

Air-operated valve for chemical liquids

AMDZ¹/₂/₃ / AMD0¹/₂/₃ Series

This compact high-performance valve greatly reduces causes of particle formation with its PFA molded body.

● Orifice: Ø1.6 to Ø4



Specifications

Descriptions	AMDZ [*] - [*] -2	AMD0 [*] - [*] -4
Working fluid	Chemical liquids, pure water, N ₂ gas, air	
Fluid temperature °C	5 to 80	
Withstanding pressure MPa	1	
Working pressure range (A → B) MPa	0 to 0.5	
Working pressure range (B → A) MPa	0 to 0.3	
Valve seat leakage cm ³ /min	0 (at, water pressure)	
Back pressure MPa	0 to 0.3	
Ambient temperature °C	0 to 60	
Frequency	30 times/min or less	
Installation attitude	Free	
Connection	Rc1/8 OD Ø3 tube connection OD 1/8" tube connection	Rc1/8 OD Ø6 tube connection OD 1/4" tube connection
Orifice	Ø2	Ø4
Cv value	0.08 (Note 1, 2)	0.32 (Note 2)
Operation section	Operation pressure MPa	NC/NO 0.3 to 0.5, double acting 0.2 to 0.3
	Operation port	M5

Note 1: The Cv for the PFA body connection Rc 1/8 is 0.12.

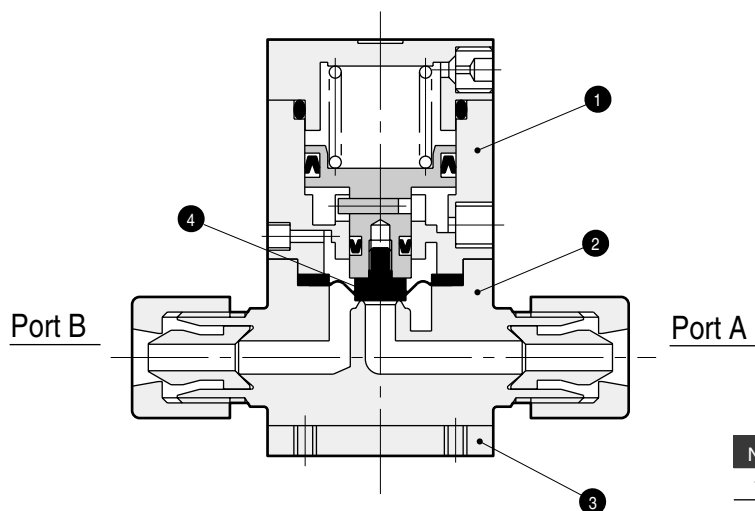
Note 2: The Cv of the SUS body is 80% of the Cv for the PFA body connection Rc 1/8.

Note 3: Check the compatibility of the product's configuration materials, working fluid, and ambient atmosphere before use.

Note 4: See page 6 for using this value for acidic fluids.

Note 5: See pages 72 and 73 for flow characteristics.

Internal structure and parts list

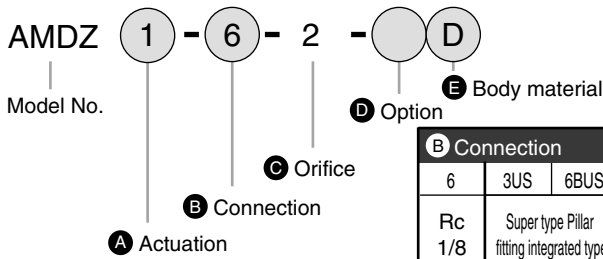


No.	Parts name	Material	Quantity
1	Actuator assembly	PPS	1
2	Body	PFA	1
3	Mounting plate	SUS	1
4	Diaphragm	PTFE	1

The material differs with the model. Contact CKD for details.

