



Air operated valve for chemical liquids (3-port valve)

AMG*03R Series

Made-to-order product

Export controlled items

*Eligibility: AMG403R, 503R



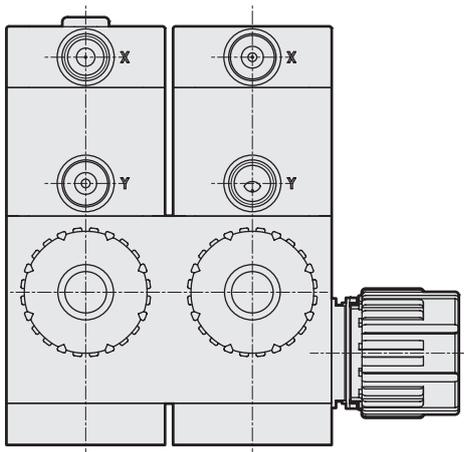
Specifications

Item	Size	AMGZ03R	AMG003R	AMG303R	AMG403R	AMG503R
		□ 22	□ 25	□ 36	□ 46	□ 60
Working fluid		Chemical liquids, pure water, N ₂ gas, air				
Fluid temperature °C		5 to 120 (*1, *2)				
Proof pressure MPa		1				
Working pressure range	(A→B) MPa	0 to 0.5				
	(B→A) MPa	0 to 0.5				
Valve seat leakage cm ³ /min		0 (water pressure)				
Back pressure MPa		0 to 0.5				
Ambient temperature °C		0 to 60 (0 to 50 for type with sensor)				
Frequency		30 cycles/min. or less			20 cycle/min. or less	
Mounting orientation		Unrestricted				
Connection		Super 300 Pillar fitting P Series F-LOCK 60 Series				
Operating section	Operating pressure MPa	0.4 to 0.5	0.35 to 0.5			
	Port connection	Rc1/8				
Weight kg		0.13	0.22	0.5	1	2.1

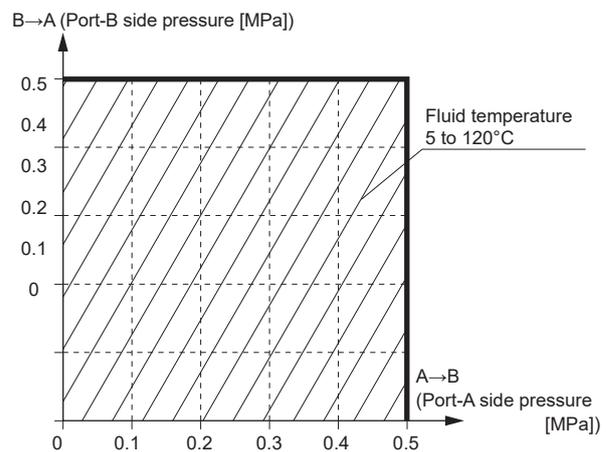
*1: For hydrofluoric acid or chemical liquids containing hydrofluoric acid, use within the range of 5 to 80°C.

*2: 5 to 100°C if the connection is F-LOCK 60 Series.

Structure diagram and parts list



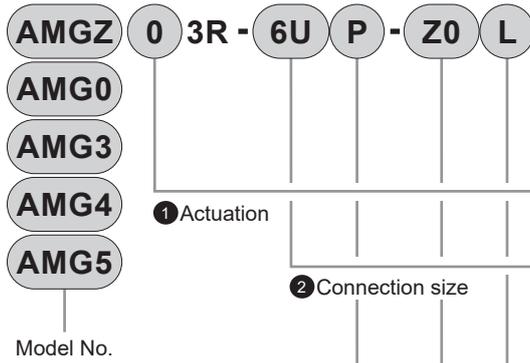
Working pressure



Part name	Material
Body (wetted parts)	PTFE
Diaphragm (wetted parts)	PTFE
Actuator	PVDF
O-ring	FEPM, FKM
Metal parts	Stainless steel (fluoro resin coating)
Mounting plate	PVDF

Always read the precautions on Intro Pages 7 to 14 before use.

