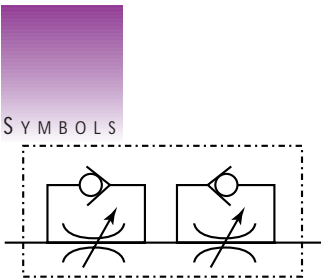
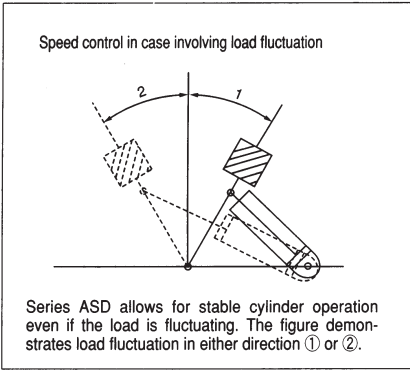


DUAL SPEED CONTROLLER
INCORPORATING TWO FLOW CONTROL
VALVES AND TWO CHECK VALVES
SERIES ASD

- ✓ Meter-in and meter-out are combined in a single body
- ✓ Compac design and reduced pipework
- ✓ With integrated one-touch fittings
- ✓ Universal body can rotate through 360°
- ✓ Ideal for high precision speed control of miniature cylinder
- ✓ Prevents cylinders "shooting out"
- ✓ Ideal for speed control in applications where load ratio changes during cylinder operation
- ✓ Ideal for single acting cylinders with low speed in both directions



TECHNICAL
SPECIFICATIONS

Proof Pressure	1.5MPa(15.3kgf/cm ²)
Max operating pressure	1MPa(10.2kgf/cm ²)
Min Operating Pressure	0.1MPa(1kgf/cm ²)
Ambient and fluid temperature	0~60°C
Number of needle rotations	10 turns (8 for ASD230F)
Applicable tube material	Nylon, Soft Nylon, Polyurethane
Option	Hexagon lock nut

Model		ASD230F	ASD330F	ASD430F		ASD530F			ASD630F	
Tube OD		Ø4, Ø6	Ø6, Ø8	Ø6	Ø8, Ø10	Ø6	Ø8	Ø10, Ø12	Ø10	Ø12
Needle, Check Valve	Flow/min (ANR) (Nℓ/min)	75	175	295	350	500	600	700	1200	1300
	Effective Orifice (mm ²)	1.1	2.7	4.5	5.3	7.6	9.1	10.7	18.3	19.8

