

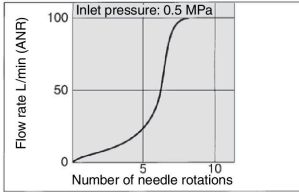
**Flow Rate and Sonic Conductance**

Model		AS12□1-M5	AS22□1-01	AS22□1-02		AS32□1		AS42□1-04	
Tubing O.D.		ø4, ø6	ø6, ø8	ø6	ø8, ø10	ø8	ø10	ø10	ø12
Controlled flow	Flow rate (L/min (ANR))	100	230	390	460	790	920	1580	1710
	Sonic conductance dm <sup>3</sup> /(s-bar)	0.3	0.7	1.2	1.4	2.4	2.8	4.8	5.2
Critical pressure ratio	Controlled	0.2	0.25	0.3		0.25		0.25	
	Free	0.4	0.2	0.3		0.2		0.3	

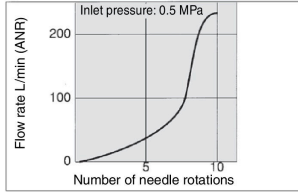
**Needle Valve/Flow Rate Characteristics**

Note) The flow rate characteristics are representative values.

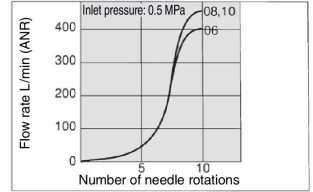
AS12□1



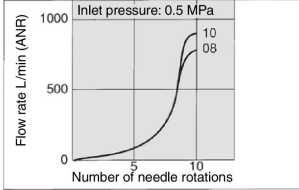
AS22□1-01



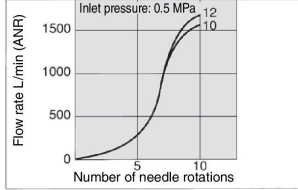
AS22□1-02



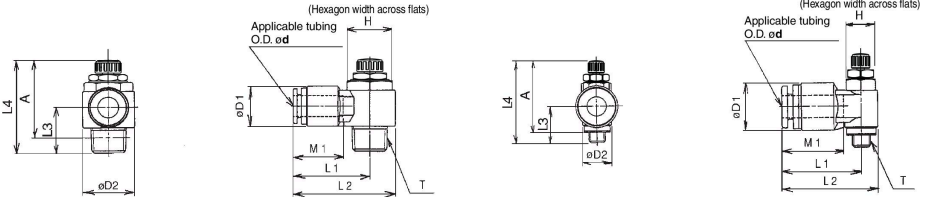
AS32□1



AS42□1



**Dimensions**



Model	Applicable tubing O.D. ød	T	H	D1	D2	L1	L2	L3	L4 (1)		A (2)		M1	Weight (g)		
									Max.	Min.	Max.	Min.				
AS12□1-M5-F04	4	M5 x 0.8	8	13	9	21	25.5	11.2	28.3	25.5	25	22.2	16	13		
AS12□1-M5-F06	6					21.5	26								17	13
AS22□1-01-F06S	6					R <sup>1</sup> / <sub>8</sub>	12								15.5	14.6
AS22□1-01-F08S	8	18.5	31													
AS22□1-02-F06S	6	R <sup>1</sup> / <sub>4</sub>	17	15.5	19.5	28.7	38.5	17.2	40.3	35.3	34.8	29.8	17	54		
AS22□1-02-F08S	8														18.5	50
AS22□1-02-F10S	10														18.2	52
AS32□1-02-F06S	8	R <sup>1</sup> / <sub>4</sub>	19	18.2	24.3	32.7	44.9	21	48.3	43.3	42.8	37.8	21	86		
AS32□1-02-F10S	10					33.3	45.5								21	81
AS32□1-03-F08S	8					R <sup>3</sup> / <sub>8</sub>	19								18.2	24.3
AS32□1-03-F10S	10	33.3	45.5	21	88											
AS42□1-04-F10S	10	R <sup>1</sup> / <sub>2</sub>	24	22.3	28.5			36.1	50.4	24.6	54.7	49.7	47.4	42.4		
AS42□1-04-F12S	12					22	146									

Note 1) Reference dimensions

Note 2) Reference dimensions of thread M5, R after installation.

**⚠ Caution**

Be sure to read this before handling the products.  
Refer to back page 50 for Safety Instructions and pages 543 to 546 for Flow Control Equipment Precautions.

- AS-F
- TMH
- ASD
- AS
- AS-FE
- KE
- AS-FG
- AS-FP
- AS-FM
- AS-D
- AS-T
- ASP
- ASN
- AQ
- ASV
- AK
- VCHC
- ASR
- ASQ