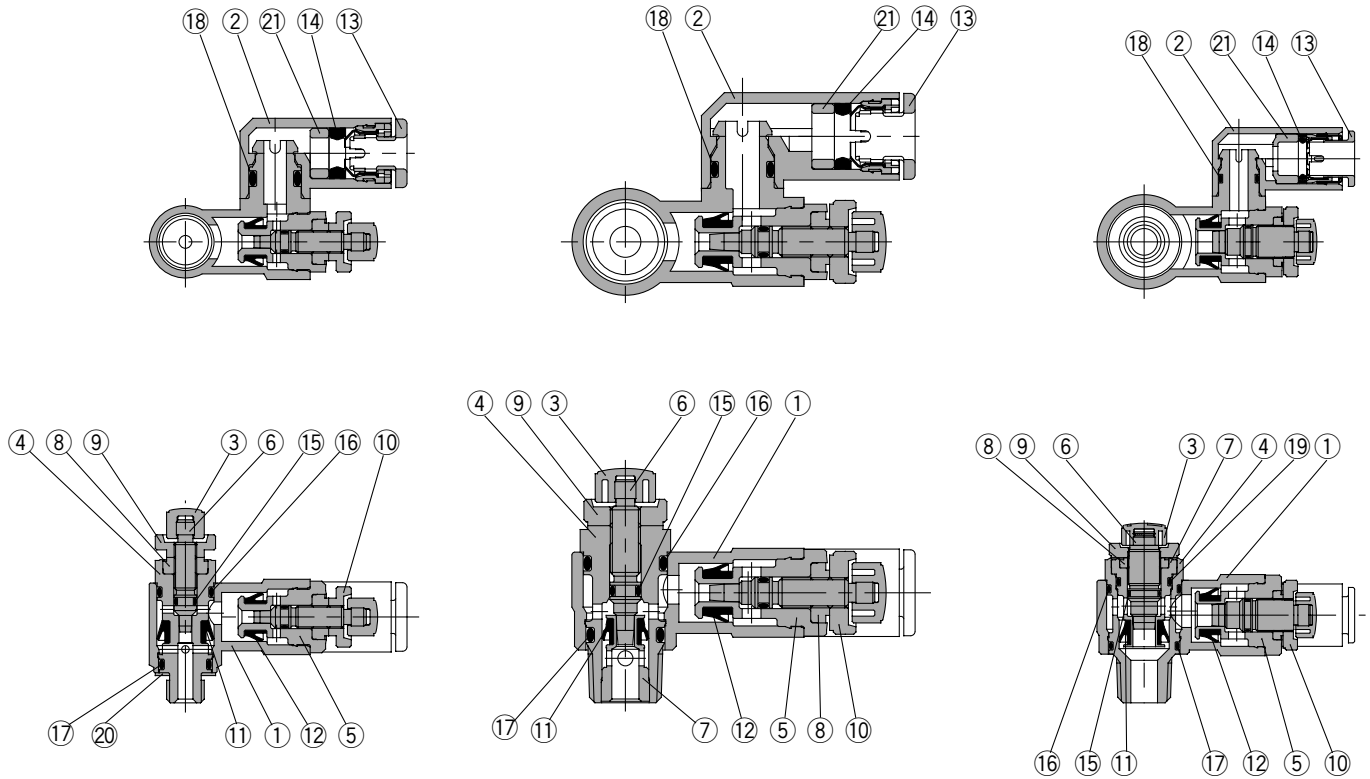
Series ASD

Construction

ASD230F

ASD330F/430F ASD530F/630F

ASD530F-02



Component Parts

No.	Description	Material	Note
①	Body A	PBT	
②	Elbow body	PBT	
③	Handle	PBT	
④	Body B	Brass	Electroless nickel plated
⑤	Body B	Brass	Electroless nickel plated
⑥	Needle	Brass	Electroless nickel plated
⑦	Seat ring	Brass	Electroless nickel plated
⑧	Needle guide	Brass	Electroless nickel plated
⑨	Lock nut	Brass ⁽³⁾	Electroless nickel plated
⑩	Lock nut	Brass ⁽³⁾	Black zinc chromate plated

No.	Description	Material	Note
⑪	U seal	HNBR	
⑫	U seal	HNBR	
⑬	Cassette	POM, Stainless steel ⁽¹⁾	
⑭	Seal	NBR	
⑮	O-ring	NBR	
⑯	O-ring	NBR	
⑰	O-ring	NBR	
⑱	O-ring	NBR	
⑲	O-ring	NBR	
⑳	Gasket	Stainless steel, NBR	ASD230F only
㉑	Spacer	PBT, Brass ⁽²⁾	

Note 1) $\phi 10$, $\phi 12$, $\phi 3/16"$, $\phi 3/8"$ are made of POM, stainless steel and brass (Electroless nickel plated).

Note 2) $\phi 3/16"$, $\phi 1/4"$, $\phi 3/8"$ are made of brass (Electroless nickel plated).

ASD230F ($\phi 4$, $\phi 6$, $\phi 1/8"$, $\phi 5/32"$, $\phi 1/4"$), ASD330F ($\phi 6$) are POM.
Note 3) ASD330F and 430F types are made of steel.