

# Speed Controller with One-touch Fitting Stainless Series

## Series AS-FG

### Elbow Type/Universal Type

**Stainless specifications for use in corrosive environments. Stainless steel 303 used for metal parts.**

Suitable for use on CRT lines where copper ions can cause damage, for washing food processing equipment where there is exposure to water and salt water, etc., and in clean rooms where dust from discoloration and rusting of copper materials is unacceptable.

**Light colors to match equipment**

White resin parts are used for bodies and release buttons.

**Threads with and without seal are available as standard.**

**Applicable tubing: Inch sizes standardized**

Inch sizes are now available for all models.

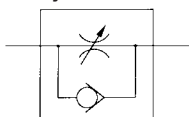


Elbow type



Universal type

JIS Symbol



Flow Direction Symbols on Body

	Meter-out type	Meter-in type
Symbol		
JIS Symbol		

**Model**

Elbow type	Universal type	Port size	Applicable tubing O.D.														Applicable cylinder bore size (mm)	
			Metric size							Inch size								
			3.2	4	6	8	10	12	1/8"	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"			
AS12□1FG-M5	AS13□1FG-M5	M5×0.8	●	●	●													6, 10, 16, 20
AS22□1FG-01	AS23□1FG-01	R 1/8	●	●	●	●	●*											20, 25, 32
AS22□1FG-02	AS23□1FG-02	R 1/4		●	●	●	●											20, 25, 32, 40
AS32□1FG-02	AS33□1FG-02	R 1/4			●	●	●	●										40, 50, 63
AS32□1FG-03	AS33□1FG-03	R 3/8			●	●	●	●										40, 50, 63
AS42□1FG-04	AS43□1FG-04	R 1/2					●	●										63, 80, 100
AS12□1FG-U10/32	AS13□1FG-U10/32	10-32 UNF							●	●	●	●						6, 10, 16, 20
AS22□1FG-N01	AS23□1FG-N01	NPT 1/8							●	●	●	●	●					20, 25, 32
AS22□1FG-N02	AS23□1FG-N02	NPT 1/4								●	●	●	●	●				20, 25, 32, 40
AS32□1FG-N02	AS33□1FG-N02	NPT 1/4									●	●	●					40, 50, 63
AS32□1FG-N03	AS33□1FG-N03	NPT 3/8									●	●	●					40, 50, 63
AS42□1FG-N04	AS43□1FG-N04	NPT 1/2												●	●			63, 80, 100

Note 1) Meter-out and meter-in types can be visually differentiated by the flow direction symbol on the resin body.

Note 2) \* Elbow type only

**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 <sup>(1)</sup> )
Applicable tubing material	Nylon, Soft nylon, Polyurethane, Soft polyurethane

Note 1) In the case of AS12□1FG and AS13□1FG

Note 2) Use caution regarding the max. operating pressure when soft nylon or polyurethane, or polyurethane tubing is used.

(Refer to pages 15-6-3 to 15-6-5 for details.)

**Flow Rate and Effective Area**

Model	AS12□1FG	AS22□1FG-□01	AS22□1FG-□02			AS32□1FG			AS42□1FG			
	AS13□1FG	AS23□1FG-□01	AS23□1FG-□02	AS23□1FG-□02	AS23□1FG-□02	AS33□1FG	AS33□1FG	AS33□1FG	AS43□1FG	AS43□1FG		
Tubing O.D.	Metric size	ø3.2 ø4 ø6	ø3.2 ø4 ø8 ø10	ø4 ø6 ø8 ø10	ø6 ø8 ø10	ø6 ø8 ø10 ø12	ø6 ø8 ø10 ø12	ø10 ø12	ø10 ø12	ø12		
	Inch size	ø1/8" ø5/32" ø3/16" ø1/4"	ø1/8" ø5/32" ø1/4" ø5/16"	ø3/16" ø3/16" ø1/4" ø5/16"	ø5/32" ø3/16" ø1/4" ø5/16"	ø1/4" ø5/16" ø3/8"	ø1/4" ø5/16" ø3/8"	ø1/4" ø5/16" ø3/8"	ø3/8" ø3/8"	ø1/2"		
Controlled flow (Free flow)	Flow rate (ℓ/min (ANR))	100	180	230	260	390	460	660	790	920	1580	1710
	Effective area (mm <sup>2</sup> )	1.5	2.7	3.5	4	6	7	10	12	14	12	26

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

AS

ASP

ASN

AQ

ASV

AK

ASS

ASR

ASF

# Series AS-FG

## How to Order

**AS 2 3 0 1 F G — 01 — 06**

**Body size**

1	M5 standard
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

**With One-touch fitting**

**Stainless steel specifications (SUS303)**

**Thread type**

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

**Option**

Nil	None
S	With seal*

\* M5 and U10/32 are not available with seal.

**Applicable tubing O.D.**

Metric size	Inch size
23	ø3.2*
04	ø4
06	ø6
08	ø8
10	ø10
12	ø12
01	ø1/8"
03	ø5/32"
05	ø3/16"
07	ø1/4"
09	ø5/16"
11	ø3/8"
13	ø1/2"

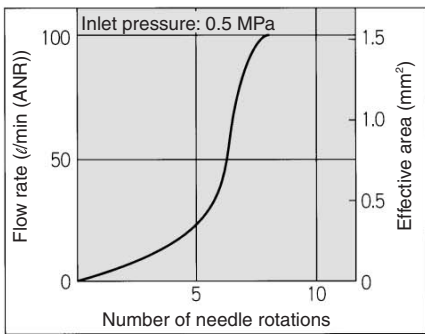
\* Use ø1/8" tube.

