

# Dual Speed Controller with One-touch Fittings Series ASD

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



## Model

Model	Port size	Applicable tube O.D.													
		Metric					Inch								
		ø4	ø6	ø8	ø10	ø12	ø1/8"	ø5/32"	ø3/16"	ø1/4"	ø5/16"	ø3/8"			
ASD230F-M5	M5	●	●												
ASD330F-01	R(PT)1/8		●	●											
ASD430F-02	R(PT)1/4		●	●	●										
ASD530F-02	R(PT)1/4		●	●	●	●									
ASD530F-03	R(PT)3/8		●	●	●	●									
ASD630F-04	R(PT)1/2				●	●									
ASD230F-U10/32	10-32 UNF					●	●	●							
ASD330F-N01	NPT1/8								●	●	●				
ASD430F-N02	NPT1/4									●	●	●			
ASD530F-N02	NPT1/4									●	●	●			
ASD530F-N03	NPT3/8									●	●	●			
ASD630F-N04	NPT1/2											●			

## Specifications

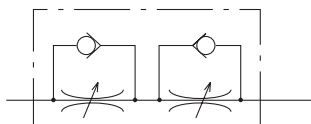
Proof pressure	1.5MPa
Max. operating pressure	1MPa
Min. operating pressure	0.1MPa
Ambient and fluid temperature	-5 to 60°C (No freezing)
Needle rotation cycles	10 turns (8 turns <sup>(1)</sup> )
Tube material <sup>(2)</sup>	Nylon, Soft nylon, Polyurethane
Option	Hexagon lock nut



Note 1) In case of ASD230F.

Note 2) Be careful with the max operating pressure for soft nylon and Polyurethane.  
(Refer to p. 2.4-2 and 2.4-3 in the catalog "Best Pneumatics 4".)

## JIS symbol



## Symbol indication of flow direction on the body

	Meter-out	Meter-in
Symbol		
JIS Symbol		

## Air Flow/Effective Area

Model	ASD230F		ASD330F		ASD430F		ASD530F			ASD630F	
	Metric	ø4, ø6	ø6, ø8	ø6	ø8, ø10	ø6	ø8	ø10, ø12	ø10	ø12	
Tube O.D.	Metric	ø4, ø6	ø6, ø8	ø6	ø8, ø10	ø6	ø8	ø10, ø12	ø10	ø12	
	Inch	ø1/8" ø5/32"	ø3/16" ø1/4"	-	ø1/4" ø5/16" ø3/8"	ø1/4"	ø5/16"	ø3/8"	-	ø3/8"	
Controlled (free)/Flow	Air flow (l/min(ANR))	75	175	295	350	500	600	700	1200	1300	
	Eff. area (mm <sup>2</sup> )	1.1	2.7	4.5	5.3	7.6	9.1	10.7	18.3	19.8	



Note 1) Max. operating pressure: 0.5MPa, Temperature: 20°C

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## 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

**Style**

3	Universal
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With One-touch fittings

**Thread**

—	Meter thread (M5)
—	Unified thread (10-32 UNF)
—	R(PT)
N	NPT

**Options**

—	None
K	Hexagon lock nut

With sealant

**Applicable tubing O.D.**

**Millimeter**

04	ø4
06	ø6
08	ø8
10	ø10
12	ø12

**Inch**

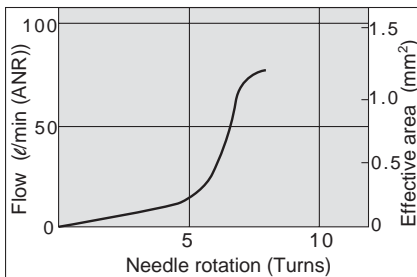
01	ø1/8"
03	ø5/32"
05	ø3/16"
07	ø1/4"
09	ø5/16"
11	ø3/8"

**Port size**

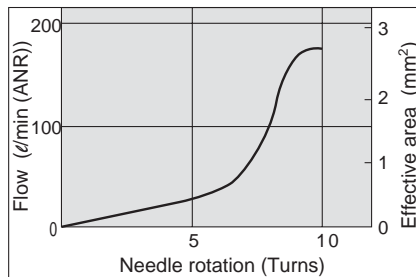
M5	M5
U10/32	10-32UNF
01	1/8
02	1/4
03	3/8
04	1/2