DIMENSIONS
SEE NEXT PAGE

HOW TO
ORDER

ASD 3 OF — — S

BODY SIZE

2M5
31/8
41/4
53/8
61/2

UNIVERSAL BODY TYPE

WITH ONE TOUCH FITTINGS

PORT SIZE

M5 ...M5x0.8
1R(PT)1/8
2R(PT)1/4
3R(PT)3/8
4R(PT)1/2

APPLICABLE TUBE OD

04 ...Ø4
06 ...Ø6
08 ...Ø8
10 ...Ø10
12 ...Ø12

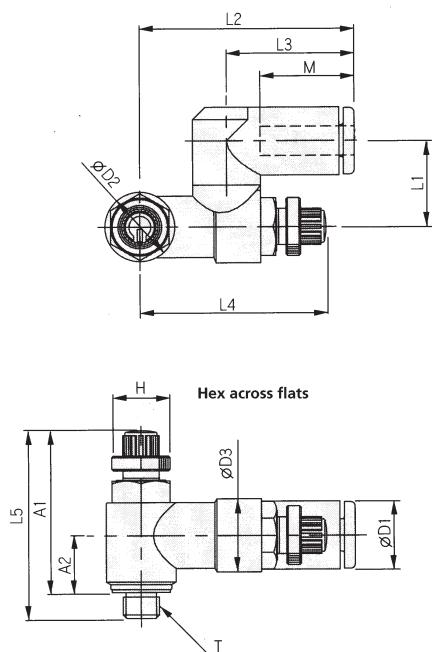
WITH SEALANT

OPTION

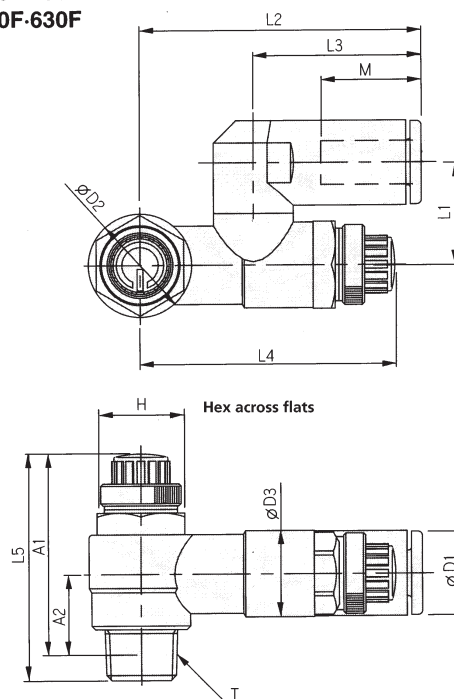
KHex locking nut

DIMENSIONS

ASD230F



**ASD330F-430F
ASD530F-630F**



型式	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	M5×0.8	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				32.5	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			15.8	44.8	28.2	38.9	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			18	46.5	28.2								18.5	55
ASD430F-02-10S	10			18.5			19.7	49.3	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			20.3	51.3	28.2								18.5	76
ASD530F-02-10S	10			18.5			23.1	54.1	32.6								21	80
ASD530F-02-12S	12			20.9			23.1	55.9	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			20.3	51.3	28.2								18.5	93
ASD530F-03-10S	10			18.5			23.1	54.1	32.6								21	98
ASD530F-03-12S	12			20.9			23.1	55.9	34.4								22	101
ASD630F-04-10S	10	R(PT)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				66.1	34.4								22	179

Dimensions measured after thread screwed in



SEE INSIDE FRONT COVER FOR
DETAILS OF YOUR LOCAL SALES OFFICE



FOR FURTHER TECHNICAL
DETAILS ON THIS
PRODUCT REQUEST
CATALOGUE REFERENCE
E201-G

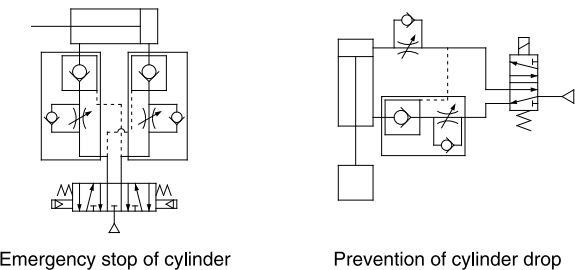
SPEED CONTROLLER WITH PILOT CHECK VALVE VALVE SERIES ASP

- ✓ Two individual products combined into one unit
- ✓ Compact, space saving solution which can be directly mounted to the actuator
- ✓ One touch fitting makes piping easier and body swivels 360°
- ✓ Brass parts electroless nickel plated as standard
- ✓ The speed controller with pilot check valve is used to stop the cylinder in mid stroke for extended periods of time when air is cut-off



NOTE: This product will be released during 1998. Please contact your SMC Regional Centre for the latest information.

EXAMPLES OF AIR CIRCUIT



Emergency stop of cylinder

Prevention of cylinder drop

TECHNICAL SPECIFICATIONS

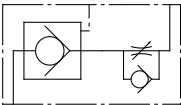
Proof pressure	1.5MPa{15.3kgf/cm ² }
Maximum operating pressure	1MPa{10.2kgf/cm ² }
Minimum operating pressure	0.1MPa{1kgf/cm ² }
Pilot check valve actuation pressure	50% or more of operating pressure
Ambient & fluid temperature	-5 to 60°C (Without freezing)
Number of needle revolutions	10 revolutions
Applicable tube material	Nylon, Soft nylon, Polyurethane

Note) Use caution with soft nylon or polyurethane at maximum operating pressures.
For details, refer to the catalog on "Air Fittings & Tubing" for pneumatic piping CAT. E 501-B.