**Port size**

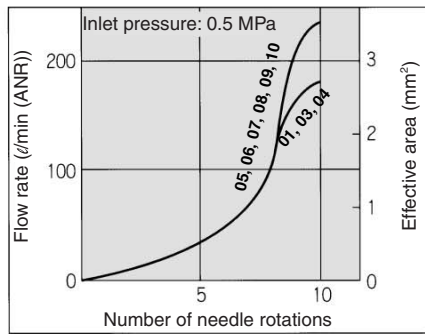
M5	M5 x 0.8
U10/32	10-32 UNF
01	1/8
02	1/4
03	3/8
04	1/2

## Needle Valve/Flow Characteristics

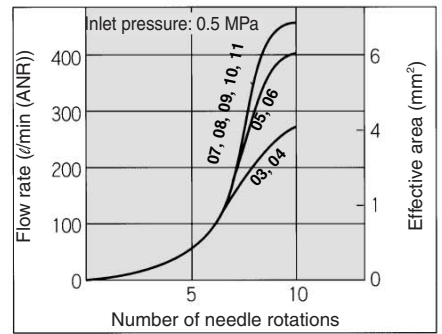
**AS12□1FG  
AS13□1FG**



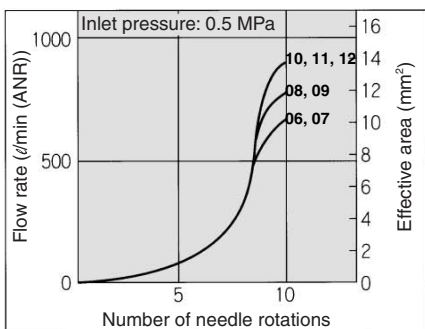
**AS22□1FG-□01  
AS23□1FG-□01**



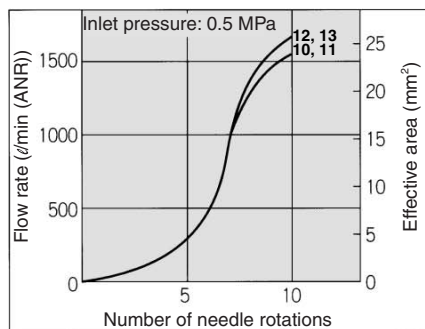
**AS22□1FG-□02  
AS23□1FG-□02**



**AS32□1FG  
AS33□1FG**



**AS42□1FG  
AS43□1FG**



# Speed Controller with One-touch Fitting Stainless Series, Elbow Type/Universal Type **Series AS-FG**

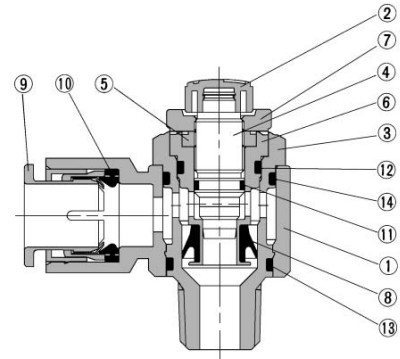
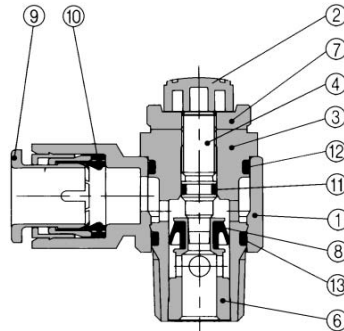
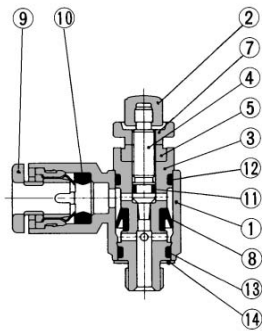
## Construction: Elbow Type

### Meter-out type

#### M5 type

#### U10/32 type

#### AS3201FG-02

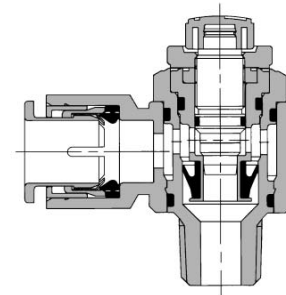
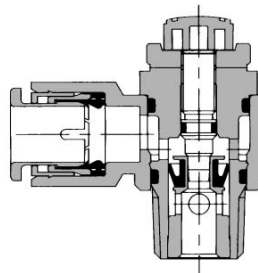
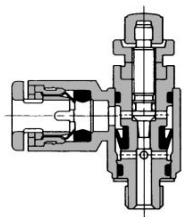


### Meter-in type

#### M5 type

#### U10/32 type

#### AS3211FG-02



## Component Parts

No.	Description	Material	Note
①	Body A	PBT	
②	Handle	PBT	
③	Body B	Stainless steel 303	
④	Needle	Stainless steel 303	
⑤	Needle guide	Stainless steel 303	
⑥	Seat ring	Stainless steel 303	
⑦	Lock nut	Stainless steel 303	
⑧	U seal	HNBR	
⑨	Cassette	POM, Stainless steel	
⑩	Seal	NBR	
⑪	O-ring	NBR	
⑫	O-ring	NBR	
⑬	O-ring	NBR	
⑭	O-ring	NBR	
⑮	Gasket	NBR/stainless steel 304	M5 type only

## ⚠ Caution

Be sure to read before handling. Refer to pages 15-18-3 to 15-18-4 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