## Needle Valve/Flow Characteristics

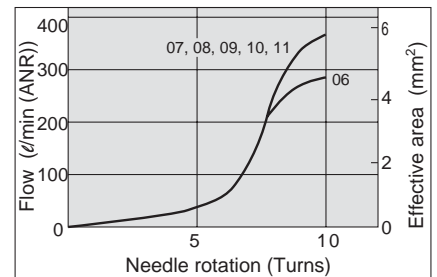
ASD230F



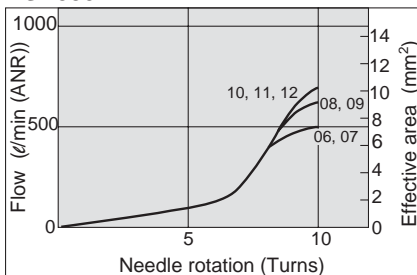
ASD330F



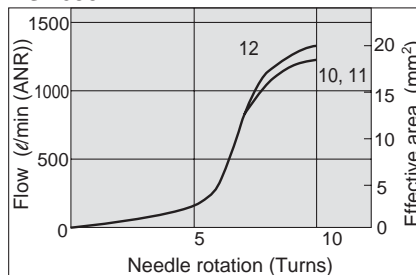
ASD430F



ASD530F



ASD630F

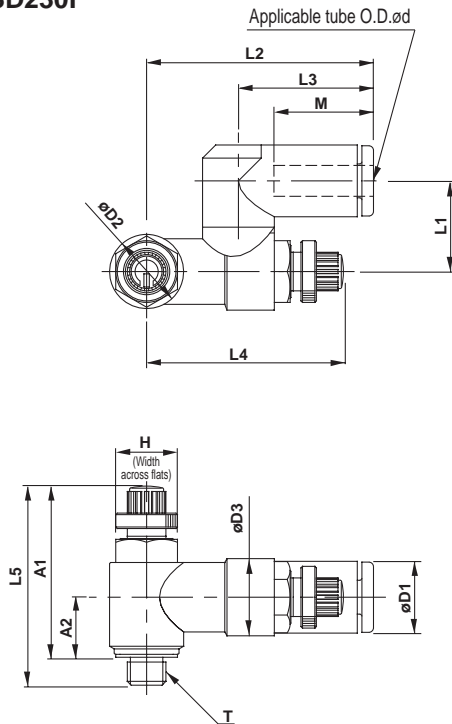


- AS
- ASN
- AQ
- ASV
- AK
- ASS

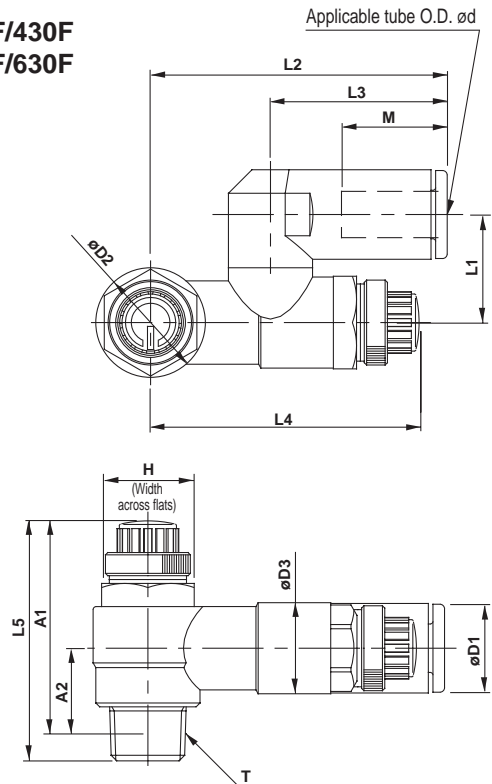
# Series ASD

## Dimensions/Metric

ASD230F



ASD330F/430F  
ASD530F/630F



## Metric

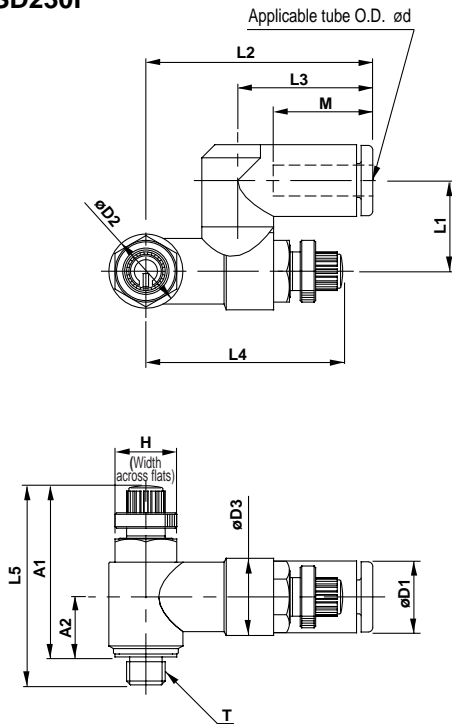
Model	d	T	H	D1	D2	D3	L1	L2	L3	L4		L5		A1*		A2*	M	Weight (g)
										MAX.	MIN.	MAX.	MIN.	MAX.	MIN.			
ASD230F-M5-04	4	M5	8	9.3	9.6	10	11.7	29.4	17.5	28.3	25.5	28.6	25.8	25	22.2	7.8	12.9	12
ASD230F-M5-06	6			11.6				20.6	13.7								13	
ASD330F-01-06S	6	R(PT)1/8	12	11.6	14.2	11.8	14	38.5	22.9	39.6	34.6	36.1	31.1	32.1	27.1	10.6	13.7	29
ASD330F-01-08S	8			15.2				33.9	18.5								31	
ASD430F-02-06S	6	R(PT)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								55	
ASD430F-02-10S	10			18.5				31	21								58	
ASD530F-02-06S	6	R(PT)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								76	
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(PT)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								93	
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(PT)1/2				24	18.5								28.6	26.5
