

Manual valve for chemical liquids (manifold/branch valve)



GMMD³₄⁵02 Series

Manifold that uses a stable seal structure Ideal for saving space in the branch part of chemical liquids

RoHS

Export controlled items

*Eligibility: GMMD402, 502 (*5)

● Orifice size: $\phi 6$ to $\phi 20$

● Station No.: 1 to 5 stations

● Connection tube size: $\phi 10$, $\phi 12$, $\phi 25$, 3/8", 1/2", 1"

Specifications

Item	GMMD302	GMMD402	GMMD502
Working fluid	Chemical liquids, pure water, air, N ₂ gas (*1)		
Fluid temperature °C	5 to 90 (*3)		
Proof pressure MPa	1.2		
Working pressure MPa	0 to 0.4		
Valve seat leakage cm ³ /min	0 (water pressure)		
Back pressure MPa	0 to 0.4		
Ambient temperature °C	0 to 60		
Mounting orientation	Unrestricted		
Connection	O.D. $\phi 10$ tube connection (integrated fitting) O.D. $\phi 12$ tube connection (integrated fitting) O.D. 3/8" tube connection (integrated fitting) O.D. 1/2" tube connection (integrated fitting)	O.D. 3/4" tube connection (Integrated fitting)	O.D. $\phi 25$ tube connection (integrated fitting) O.D. 1" tube connection (integrated fitting)
Orifice size	$\phi 6$ to $\phi 10$ (*2)	$\phi 14.7$ to $\phi 16$ (*2)	$\phi 20$
Weight kg	1 station	0.25	1.1
	2 stations	0.51	2.2
	3 stations	0.76	3.3
	4 stations	1.0	4.4
	5 stations	1.3	—

*1: Check the compatibility of product structural materials, working fluids and atmosphere.

*2: Check the orifice size of each connection in How to order.

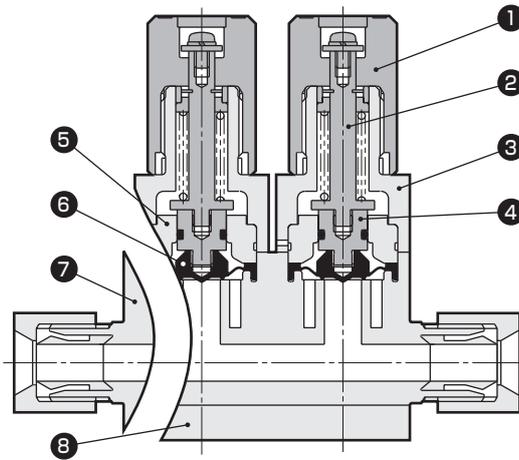
*3: For use with hydrofluoric acid, or when the fluid temperature exceeds 40°C, consult with CKD.

*4: MMD*02 Series cannot be used for flow rate adjustment. Use it either fully closed or fully opened.

*5: GMMD302 is not applicable. (when piping individual secondary side ports)

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

Internal structure and parts list



Part No.	Part name	Material (by fluid code)
		U
1	Knob	PE
2	Shaft	SUS304 (with fluoro resin coating)
3	Cover	PP
4	Rod	PP
5	Diaphragm holder	PP
6	Diaphragm	PTFE
7	Body	PTFE
8	Mounting plate	PP

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

GMMD302 Series

How to order

● GMMD3 Series (connection: $\varnothing 10$, 3/8" tube connection)

GMMD302 - 10UK - 4 U L

Model No. ① Connection ② Station No. ③ Fluid ④ Port A position

Part 3R	High pressure	Air operated valve
Part 2	Metal-free	
Part 1	Large bore size	
	PVC	
	Drainage	
Part 3RN	High pressure	Manual valve
Part 2	Metal-free	
	Large bore size	
	Single unit	Drip prevention valve
	Air operated Integrated	
	Pilot	Regulator
	Manual	
	Electric	Flow rate adjusting valve
	Manual	
	Manual Fine flow rate	
	Fine level Switch	
Related products		