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# Series AS-FG

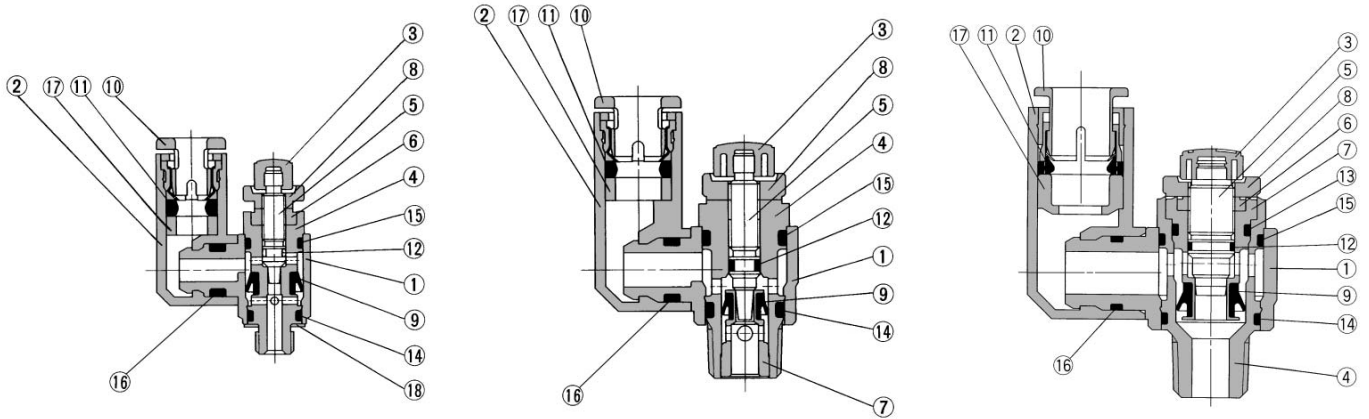
## Construction: Universal Type

### Meter-out type

#### M5 type

#### U10/32 type

#### AS3301FG-02

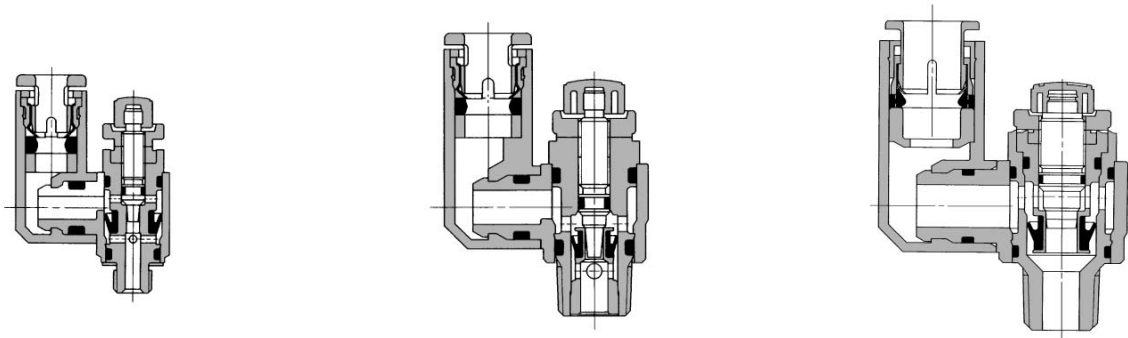


### Meter-in type

#### M5 type

#### U10/32 type

#### AS3311FG-02



## Component Parts

No.	Description	Material	Note
①	Body A	PBT	
②	Elbow body	PBT	
③	Handle	PBT	
④	Body B	Stainless steel 303	
⑤	Needle	Stainless steel 303	
⑥	Needle guide	Stainless steel 303	
⑦	Seat ring	Stainless steel 303	
⑧	Lock nut	Stainless steel 303	
⑨	U seal	HNBR	
⑩	Cassette	POM, Stainless steel	
⑪	Seal	NBR	
⑫	O-ring	NBR	
⑬	O-ring	NBR	
⑭	O-ring	NBR	
⑮	O-ring	NBR	
⑯	O-ring	NBR	
⑰	Spacer	PBT (Note)	
⑱	Gasket	NBR, Stainless steel	

Note)  $\phi 3/16"$ ,  $\phi 3/8"$  and  $\phi 1/2"$  are made of stainless steel 303.

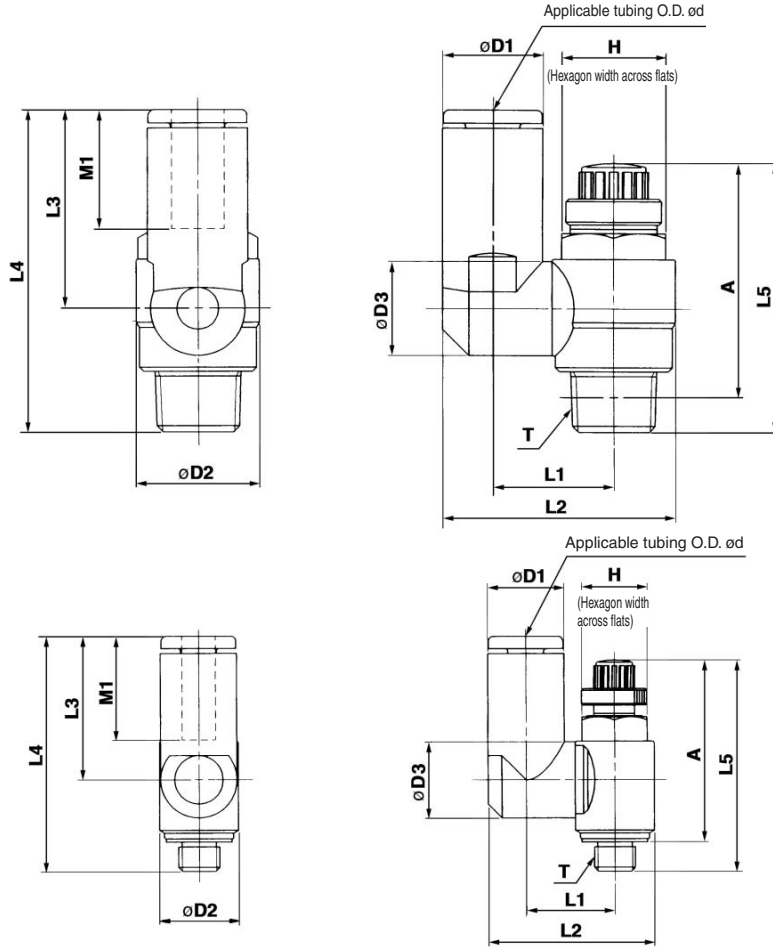
AS13□1FG( $\phi 3.2$ ,  $\phi 4$ ,  $\phi 6$ ,  $\phi 1/8"$ ,  $\phi 5/32"$ ,  $\phi 1/4"$ ),

AS23□1FG-□01( $\phi 3.2$ ,  $\phi 4$ ,  $\phi 6$ ,  $\phi 1/8"$ ,  $\phi 5/32"$ ) are made of POM.



# Series AS-FG

## Dimensions: Universal Type



M5 type  
U10/32 type

### Metric Size

Model	d	T	H	D1	D2	D3	L1	L2	L3	L4	L5		A*		M1	Weight (g)	
											Max.	Min.	Max.	Min.			
AS13□1FG-M5-23	3.2			8.4			19.8	17.5	28.7			28.6	25.8	25	22.2	12.7	7
AS13□1FG-M5-04	4	M5 x 0.8	8	9.3	9.6	9.3	10.8	20.3								13.5	
AS13□1FG-M5-06	6			11.6					21.4	20.6	31.8						
AS23□1FG-01-23	3.2			8.4			24.4	24.4	17.5	31.8						17	
AS23□1FG-01-04	4			9.3			13.1	24.9	17.5	31.8						12.7	
AS23□1FG-01-06	6	R 1/8	12	9.3	14.2		9.3	13.1	17.5	31.8						13.5	
AS23□1FG-01-08	8			11.6			10.9	14	26.9	22.9	37.2					18.5	
AS23□1FG-02-04	4			10.4			10.9	16.2	30.6	21.9	40.1					16	
AS23□1FG-02-06	6			12.8			18.4	34	25.2	42.6						17	
AS23□1FG-02-08	8	R 1/4	17	15.2	18.5		12.9	18.3	35.2	28.2	45.6					18.5	
AS23□1FG-02-10	10			18.5				20.2	38.7	31	48.4					21	
AS33□1FG-02-06	6			12.8			12.9	20.6	38.5	25.2	47					17	
AS33□1FG-02-08	8			15.2					39.7	28.2	50					18.5	
AS33□1FG-02-10	10	R 1/4	19	18.5	23				43.7	32.6	54.4	48.8	43.8	42.8	37.8	21	
AS33□1FG-02-12	12			20.9			16.2	23	44.9	34.4	56.2					22	
AS33□1FG-03-06	6			12.8			12.9	20.6	38.5	25.2	46.1					17	
AS33□1FG-03-08	8	R 3/8	19	15.2	23				39.7	28.2	49.1	46.5	41.5	40	35	18.5	
AS33□1FG-03-10	10			18.5			16.2	23	43.7	32.6	53.5					21	
AS33□1FG-03-12	12			20.9					44.9	34.4	55.3					22	
AS43□1FG-04-10	10	R 1/2	24	18.5	28.6		16.2	25.8	49.4	32.6	58	57.6	50.1	49.6	42.1	21	
AS43□1FG-04-12	12			20.9			19.4	26.8	52	36.3	61.7					22	

