

Speed Controller: Standard Type

Series AS

Large Flow In-line Type

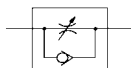
Able to control and set a constant speed easily.

Speed may be accurately controlled even at low speed.

Retainer prevents accidental loss of needle.



JIS Symbol



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.

Model

Model	Port size	Free flow		Controlled flow		Applicable cylinder bore size (mm)	Weight (g)
		Flow rate (l/min (ANR))	Effective area (mm ²)	Flow rate (l/min (ANR))	Effective area (mm ²)		
AS420-02	1/4	2,500	38	3,600	55	63, 80, 100, 125	0.34
AS420-03	3/8	5,000	77	4,800	74		0.33
AS420-04	1/2	6,600	100	6,700	102		0.32
AS500-06	3/4	10,100	154	8,100	123	140, 160, 180, 200	0.36
AS600-10	1	15,100	230	16,900	258	160, 180, 200, 250	0.7
AS800-12	1 1/4	35,400	540	38,500	586	300	1.4
AS900-14	1 1/2	52,000	792	47,500	724		3.3
AS900-20	2	57,800	880	60,800	926		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)
Number of needle rotations	10 turns (12 turns Note)

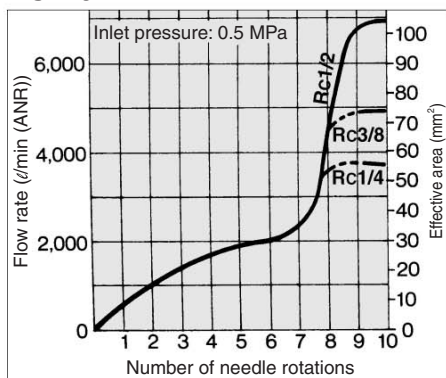
Note) (): Values for AS800, AS900.

How to Order

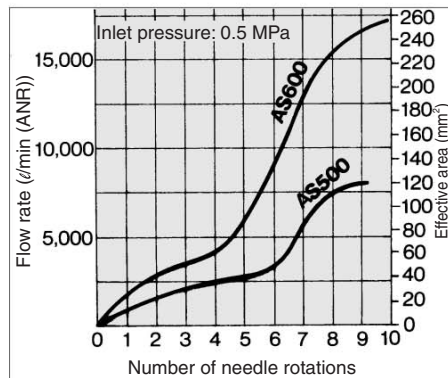
AS 42 0		02		
Body size			Option	
42	1/2 standard		Nil	None
50	3/4 standard		H ⁽¹⁾	High temperature (-5 to 80°C)
60	1 standard		L ⁽²⁾	Low temperature (-30 to 60°C)
80	1 1/4 standard		Note 1) AS800 is available as special.	
90	1 1/2 standard		Note 2) AS900 is available as special.	
Thread type				
Nil	Rc			
N	NPT			
F	G			
		Bore size		
		Bore size	Applicable series	
		02	1/4	AS420
		03	3/8	
		04	1/2	
		06	3/4	AS500
		10	1	AS600
		12	1 1/4	AS800
		14	1 1/2	AS900
		20	2	

