



Air-operated valve for chemical liquids

AMD4¹/₂² Series

● Orifice: Ø14.7 to Ø16



Subject to Export Trade Control Ordinances

Specifications

Descriptions	AMD4 ¹ / ₂ ² -* -16	
Working fluid	Chemical liquids, pure water (Note 1)	
Fluid temperature °C	5 to 90 (5 to 160) (Note 5)	
Withstanding pressure MPa	0.9	
Working pressure range (A → B) MPa	0 to 0.3 (Note 3)	
Working pressure range (B → A) MPa	0 to 0.1 (Note 3)	
Valve seat leakage cm ³ /min	0 (at, water pressure)	
Back pressure MPa	0 to 0.1 (Note 3)	
Ambient temperature °C	0 to 60	
Frequency	20 times/min or less	
Installation attitude	Free	
Connection	OD3/4" tube connection (fitting integrated type)	
Orifice	Ø16	
Cv value	5	
Bypass orifice (when bypass is installed)	Ø6	
Operation section	Operation pressure range MPa	NC 0.3 to 0.5, NO 0.3 to 0.5 (0.3 to 0.35 for high temperature use), double acting 0.3 to 0.4 (0.2 to 0.25 for high temperature use)
	Operation pressure connection port	Rc1/8 (Note 2)

Note 1: Check the compatibility of the product's configuration materials, working fluid, and ambient atmosphere before use.

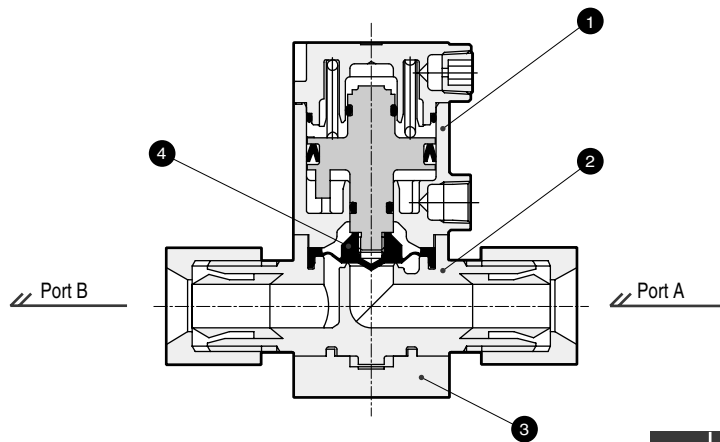
Note 2: Connect a resin fitting when connecting to the operation port.
(When using a metal fitting, select one with a reinforcement ring.)

Note 3: See page 56 for high-pressure specifications.

Note 4: See pages 70 and 71 for flow characteristics.

Note 5: 5 to 40 °C for hydrofluoric acids.

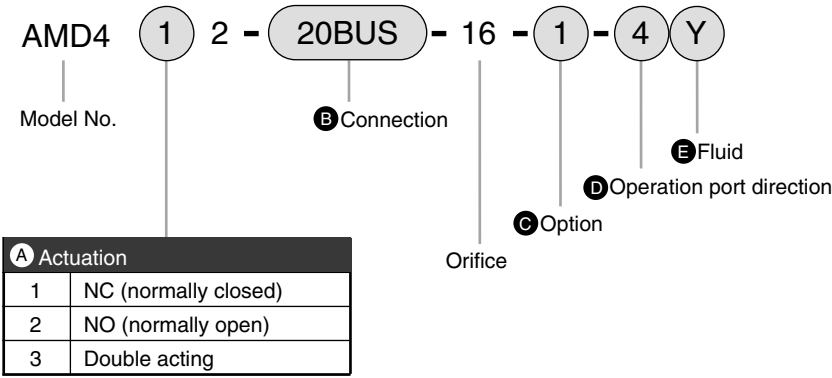
Internal structure and parts list



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

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

How to order



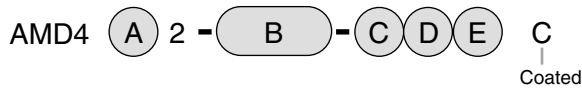
B Connection						
20BUS	20BUJ	20BUP	20BUA	20BUR	20BUK	20BUW
Super type Pillar fitting integrated type	Super 300 type Pillar fitting L series integrated type	Super 300 type Pillar fitting P series integrated type	F-LOCK 20A series fitting integrated type	F-LOCK 60 series fitting integrated type	Final lock fitting integrated type	FLARTEC fitting integrated type
3/4" X 5/8" tube connection						

Symbol	Descriptions	Orifice						
		Ø16	Ø16	Ø16	Ø16	Ø15.9	Ø16	Ø14.7
C Option								
		PFA: PFA molded body, PTFE: PTFE machined body						
0	ON/OFF only	PFA	PFA	PFA	PFA	PFA	PFA	PFA
1	With flow adjustment	PFA	PFA	PFA	PFA	PTFE	PFA	PTFE
2	With bypass							
3	With flow adjustment and bypass							
6	ON/OFF, with indicator	PFA	PFA	PFA	PFA	PFA	PFA	PFA
7	With bypass/with indicator	PFA	PFA	PFA	PFA	PTFE	PFA	PTFE

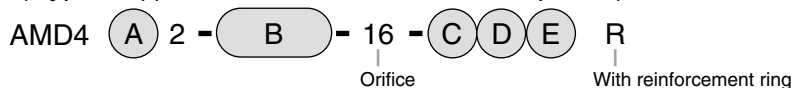
D Operation port direction								
4	<p>Indicates that fluid flows in direction of the black arrow when looking at valve from above. The white arrow indicates operation port direction.</p>	●	●	●	●	●	●	●
1		●	●	●	●	●	●	●
2		●	●	●	●	●	●	●
3		●	●	●	●	●	●	●

E Fluid								
Blank	Standard	●	●	●	●	●	●	●
M	For ammonia	●	●	●	●	●	●	●
P	For nitric acid, for hydrofluoric acid (Note 2)	●	●	●	●	●	●	●
Y	For high temperature (5 to 160°C) (Note 1)	●	●	●	●	●	●	●
E	For high temperature (5 to 160°C), PTFE machined body (Note 1)	●	●	●	●	●	●	●

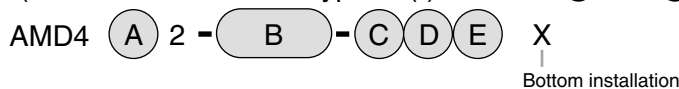
- Model No. for type with coated metal section (Orifice indication and hyphen (-) between C and D are not required.)



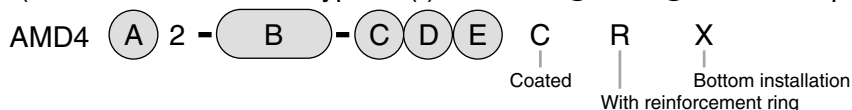
- Model No. for type with operation port reinforcement ring (Hyphen (-) between C and D is not required.)



- Bottom installation type No. (Orifice indication and hyphen (-) between C and D are not required.)



- Model No. for type with coated metal section + operation port reinforcement ring + bottom installation (Orifice indication and hyphen (-) between C and D are not required.)



Note on model No. selection

Note 1: The following C options are not available: 2 (with bypass), 3 (with flow adjustment, bypass), 7 (with bypass/with indicator).

This valve is not compatible with nitric acid, hydrofluoric acid, or chlorine.

Note 2: C (with coated metal section) is included in the E Fluid P item.