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

### Inch Size

Model	d	T	H	D1	D2	D3	L1	L2	L3	L4	L5		A*		M1	Weight (g)	
											Max.	Min.	Max.	Min.			
AS13□1FG-U10/32-01	1/8"			8.4			19.8	17.5	28.7			28.6	25.8	25	22.2	12.7	7
AS13□1FG-U10/32-03	5/32"			9.3			20.3									13.5	
AS13□1FG-U10/32-05	3/16"	10-32 UNF	8	11.4	9.6	9.3	10.8	21.3	23.3	34.5						16.5	
AS13□1FG-U10/32-07	1/4"			12				21.6	20.7	31.9						13.7	
AS23□1FG-N01-01	1/8"			8.4			24.4	24.4	17.5	31.8						12.7	17
AS23□1FG-N01-03	5/32"			9.3			13.1	24.9	17.5	31.8						13.5	
AS23□1FG-N01-05	3/16"	NPT 1/8	12.7	11.4	14	10.9	14	26.8	23.9		36.1	31.1	32.1	27.1		16.5	
AS23□1FG-N01-07	1/4"			13.2			12.9	16.2	29.9	25.6	37.2					18.5	
AS23□1FG-N01-09	5/16"			15.2					30.9	28.2	41.7					21	
AS23□1FG-N02-03	5/32"			10.4			10.9	16.2	30.6	21.9	40.1					16	
AS23□1FG-N02-05	3/16"			11.4					31.1	23.9	42.6					17	
AS23□1FG-N02-07	1/4"	NPT 1/4	17.5	13.2	19				34.2	25.6	45.6	40.4	35	34.4	29.4	18.5	
AS23□1FG-N02-09	5/16"			15.2			12.9	18.3	35.2	28.2	48.4					21	
AS23□1FG-N02-11	3/8"			17.9					20.2	38.7	31	47				21	
AS33□1FG-N02-07	1/4"			13.2			12.9	20.6	38.7	25.6	50					17	
AS33□1FG-N02-09	5/16"	NPT 1/4	19	15.2	23				39.7	28.2	54.4	48.8	43.8	42.8	37.8	18.5	
AS33□1FG-N02-11	3/8"			17.9			16.2	23	43.7	32.6	56.2					21	
AS33□1FG-N03-07	1/4"			13.2			12.9	20.6	38.7	25.6	46.1					17	
AS33□1FG-N03-09	5/16"	NPT 3/8	19	15.2	23				39.7	28.2	49.1	46.5	41.5	40.2	35.2	18.5	
AS33□1FG-N03-11	3/8"			17.9			16.2	23	43.7	32.6	53.5					21	
AS43□1FG-N04-11	3/8"	NPT 3/8	23.8	17.9	29		16.2	25.8	49.4	32.6	55.3	57.6	50.1	49.6	42.1	21	
AS43□1FG-N04-13	1/2"	NPT 1/2	28.8	21.7	29		19.4	26.8	52	36.3	58					22	

\* Reference dimensions of 10-32UNF and NPT threads after installation.



# Speed Controller with One-touch Fittings Stainless Series

## Series AS-FG

In-line Type



### Model

Model	Applicable tubing O.D.											Applicable cylinder bore size (mm)		
	Metric size						Inch size							
	3.2	4	6	8	10	12	1/8"	5/32"	3/16"	1/4"	5/16"		3/8"	1/2"
AS1001FG	●	●	●				●	●	●	●				6, 10, 16, 20
AS2001FG		●	●					●	●	●				20, 25, 32
AS2051FG			●	●					●	●	●			20, 25, 32, 40
AS3001FG			●	●	●	●			●	●	●			40, 50, 63
AS4001FG					●	●						●	●	63, 80, 100

### 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 <sup>(1)</sup> )
Applicable tubing material <sup>(2)</sup>	Nylon, Soft nylon, Polyurethane, Soft polyurethane

Note 1) In the case of AS1001FG type

Note 2) Use caution regarding the max. operating pressure when soft nylon or polyurethane, or soft polyurethane tubing is used.

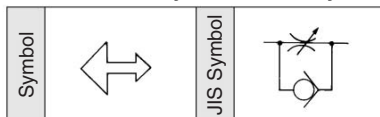
(Refer to pages 15-6-3 to 15-6-5 for details.)

### Flow Rate and Effective Area

Model		AS1001FG	AS2001FG	AS2051FG	AS3001FG			AS4001FG			
Tubing O.D.	Metric size	ø3.2 ø4 ø6	ø4 ø6	ø6 ø8	ø6 ø8	ø6 ø8 ø10 ø12	ø6 ø8	ø10 ø12	ø10 ø12		
	Inch size	ø1/8" ø5/32" ø3/16"	ø5/32" ø3/16" ø1/4"	ø3/16" ø1/4"	ø3/16" ø1/4" ø5/16"	ø1/4" ø5/16" ø3/8"	ø3/8" ø1/2"	ø3/8" ø1/2"	ø1/2"		
Controlled flow (Free flow)	Flow rate (ℓ/min (ANR))	100	130	230	290	460	420	660	920	1050	1390
	Effective area (mm <sup>2</sup> )	1.5	2	3.5	4.5	7	6.5	10	14	16	21

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

### Flow Direction Symbols on Body



AS

ASP

ASN

AQ

ASV

AK

ASS

ASR

ASF

# Series AS-FG

## How to Order

**AS 200 1 F G -06**

### Body size

100	M5 standard
200	1/8 standard
205	1/4 standard
300	3/8 standard
400	1/2 standard

With One-touch fittings

Stainless steel specifications (SUS303)

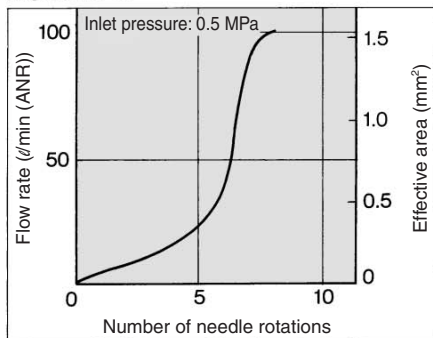
### Applicable tubing O.D.

