



Chemical liquid manual valve

MMD20·MMD30·MMD40 Series

Metal free design with flow rate adjustment and closing functions

● Orifice: Ø8/Ø10/Ø12/Ø16/Ø20



Subject to Export Trade Control Ordinances

*Target: Valves with Ø12 or larger orifice

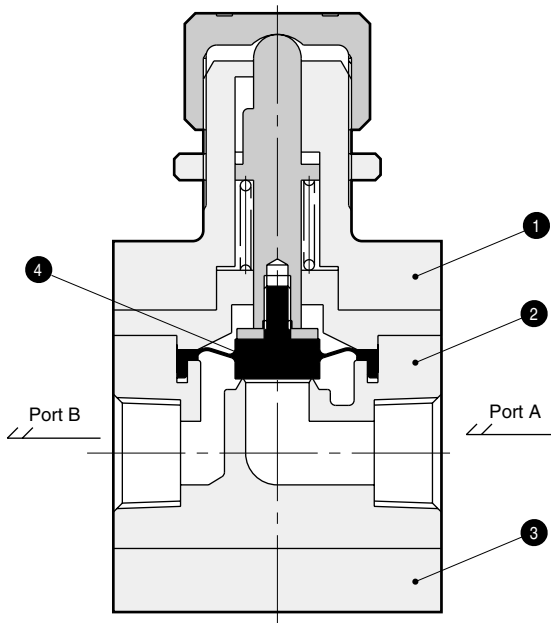
Specifications

Descriptions	MMD20	MMD30		MMD40	
Working fluid	Chemical liquids, pure water, N ₂ gas, air				
Fluid temperature °C	5 to 60 (5 to 90) (Note 2)				
Withstanding pressure MPa	1.4				
Working pressure range MPa	0 to 0.5		0 to 0.4		
Valve seat leakage cm ³ /min	0 (at, water pressure)				
Ambient temperature °C	0 to 40				
Installation attitude	Free				
Connection (Note 1)	Rc3/8	Rc1/2		Rc3/4	
Orifice	Ø8	Ø10	Ø12	Ø16	Ø20
Cv value	1.25	1.8	2.5	5.2	8

Note 1: The fitting integrated type is also available.

Note 2: 5 to 40 °C for hydrofluoric acids.

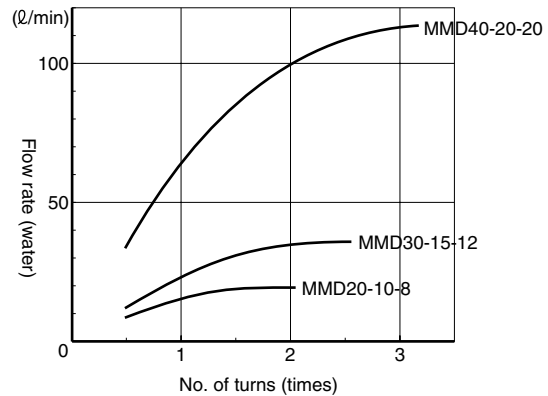
Internal structure and parts list



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

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

Flow rate - No. of knob turns (at differential pressure 0.1MPa)



No. of knob turns - flow rate at differential pressure 0.1MPa

● Set the adjustment knob so that it opens at least 3/8 turn from fully closed. If closed further, vibration or flow fluctuation, etc., may occur, depending on working conditions.

● Tighten the knob with the following torque.

MMD20	0.4 to 0.6
MMD30	0.8 to 1.6
MMD40	2.0 to 2.8

(N·m)

How to order

● MMD2 Series

MMD20 - 10 - 8 - F

Model No.

A Connection

B Fluid

A Connection								
10	10US	10BUS	10UF	10BUF	10UA	10BUA		
Rc 3/8	Super type Pillar fitting		F-LOCK 20 series fitting integrated type		F-LOCK 20A series fitting integrated type			
	Ø10 X Ø8 tube connection	3/8" X 1/4" tube connection	Ø10 X Ø8 tube connection	3/8" X 1/4" tube connection	Ø10 X Ø8 tube connection	3/8" X 1/4" tube connection		
Symbol	Descriptions							
B Fluid								
Blank	Standard							●
F	For medium temperature (5 to 90 °C)							●

● MMD3 Series

MMD30 - 12US - 10 - F

Model No.

A Connection

B Orifice

C Fluid

A Connection								
15	12US	15BUS	12UF	15BUF	12UA	15BUA		
Rc 1/2	Super type Pillar fitting integrated type		F-LOCK 20 series fitting integrated type		F-LOCK 20A series fitting integrated type			
	Ø12 X Ø10 tube connection	1/2" X 3/8" tube connection	Ø12 X Ø10 tube connection	1/2" X 3/8" tube connection	Ø12 X Ø10 tube connection	1/2" X 3/8" tube connection		
Symbol	Descriptions							
B Orifice								
10	Ø10							●
12	Ø12							●
C Fluid								
Blank	Standard							●
F	For medium temperature (5 to 90 °C)							●

AM/DZ
AM/D0
AM/D0*2
AM/D3*2
AM/D4*2
AM/D5*2
AM/GZ0
AM/G00
AM/G*02
GAM/D**2
High pressure specifications
AM/D
AM/B
Flow characteristics
MMD*02
GMMD*02
MMD*0
TMD*02
AMS
AMDS
TOAS
Fine regulator
KML
Others
Solenoid valve

MMD40Series

How to order

● MMD4 Series

MMD40 - (20) - (20) - (F)

Model No.

A Connection

B Orifice

C Fluid

A Connection				
20	20BUS	20BUF	20BUA	
Rc 3/4	Super type fitting integrated type	Super type fitting integrated type	F-LOCK 20 series fitting integrated type	F-LOCK 20A series fitting integrated type
3/4" X 5/8" tube connection				

Symbol	Descriptions				
B Fluid					
16	Ø16		●	●	●
20	Ø20	●			
C Fluid					
Blank	Standard	●	●	●	●
F	For medium temperature (5 to 90 °C)	●	●	●	●