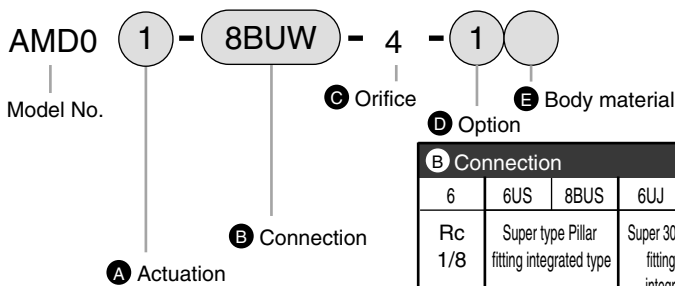
How to order

● AMDZ Series



		B Connection					
		6	3US	6BUS	3UF	3UR	6BUR
Rc 1/8	Super type Pillar fitting integrated type	F-LOCK 20 series fitting integrated type		F-LOCK 60 series fitting integrated type			
	Ø3 X Ø2 tube connection	Ø3 X Ø2 tube connection	Ø3 X Ø2 tube connection	Ø3 X Ø2 tube connection	Ø3 X Ø2 tube connection	1/8" X 1/16" tube connection	
Symbol	Description						
A Actuation							
1	NC (normally closed)	●	●	●	●	●	●
2	NO (normally open)	●	●	●	●	●	●
3	Double acting	●	●	●	●	●	●
C Orifice							
2	Refer to the right	Ø2	Ø2	Ø2	Ø2	Ø1.6	Ø1.6
D Option							
Blank	ON/OFF only	●	●	●	●	●	●
1	With flow adjustment (Only NC type)	●	●	●	●	●	●
E Body material							
Blank	PFA molded body or PTFE machined body	PFA	PFA	PTFE	PTFE		
D	Stainless steel body	●					

● AMD0 Series



		B Connection													
		6	6US	8BUS	6UJ	8BUJ	6UP	8BUP	6UF	8BUF	6UR	8BUR	6UK	8BUK	8BUW
Rc 1/8	Super type Pillar fitting integrated type	Super 300 type Pillar fitting J series integrated type		Super 300 type Pillar fitting P series integrated type		F-LOCK 20 series fitting integrated type		F-LOCK 60 series fitting integrated type		Final lock fitting integrated type		FLARTEC fitting integrated type			
	Ø6 X Ø4 tube connection	Ø6 X Ø4 tube connection	1/4" X 5/32" tube connection	Ø6 X Ø4 tube connection	1/4" X 5/32" tube connection	Ø6 X Ø4 tube connection	1/4" X 5/32" tube connection	Ø6 X Ø4 tube connection	Ø6.35 X Ø4.3 tube connection	Ø6 X Ø4 tube connection	1/4" X 5/32" tube connection	Ø6 X Ø4 tube connection	1/4" X 5/32" tube connection	1/4" X 5/32" tube connection	
Symbol	Description														
A Actuation															
1	NC (normally closed)	●	●	●	●	●	●	●	●	●	●	●	●	●	
2	NO (normally open)	●	●	●	●	●	●	●	●	●	●	●	●	●	
3	Double acting	●	●	●	●	●	●	●	●	●	●	●	●	●	
C Orifice															
4	Refer to the right	Ø4	Ø4	Ø4	Ø4	Ø4	Ø4	Ø4	Ø4	Ø4	Ø3.5	Ø3.5	Ø4	Ø4	Ø3
D Option															
Blank	ON/OFF only	●	●	●	●	●	●	●	●	●	●	●	●	●	
1	With flow adjustment	●	●	●	●	●	●	●	●	●	●	●	●	●	
E Body material															
Blank	PFA molded body or PTFE machined body	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PFA	PTFE	
D	Stainless steel body	●													

⚠ Note on model No. selection

Note 1: See page 6 when selecting an all-resin actuator used with acidic fluids.

Note 2: The actuator soft-shut (diaphragm) model also available reduces foaming and improves drip prevention. Contact CKD for details.