Metric size		Inch size	
23	ø3.2 *	01	ø1/8"
04	ø4	03	ø5/32"
06	ø6	05	ø3/16"
08	ø8	07	ø1/4"
10	ø10	09	ø5/16"
12	ø12	11	ø3/8"
		13	ø1/2"

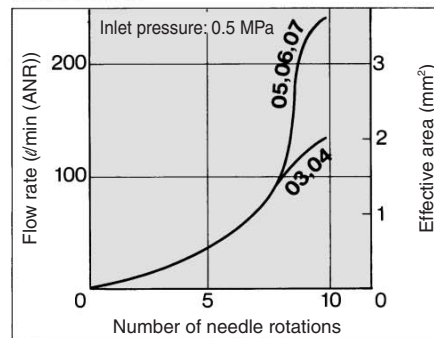
\* Use ø1/8" tube.

## Needle Valve/Flow Characteristics

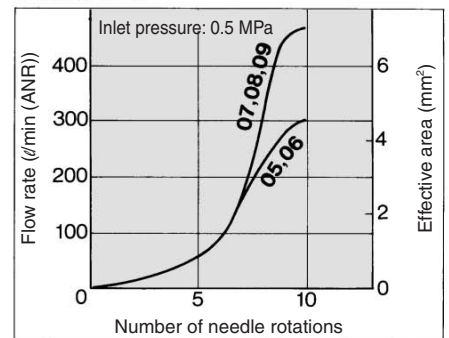
**AS1001FG**



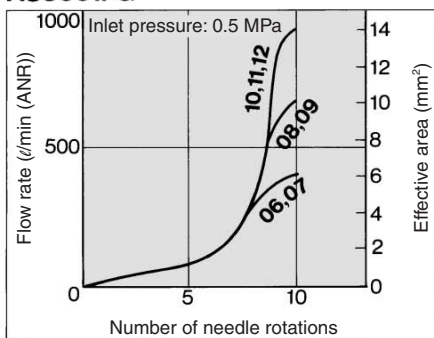
**AS2001FG**



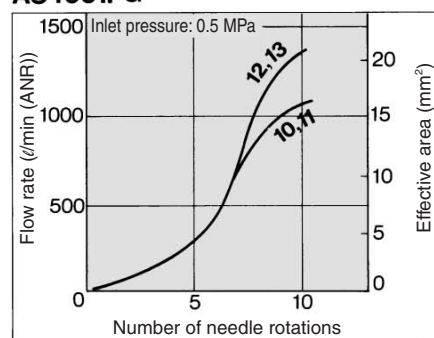
**AS2051FG**



**AS3001FG**



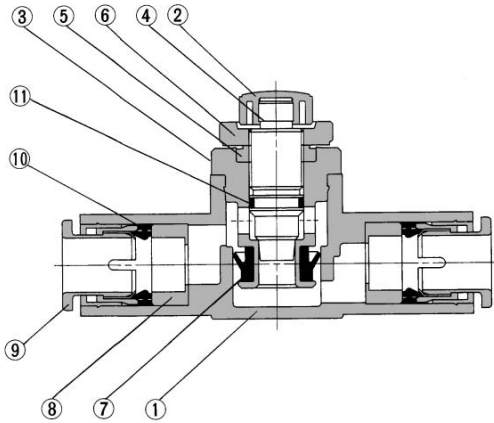
**AS4001FG**





# Speed Controller with One-touch Fittings Stainless Series, In-line Type **Series AS-FG**

## Construction

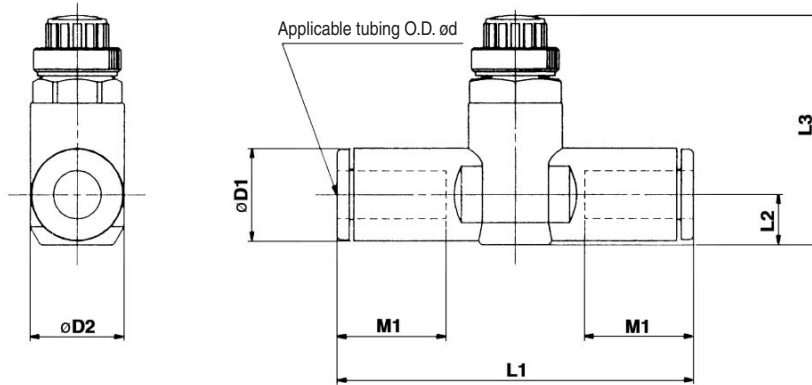


### Component Parts

No.	Description	Material	Note
①	Body A	PBT	
②	Handle	PBT	
③	Body B	Stainless steel 303	
④	Needle	Stainless steel 303	
⑤	Needle guide	Stainless steel 303	
⑥	Lock nut	Stainless steel 303	
⑦	U seal	HNBR	
⑧	Spacer	PBT <sup>Note)</sup>	
⑨	Cassette	POM, Stainless steel	
⑩	Seal	NBR	
⑪	O-ring	NBR	

Note)  $\phi 3/16"$ ,  $\phi 3/8"$  and  $\phi 1/2"$  are made of stainless steel 303.  
AS1001FG( $\phi 3.2$ ,  $\phi 4$ ,  $\phi 6$ ,  $\phi 1/8"$ ,  $\phi 5/32"$ ,  $\phi 1/4"$ ),  
AS2001FG( $\phi 4$ ,  $\phi 6$ ,  $\phi 5/32"$ ) are POM.

