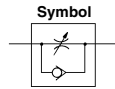


# Speed Controller: Standard Type Large Flow In-line Type

# AS Series



Able to control and set a constant speed easily.  
Speed may be accurately controlled even at low speed.  
Retainer prevents accidental loss of needle.



**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.

### Model

Model	Port size	Free flow			Controlled flow			Weight (kg)
		Flow rate (L/min (ANR))	Sonic conductance (dm <sup>3</sup> /s.bar)	Critical pressure ratio	Flow rate (L/min (ANR))	Sonic conductance (dm <sup>3</sup> /s.bar)	Critical pressure ratio	
AS420-02	1/4	2,500	6.9	0.25	3,600	10	0.45	0.34
AS420-03	3/8	5,000	13.9		4,800	13.3		0.33
AS420-04	1/2	6,600	18.3		6,700	18.6		0.32
AS500-06	3/4	10,100	28.1		8,100	22.5		0.36
AS600-10	1	15,100	42		16,900	47		0.7
AS800-12	1 1/4	35,400	98		38,500	107		1.4
AS900-14	1 1/2	52,000	144		47,500	132		3.3
AS900-20	2	57,800	161		60,800	169		3.3

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

### Specifications

Fluid	Air
Proof pressure	1.5 MPa
Max. operating pressure	1 MPa
Min. operating pressure	0.05 MPa
Ambient and fluid temperature	-5 to 60°C (No freezing)

### How to Order

AS 42 0 - [ ] 02 - [ ]

Body size

42	1/2 standard
50	3/4 standard
60	1 standard
80	1 1/4 standard
90	1 1/2 standard

Thread type

Nil	Rc
N	NPT
F	G

Bore size

Bore size	Applicable series
02	1/4
03	3/8
04	1/2
06	3/4
10	1
12	1 1/4
14	1 1/2
20	2

Option

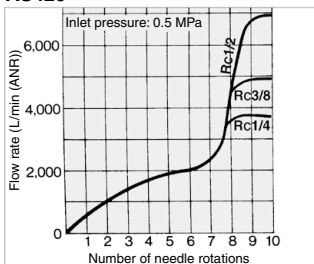
Nil	None
H (1)	High temperature (-5 to 80°C)
L (2)	Low temperature (-30 to 60°C)

Note 1) AS800 is available as special.  
Note 2) AS900 is available as special.

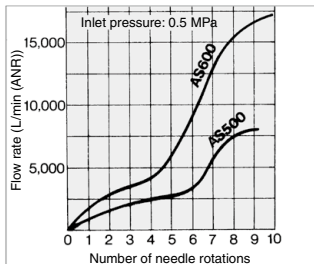
### Needle Valve/Flow Rate Characteristics

Note) The flow rate characteristics are representative values.

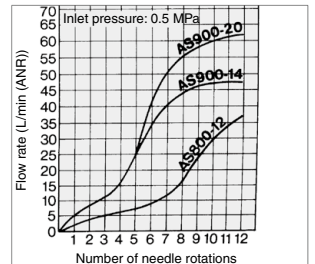
AS420



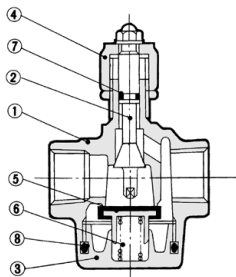
AS500/600



AS800/900



**Construction: AS420/500/600**



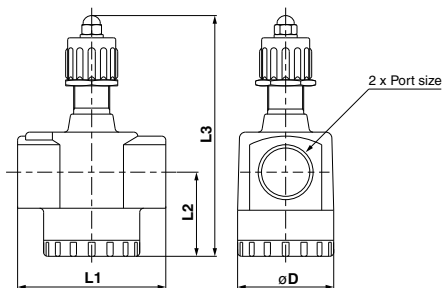
**Component Parts**

No.	Description	Material
1	Body	Aluminum alloy
2	Needle	Brass
3	Bottom cover	Aluminum alloy
4	Handle	Zinc alloy

**Replacement Parts**

No.	Description	Material	Part no.	
			AS420-500	AS600
5	Check Valve	NBR, Brass	14254	14273
6	Spring	Stainless steel	14255	14275
7	O-ring	NBR	KA00476	KA00476
8	O-ring	NBR	KA00472	KA00474

**Dimensions: AS420/500/600**

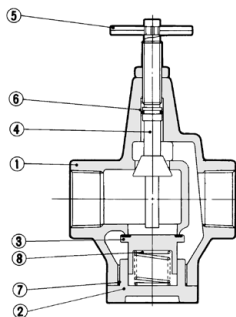


**Dimensions**

Model	Port size	L1	L2	L3 (1)		D
				Max.	Min.	
AS420	1/4, 3/8, 1/2	67.5	38	122	112	50
AS500	3/4	74	42	115	105	50
AS600	1	90	55	158	148	62

Note 1) L3: Reference dimensions

**Construction: AS800/900**



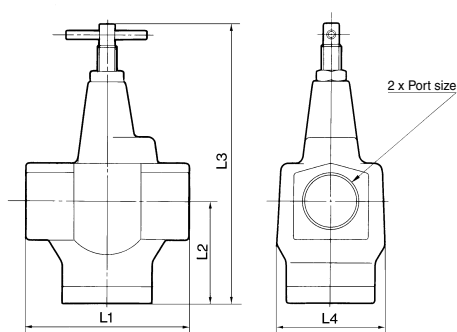
**Component Parts**

No.	Description	Material
1	Body	Aluminum alloy
2	Valve guide	Aluminum alloy
3	Check valve	NBR, Brass
4	Needle	Brass
5	Handle	Carbon steel

**Replacement Parts**

No.	Description	Material	Part no.	
			AS800	AS900
6	O-ring	NBR	KA00069	KA00072
7	O-ring	NBR	KA00460	KA00462
8	Spring	Stainless steel	14115	14124

**Dimensions: AS800/900**



**Dimensions**

Model	Port size	L1	L2	L3 (1)		L4
				Max.	Min.	
AS800	1 1/4	120	74	204	192	80
AS900	1 1/2, 2	150	93	262	250	94

Note 1) L3: Reference dimensions

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