ASD630F-04-12S	12	20.9	34.4		22	179												

\*Reference dimensions of M5 X 0.8, R(PT) thread after being screwed in.

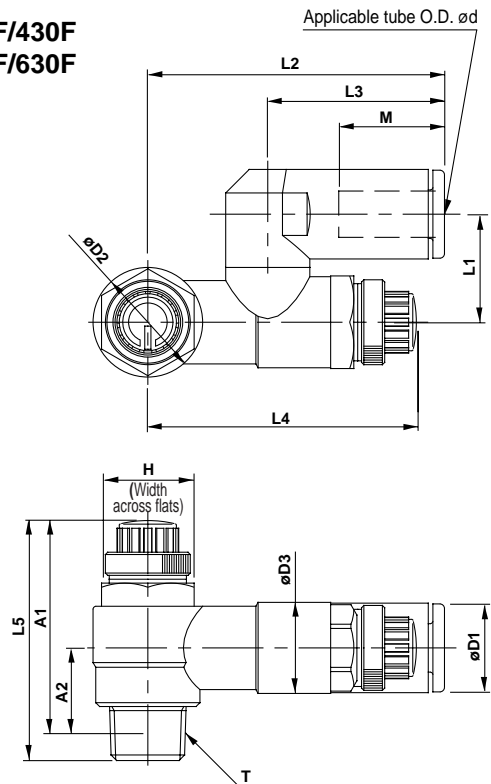
# Dual Speed Controller with One-touch Fittings Series ASD

## Dimensions/Inch

ASD230F



ASD330F/430F  
ASD530F/630F



## Inch

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																			
ASD330F-N01-05S	3/16"	NPT1/8	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"			13.2														15.8	42.2	25.6	17	31
ASD330F-N01-09S	5/16"			15.2														15.8	44.8	28.2	18.5	31
ASD430F-N02-07S	1/4"	NPT1/4	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														19.7	46.5	28.2	18.5	31
ASD430F-N02-11S	3/8"			18.5														19.7	49.3	31	21	62
ASD530F-N02-07S	1/4"	NPT1/4	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														23.1	51.3	28.2	18.5	31
ASD530F-N02-11S	3/8"			18.5														23.1	54.1	32.6	21	84
ASD530F-N03-07S	1/4"	NPT3/8	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														23.1	51.3	28.2	18.5	31
ASD530F-N03-11S	3/8"			18.5														23.1	54.1	32.6	21	102
ASD630F-N04-11S	3/8"	NPT1/2	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 M5 X 0.8, R(PT) thread after being screwed in.