## Dimensions



### Metric Size

Model	d	D1	D2	L1	L2	L3		M1	Weight (g)
						Max.	Min.		
AS1001FG-23	3.2	8.4	10	38	4.5	23.5	20.7	12.7	6
AS1001FG-04	4	9.3		39.2	5.2	24.2	21.4	7	7
AS1001FG-06	6	11.6		40.7	6.2	25.2	22.4	13.5	8
AS2001FG-04	4	9.3	11.8	40.7	5.2	32.6	27.6	12.7	12
AS2001FG-06	6	11.6		44.8	6.3	33.7	28.7	13.5	13
AS2051FG-06	6	12.8	14.8	53.2	6.7	35.2	30.2	17	26
AS2051FG-08	8	15.2		59.8	8.1	32.6	27.6	18	31
AS3001FG-06	6	12.8	19.8	59	7.4	38.3	33.3	17	18
AS3001FG-08	8	15.2		64.4	8.2	39.1	34.1	18	21
AS3001FG-10	10	18.5		71.6	9.8	40.6	35.6	21	32
AS3001FG-12	12	20.9	26.5	76	11	41.8	36.8	22	33
AS4001FG-10	10	18.5		51.1	43.6	21	36		
AS4001FG-12	12	20.9		52.1	44.6	22	40		

### Inch Size

Model	d	D1	D2	L1	L2	L3		M1	Weight (g)
						Max.	Min.		
AS1001FG-01	1/8"	8.4	10	38	4.5	23.5	20.7	12.7	6
AS1001FG-03	5/32"	9.3		39.2	5.2	24.2	21.4	7	7
AS1001FG-05	3/16"	11.4		48.7	6.2	25.2	22.4	16.5	8
AS1001FG-07	1/4"	12	11.8	40.7	5.2	32.6	27.6	12.7	12
AS2001FG-03	5/32"	9.3		40.7	5.2	32.6	27.6	12.7	12
AS2001FG-05	3/16"	11.4	14.8	50	6.2	33.6	28.6	16.5	18
AS2001FG-07	1/4"	13.2		52.2	7.1	34.5	29.5	17	21
AS2051FG-05	3/16"	11.4	14.8	52.2	6.2	34.6	29.6	16.5	24
AS2051FG-07	1/4"	13.2		54.4	7.1	35.5	30.5	17	26
AS2051FG-09	5/16"	15.2		59.8	8.1	32.6	27.6	18	31
AS3001FG-07	1/4"	13.2	19.8	59	7.4	38.3	33.3	17	42
AS3001FG-09	5/16"	15.2		64.4	8.2	39.1	34.1	18	46
AS3001FG-11	3/8"	17.9	26.5	70.8	9.5	40.3	35.3	21	53
AS4001FG-11	3/8"	17.9		76.9	10.3	51	43.5	21	97
AS4001FG-13	1/2"	21.7		83.1	11.6	52.4	44.9	22	106

AS

ASP

ASN

AQ

ASV

AK

ASS

ASR

ASF

# Dual Speed Controller with One-touch Fitting Stainless Series

## Series ASD-FG

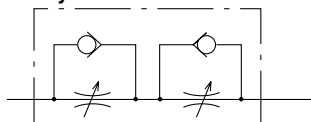
Two flow control valves and check valves have been integrated.

Prevention of stick-slip phenomenon, and speed control of a single acting cylinder.

Stable speed control is achievable even with load fluctuations.



JIS Symbol



Flow Direction Symbols on Body

	Meter-out type	Meter-in type
Symbol		
JIS Symbol		

Model

Model	Port size	Applicable tubing O.D.													
		Metric size					Inch size								
		4	6	8	10	12	1/8"	5/32"	3/16"	1/4"	5/16"	3/8"			
ASD230FG-M5	M5 x 0.8	●	●												
ASD330FG-01	R 1/8		●	●											
ASD430FG-02	R 1/4		●	●	●										
ASD530FG-02	R 1/4		●	●	●	●									
ASD530FG-03	R 3/8		●	●	●	●									
ASD630FG-04	R 1/2				●	●									
ASD230FG-U10/32	10-32 UNF						●	●	●	●					
ASD330FG-N01	NPT 1/8								●	●	●				
ASD430FG-N02	NPT 1/4									●	●	●			
ASD530FG-N02	NPT 1/4									●	●	●			
ASD530FG-N03	NPT 3/8									●	●	●			
ASD630FG-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 <sup>(1)</sup> )
Applicable tubing material <sup>(2)</sup>	Nylon, Soft nylon, Polyurethane, Soft polyurethane

Note 1) In the case of ASD230FG type

Note 2) Use caution regarding the max. operating pressure when soft nylon or polyurethane, or soft polyurethane tubing is used.

(Refer to pages 15-6-3 to 15-6-5 for details.)

Flow Rate and Effective Area

Model	ASD230FG		ASD330FG		ASD430FG		ASD530FG			ASD630FG	
	Metric size	ø4, ø6	ø6, ø8	ø6	ø8, ø10	ø6	ø8	ø10, ø12	ø10	ø12	
Tubing O.D.	Metric size	ø3/16"	ø3/16"	ø3/16"	ø1/4"	ø1/4"	ø1/4"	ø5/16"	ø3/8"	—	ø3/8"
	Inch size	ø1/4"	ø1/8"	ø1/4"	ø3/8"	—	—	—	—	—	—
Controlled flow (Free flow)	Flow rate (ℓ/min (ANR))	75	175	295	350	500	600	700	1200	1300	
	Effective area (mm <sup>2</sup> )	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.

How to Order

**ASD 330FG - 01-06 S**

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 ●

Stainless steel specifications (SUS303) ●

Thread type ●

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

● With seal

\* M5 and U10/32 are not available with seal.

● Applicable tubing O.D.

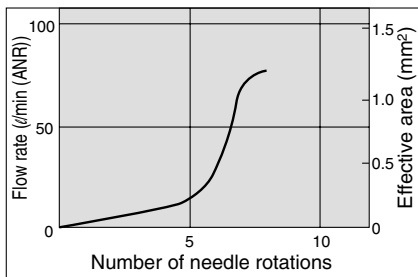
Metric size		Inch size	
04	ø4	01	ø1/8"
06	ø6	03	ø5/32"
08	ø8	05	ø3/16"
10	ø10	07	ø1/4"
12	ø12	09	ø5/16"
		11	ø3/8"

● Port size

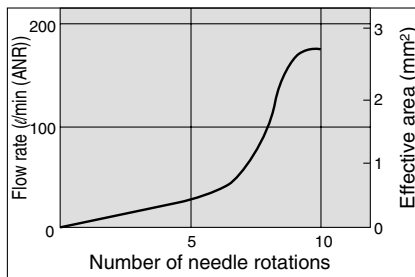
M5	M5 x 0.8
U10/32	10-32 UNF
01	1/8
02	1/4
03	3/8
04	1/2