How to order



Code	Description					
① Actuation						
0	NC + NO					
② Connection size		Selectable models				
Metric	Tube size	AMGZ	AMG0	AMG3	AMG4	AMG5
6U	ø6 x ø4	●	●			
8U	ø8 x ø6		●			
10U	ø10 x ø8		●	●		
12U	ø12 x ø10			●		
25U	ø25×ø22					●
Inching	Tube size	AMGZ	AMG0	AMG3	AMG4	AMG5
8BU	1/4"×5/32"	●	●			
10BU	3/8"×1/4"		●	●		
15BU	1/2"×3/8"			●		
20BU	3/4"×5/8"				●	
25BU	1"×7/8"					●
③ Connection						
P	Super 300 Pillar fitting P Series					
R	F-LOCK 60 Series					
④ Actuator option						
Z0	ON/OFF only (Note: Only AMGZ can make selection)					
00	ON/OFF only (with indicator)					
10	With flow rate adjustment					
With sensor	Transistor	Cable direction			Cable length	
A1	NPN	Operating port side			1 m	
A3		Operating port side			3 m	
B1		Opposite side to operating port			1 m	
B3	PNP	Opposite side to operating port			3 m	
C1		Operating port side			1 m	
D1		Opposite side to operating port			1 m	
⑤ Port A position						
L	Left					
R	Right					

Precautions for model No. selection

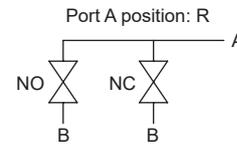
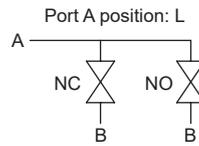
Note: Actuator option
 00 (with ON/OFF indicator) / 10 (with flow rate adjustment) cannot be selected for AMGZ.
 Model with sensor can be selected at AMG3/AMG4/AMG5.

Part3R	Part2	Part1	High pressure	Metals-free	Large bore size	Polyvinyl chloride	Drainage	Part3RN	Part2	High pressure	Metals-free	Large bore size	Single unit	Air operated integrated	Pilot	Manual	Electric	Manual	Manual Fine flow rate	Fine level Switch	Related products
			Air operated valve						Manual valve				Drip prevention valve		Regulator		Flow rate adjusting valve				

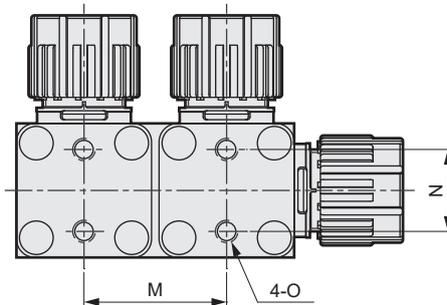
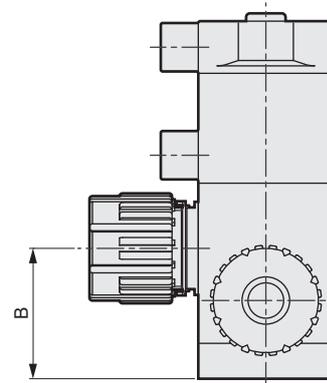
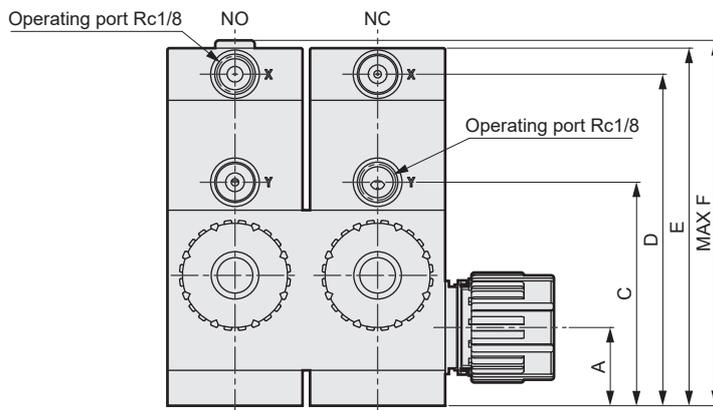
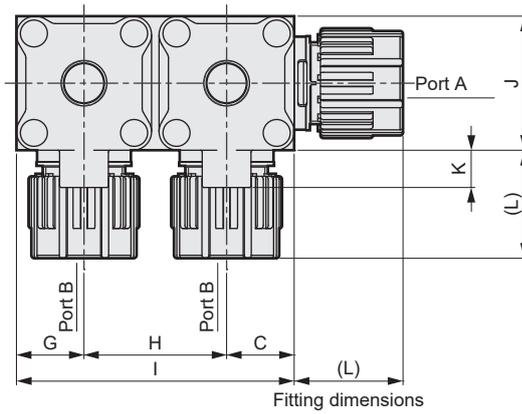
Dimensions