AS

ASN

AQ

ASV

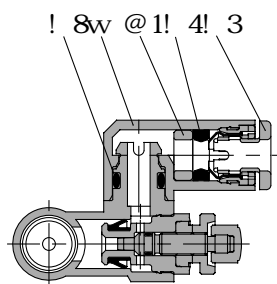
AK

ASS

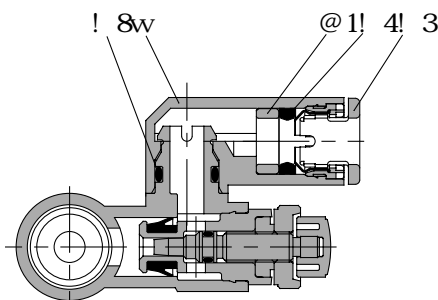
# Series ASD

## Construction

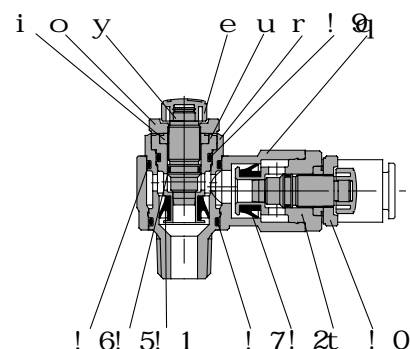
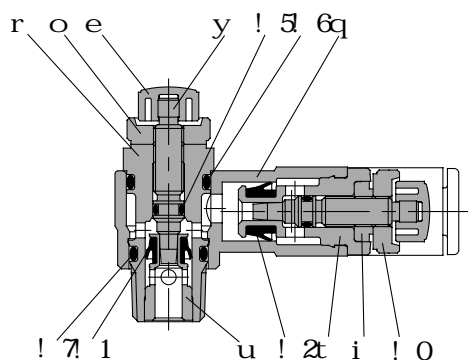
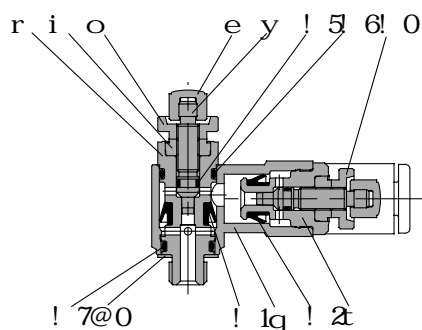
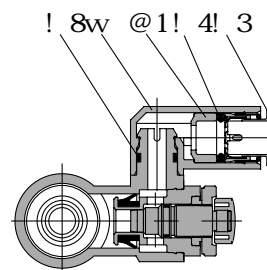
### ASD230F



### ASD330F/430F ASD530F/630F



### ASD530F-02



### Component Parts

No.	Description	Material	Note
q	Body A	PBT	
w	Elbow body	PBT	
e	Handle	PBT	
r	Body B	Brass	Electroless nickel plated
t	Body B	Brass	Electroless nickel plated
y	Needle	Brass	Electroless nickel plated
u	Seat ring	Brass	Electroless nickel plated
i	Needle guide	Brass	Electroless nickel plated
o	Lock nut	Brass <sup>(3)</sup>	Electroless nickel plated
! 0	Lock nut	Brass <sup>(3)</sup>	Black zinc chromated

### Component Parts

No.	Description	Material	Note
! 1	U packing	NBR	
! 2	U packing	NBR	
! 3	Cassette	POM, Stainless steel <sup>(1)</sup>	
! 4	Packing	NBR	
! 5	O ring	NBR	
! 6	O ring	NBR	
! 7	O ring	NBR	
! 8	O ring	NBR	
! 9	O ring	NBR	
@0	Gasket	Stainless, NBR	ASD230F only
@1	Spacer	POM, Brass <sup>(2)</sup>	

! Note 1)  $\phi 10$ ,  $\phi 12$ ,  $\phi 3/16"$ ,  $\phi 3/8"$ : POM, Stainless steel and Brass (Electroless nickel plated)

Note 2)  $\phi 3/16"$ ,  $\phi 1/4"$ ,  $\phi 3/8"$ : Brass (Electroless nickel plated)

Note 3) ASD330 F and 430F: Steel