Needle Valve/Flow Characteristics

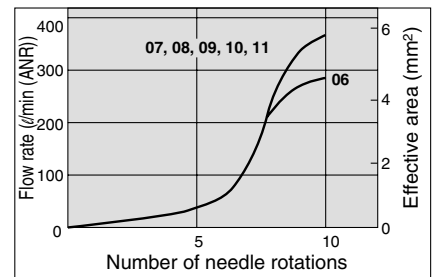
ASD230FG



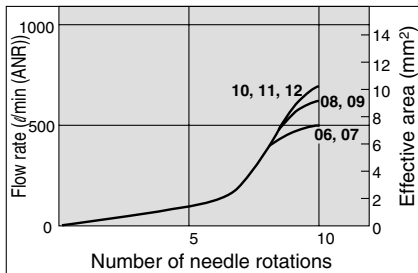
ASD330FG



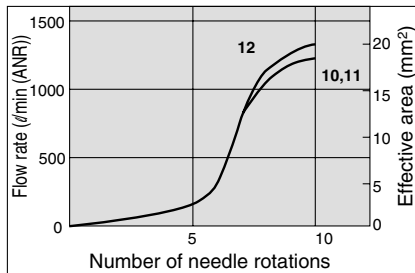
ASD430FG



ASD530FG



ASD630FG

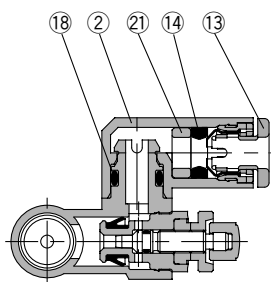


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 ASV  
 AK  
 ASS  
 ASR  
 ASF

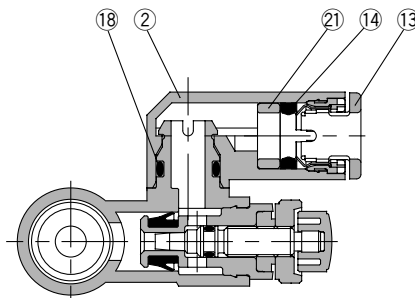
# Series ASD-FG

## Construction

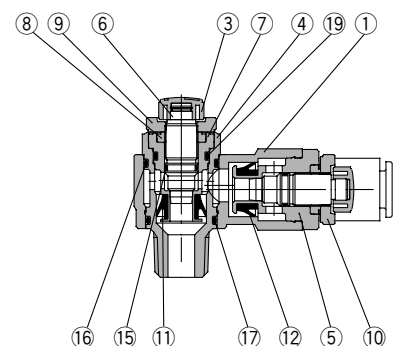
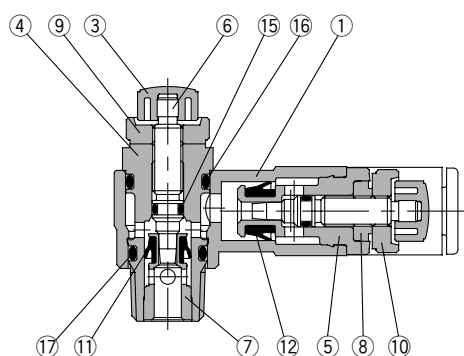
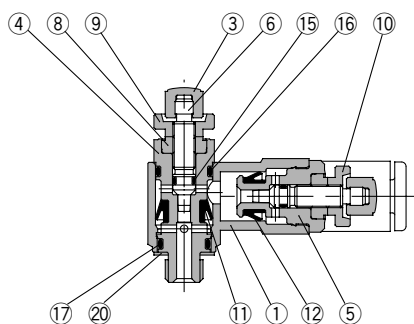
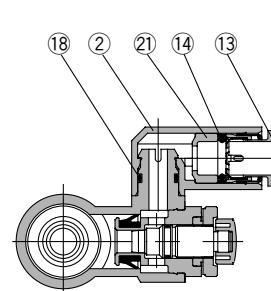
### ASD230FG



### ASD330FG/430FG ASD530FG/630FG



### ASD530FG-02



## Component Parts

No.	Description	Material	Note
①	Body A	PBT	
②	Elbow body	PBT	
③	Handle	PBT	
④	Body B	Stainless steel 303	
⑤	Body B	Stainless steel 303	
⑥	Needle	Stainless steel 303	
⑦	Seat ring	Stainless steel 303	
⑧	Needle guide	Stainless steel 303	
⑨	Lock nut	Stainless steel 303	
⑩	Lock nut	Stainless steel 303	
⑪	U seal	HNBR	

No.	Description	Material	Note
⑫	U seal	NBR	
⑬	Cassette	POM, Stainless steel	
⑭	Seal	NBR	
⑮	O-ring	NBR	
⑯	O-ring	NBR	
⑰	O-ring	NBR	
⑱	O-ring	NBR	
⑳	Gasket	NBR, Steel	M5 type only
㉑	Spacer	PBT <sup>Note)</sup>	

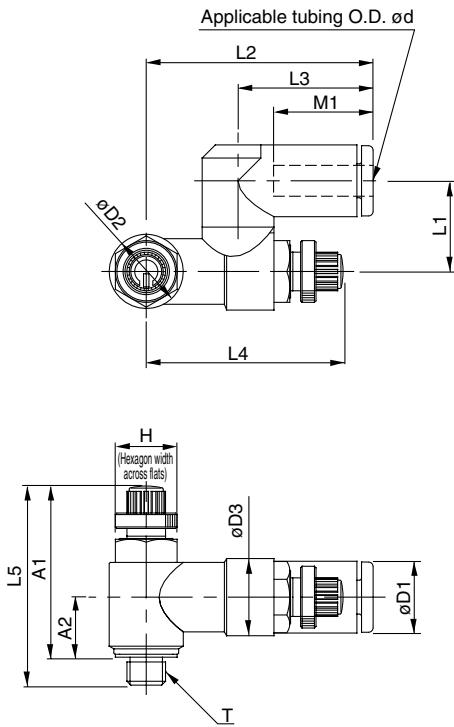
Note)  $\phi 3/16"$ ,  $\phi 3/8"$  and  $\phi 1/2"$  are stainless steel 303.

ASD230FG ( $\phi 4$ ,  $\phi 6$ ,  $\phi 1/8"$ ,  $\phi 5/32"$ ,  $\phi 1/4"$ ),  
ASD330FG ( $\phi 6$ ) are made of POM.