*: NC and NO arrangements differ by port A position.

The valve close to the port A side is NC, while the other is NO.



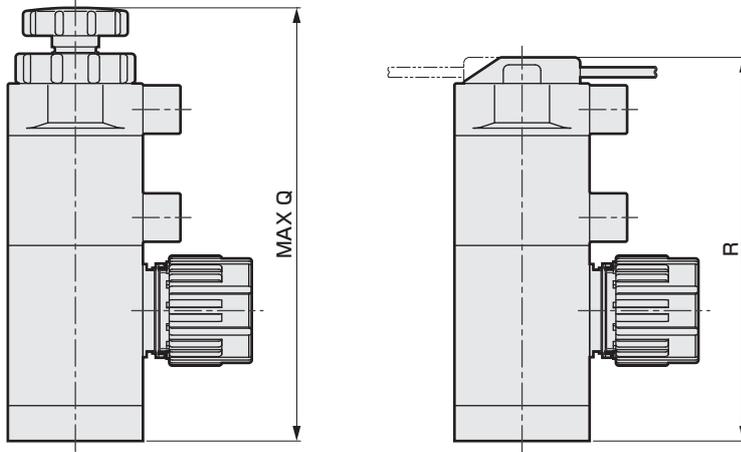
● ON/OFF only (with indicator)



Dimensions

● With flow rate adjustment

● With sensor



Model	A	B	C	D	E	F	G	H	I	J	K	Q	R
AMGZ03R	17	17	39	54	61	-	11	22.5	44.5	22	8	-	-
AMG003R	19	28.5	49	65	72	74	12.5	Table 1		25	8	90	-
AMG303R	21	35	60	89	96	98	18	38	74	36	10	119	103
AMG403R	27	46	78	118	125	128	23	48	94	46	8	148	132
AMG503R	35	60	99	142	149	154	30	62	122	60	8	181	156

Model	M	N	O
AMGZ03R	22.5±0.5	14±0.3	M6 depth 6
AMG003R	Table 1	14±0.3	M6 depth 8
AMG303R	38±0.3	22±0.3	M6 depth 9
AMG403R	48±0.4	28±0.3	M8 depth 10
AMG503R	62±0.4	40±0.3	M8 depth 13

Super 300P Series

Connection (connection size + type)	L
6UP, 8BUP	19
8UP	22
10UP, 10BUP	25
12UP, 15BUP	29
20BUP	36
25UP, 25BUP	43

F-LOCK 60 Series

Connection (connection size + type)	L
6UR	30
8BUR	31
8UR	31
10UR	37
10BUR	39
12UR	37
15BUR	39
20BUR	44
25UR	49.5
25BUR	51

Table 1

Connection (connection size + type)	H	I	M
6UP, 8BUP	26	51	26±0.3
8UP			
6UR, 8BUR			
8UR			
10UP, 10BUP	31	56	31±0.3
10UR, 10BUR			

Air operated valve	Part3R
	Part2
	Part1
	High pressure
	Metah-free
Manual valve	Large bore size
	Polyvinyl chloride
	Drainage
	Part3RN
	Part2
Drip prevention valve	High pressure
	Metah-free
	Large bore size
Regulator	Single unit
	Air operated Integrated
Flow rate adjusting valve	Pilot
	Manual
	Electric
Manual/Flow rate	Manual
	Manual/Fine
Fine level Switch	
Related products	