Model		ASP330F		ASP430F		ASP530F		ASP630F	
Tube outside diameter		ø6, ø8	ø6	ø8	ø8	ø10	ø10	ø12	
Connection	Cylinder Side	R(PT) ¹ / ₈	R(PT) ¹ / ₄		R(PT) ³ / ₈		R(PT) ¹ / ₂		
	Pilot Port	M5x0.8	Rc(PT) ¹ / ₈		Rc(PT) ¹ / ₄		Rc(PT) ¹ / ₄		
Controlled flow (Free flow)	Flow rate ℓ/min (ANR){N ℓ/min}	180	330	350	600	750	1100	1190	
	Effective sectional area mm ²	2.9	5.2	5.4	9.3	11.6	17	18.4	

Note) The indicated flow rate values are at a pressure of 0.5MPa and a temperature of 20°C.

SYMBOLS



How To ORDER

ASP — OF — — S

BODY SIZE —

3 1/8

4 1/4

5 3/8

6 1/2

CONSTRUCTION —

3 Universal

WITH ONE TOUCH FITTING

CONNECTION —

..... Cylinder Side ... Pilot Port

01 ... R(PT) 1/8 M5x0.8

02 ... R(PT) 1/4 Rc(PT) 1/8

03 ... R(PT) 3/8 Rc(PT) 1/8

04 ... R(PT) 1/2 Rc(PT) 1/4

APPLICABLE TUBE DIA —

06 ... Ø6

08 ... Ø8

10 ... Ø10

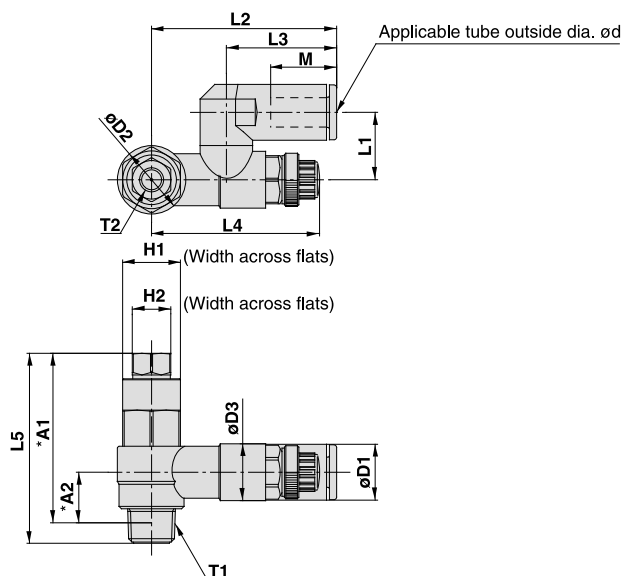
12 ... Ø12

WITH SEALANT —

DIMENSIONS
SEE NEXT PAGE

DIMENSIONS

Millimeter 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(PT)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			15.8			38.9	33.9					35
ASP430F-02-06S	6	R(PT)1/4	Rc(PT)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			46.4	28.2					68
ASP530F-03-08S	8	R(PT)3/8	Rc(PT)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			54.1	32.6					110
ASP630F-04-10S	10	R(PT)1/2	Rc(PT)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			25.9			66	34.4					215

Reference dimensions for R(PT) threads after installation.

NOTE: ASP IS NOT DESIGNED TO REPLACE PERFECT SPACERS IN SY MANIFOLD ASSEMBLIES BUT PROVIDES A LOW COST ALTERNATIVE



SEE INSIDE FRONT COVER FOR
DETAILS OF YOUR LOCAL SALES OFFICE



FOR FURTHER TECHNICAL
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CATALOGUE REFERENCE
E201-G