Needle Valve/Flow Characteristics

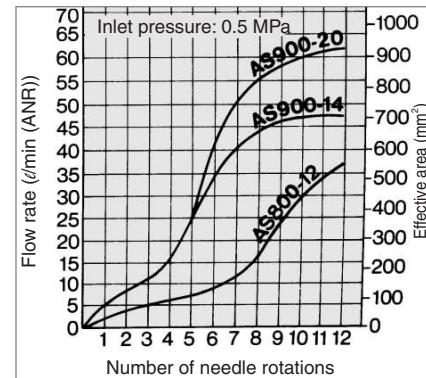
AS420



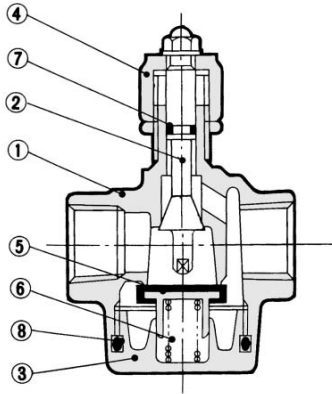
AS500/600



AS800/900



Construction: AS420/500/600



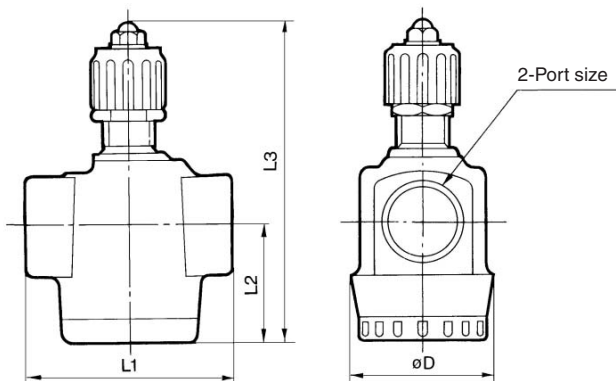
Component Parts

No.	Description	Material	Note
①	Body	Aluminum alloy	Chromated
②	Needle	Brass	—
③	Bottom cover	Aluminum alloy	Chromated
④	Handle	Zinc alloy	Black painted

Replacement Parts

No.	Description	Material	Part no.	
			AS420-500	AS600
⑤	Check Valve	Brass	14254	14273
⑥	Spring	Stainless steel	14255	14275
⑦	O-ring	NBR	JIS B 2401 P-7	JIS B 2401 P-7
⑧	O-ring	NBR	JIS B 2401 P-38	JIS B 2401 P-48

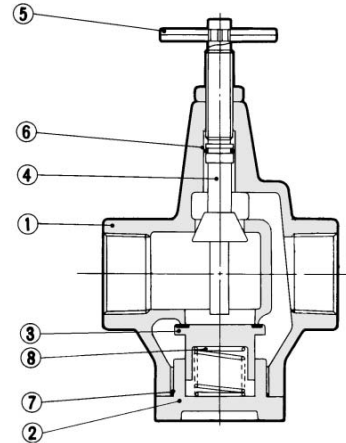
Dimensions: AS420/500/600



Dimensions

Model	Port size	L1	L2	L3		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

Construction: AS800/900



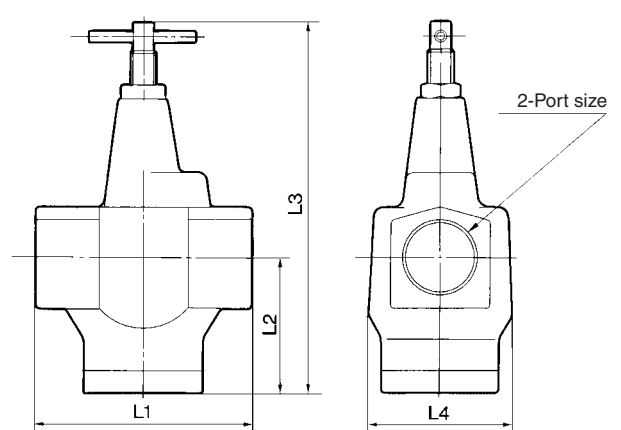
Component Parts

No.	Description	Material	Note
①	Body	Aluminum alloy	Chromated
②	Valve guide	Aluminum alloy	Chromated
③	Check valve	Brass	Rubber lining
④	Needle	Brass	—
⑤	Handle	Carbon steel	Chromated

Replacement Parts

No.	Description	Material	Part no.	
			AS800	AS900
⑥	O-ring	NBR	JIS B 2401 P-12	JIS B 2401 P-16
⑦	O-ring	NBR	JIS B 2401 G-50	JIS B 2401 G-65
⑧	Spring	Stainless steel	14115	14124

Dimensions: AS800/900



Dimensions

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

AS

ASP

ASN

AQ

ASV

AK

ASS

ASR

ASF