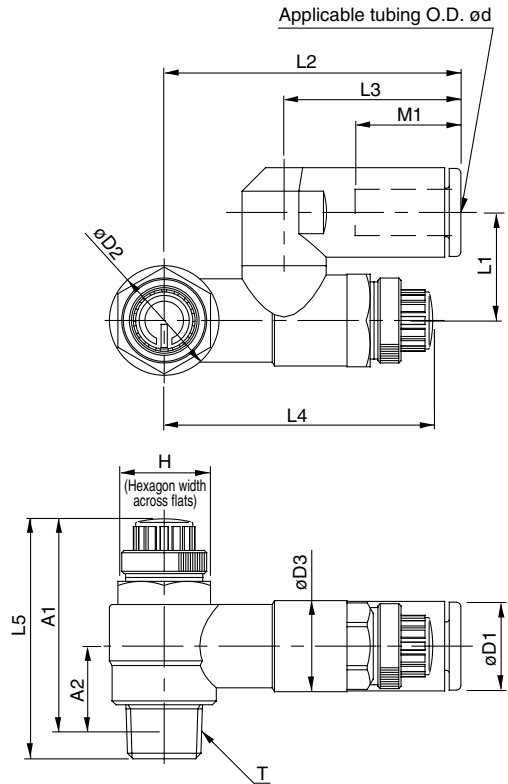
# Dual Speed Controller with One-touch Fitting Stainless Series **Series ASD-FG**

## Dimensions: Metric Size

### ASD230FG



### ASD330FG/430FG ASD530FG/630FG



## Metric Size

Model	d	T	H	D1	D2	D3	L1	L2	L3	L4		L5		A1*		A2*	M1
										Max.	Min.	Max.	Min.	Max.	Min.		
ASD230FG-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
ASD230FG-M5-06	6			11.6				20.6	13.7								
ASD330FG-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
ASD330FG-01-08S	8			15.2				28.2	33.9								18.5
ASD430FG-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
ASD430FG-02-08S	8			15.2				28.2	38.9								18.5
ASD430FG-02-10S	10			18.5			19.7	49.3	31								21
ASD530FG-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
ASD530FG-02-08S	8			15.2				28.2	51.3								18.5
ASD530FG-02-10S	10			18.5				32.6	54.1								21
ASD530FG-02-12S	12			20.9				34.4	55.9								22
ASD530FG-03-06S	6	R 3/8	19	12.8	23	19.8	20.3	48.3	25.2	46.9	41.9	48.8	43.8	40	35	14	17
ASD530FG-03-08S	8			15.2				28.2	51.3								18.5
ASD530FG-03-10S	10			18.5				32.6	54.1								21
ASD530FG-03-12S	12			20.9				34.4	55.9								22
ASD630FG-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
ASD630FG-04-12S	12			20.9				34.4	66.1								22

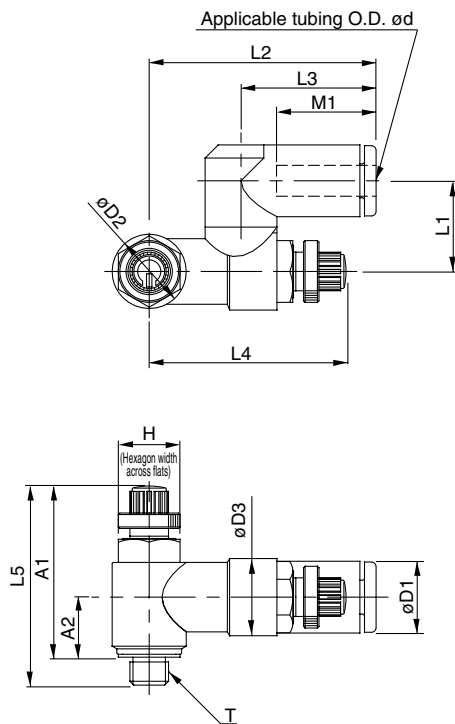
\* Reference dimensions of M5 x 0.8, R threads after installation.

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

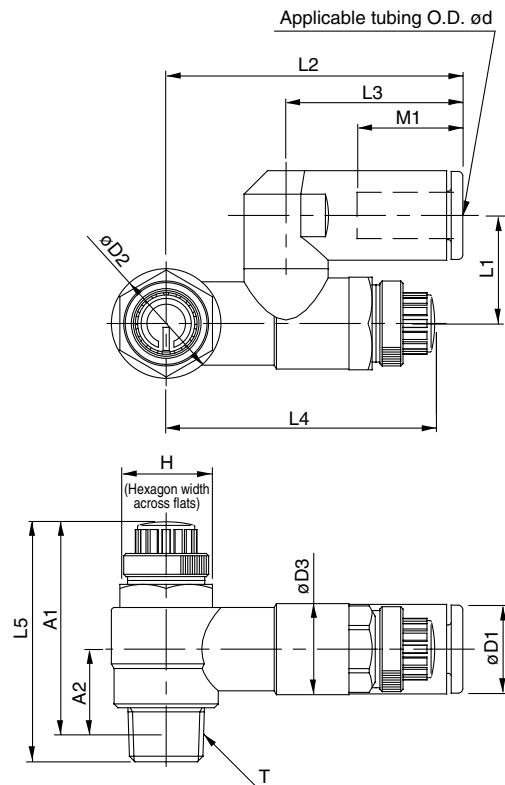
# Series ASD-FG

## Dimensions: Inch Size

### ASD230FG



### ASD330FG/430FG ASD530FG/630FG



## Inch Size

Model	d	T	H	D1	D2	D3	L1	L2	L3	L4		L5		A1*		A2*	M1		
										Max.	Min.	Max.	Min.	Max.	Min.				
ASD230FG-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		
ASD230FG-U10/32-03	5/32"			9.3															
ASD230FG-U10/32-05	3/16"			11.4														35.2	23.3
ASD230FG-U10/32-07	1/4"			12														32.6	20.7
ASD330FG-N01-05S	3/16"	NPT1/8	12.7	11.6	14.2	11.8	14	38.5	23.9	39.6	34.6	36.1	31.1	32	27	10.6	16.5		
ASD330FG-N01-07S	1/4"			13.2														42.2	25.6
ASD330FG-N01-09S	5/16"			15.2														44.8	28.2
ASD430FG-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		
ASD430FG-N02-09S	5/16"			15.2														46.5	28.2
ASD430FG-N02-11S	3/8"			18.5														49.3	31
ASD530FG-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		
ASD530FG-N02-09S	5/16"			15.2														51.3	28.2
ASD530FG-N02-11S	3/8"			18.5														54.1	32.6
ASD530FG-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		
ASD530FG-N03-09S	5/16"			15.2														51.3	28.2
ASD530FG-N03-11S	3/8"			18.5														54.1	32.6
ASD630FG-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	46.9	42.1	18.6	21		

\* Reference dimensions of 10-32UNF and NPT threads after installation.