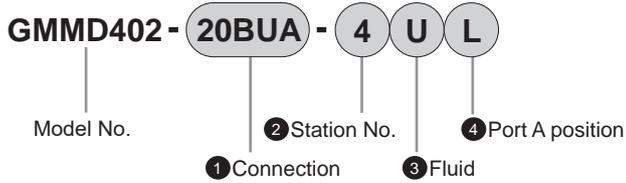
		① Connection										
		10US	10BUS	10UP	10BUP	10UA	10BUA	10UR	10BUR	10UK	10BUK	10BUW
		Super Type Pillar fitting Integrated		Super 300 Pillar fitting P series integrated		F-LOCK 20A Series Integrated fitting		F-LOCK 60 Series Integrated fitting		Final Lock Fitting Integrated		Flaretek Fitting Integrated
		$\varnothing 10 \times \varnothing 8$ tube connection 3/8" x 1/4" tube connection		$\varnothing 10 \times \varnothing 8$ tube connection 3/8" x 1/4" tube connection		$\varnothing 10 \times \varnothing 8$ tube connection 3/8" x 1/4" tube connection		$\varnothing 10 \times \varnothing 8$ tube connection 3/8" x 1/4" tube connection		$\varnothing 10 \times \varnothing 8$ tube connection 3/8" x 1/4" tube connection		3/8" x 1/4" tube connection
Code	Description	Orifice size $\varnothing 8$						$\varnothing 7$	$\varnothing 6$	$\varnothing 8$		$\varnothing 6.3$
Body material		PTFE machined body										
② Station No.												
1 to 5	1 station to 5 stations	●	●	●	●	●	●	●	●	●	●	●
③ Fluid												
U	Standard	●	●	●	●	●	●	●	●	●	●	●
④ Port A position												
Blank	Right	●	●	●	●	●	●	●	●	●	●	●
L	Left	●	●	●	●	●	●	●	●	●	●	●
W	Both sides	●	●	●	●	●	●	●	●	●	●	●

* Machined PTFE products will be manufactured on a per-order basis.

GMMD402 Series

How to order

● GMMD4 Series



① Connection

20BUS	20BUP	20BUA	20BUR	20BUK	20BUW
Super-type pillar integrated fitting	Super 300 type Pillar fitting P Series integrated	F-LOCK20 A Series Integrated fitting	F-LOCK60 Series Integrated fitting	Final Lock Integrated fitting	Flaretek Integrated fitting

3/4" x 5/8" tube connection

Code	Description	Orifice size				
			ø16	ø15.9	ø16	ø14.7
Body material		PTFE machined body				

② Station No.

1 to 5	1 station to 5 stations	20BUS	20BUP	20BUA	20BUR	20BUK	20BUW
		●	●	●	●	●	●

③ Fluid

U	Standard	20BUS	20BUP	20BUA	20BUR	20BUK	20BUW
		●	●	●	●	●	●

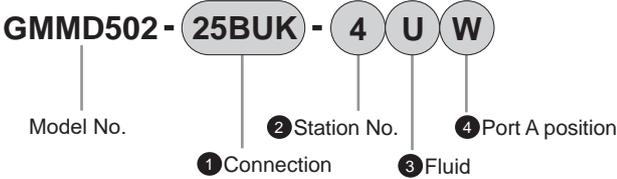
④ Port A position

Blank	Right	20BUS	20BUP	20BUA	20BUR	20BUK	20BUW
		●	●	●	●	●	●
L	Left	●	●	●	●	●	●
W	Both sides	●	●	●	●	●	●

* Machined PTFE products will be manufactured on a per-order basis.

How to order

● GMMD5 Series



		① Connection									
		25US	25BUS	25UP	25BUP	25BUA	25UR	25BUR	25UK	25BUK	25BUW
		Super Type Pillar fitting Integrated		Super 300 Pillar fitting P series integrated		F-LOCK 20A Series Fitting Integrated	F-LOCK 60 Series Integrated fitting		Final Lock Fitting Integrated		Flaretek Fitting Integrated
		ø25 x ø22 tube connection	1" x 7/8" tube connection	ø25 x ø22 tube connection	1" x 7/8" tube connection	1" x 7/8" tube connection (*1)	ø25 x ø22 tube connection	1" x 7/8" tube connection	ø25 x ø22 tube connection	1" x 7/8" tube connection	1" x 7/8" tube connection
Code	Description	ø20									
	Orifice size										
	Body material	PTFE machined body									
② Station No.											
1 to 4	1 station to 4 stations	●	●	●	●	●	●	●	●	●	●
③ Fluid											
U	Standard	●	●	●	●	●	●	●	●	●	●
④ Port A position											
Blank	Right	●	●	●	●	●	●	●	●	●	●
L	Left	●	●	●	●	●	●	●	●	●	●
W	Both sides	●	●	●	●	●	●	●	●	●	●

* Machined PTFE products will be manufactured on a per-order basis.

Precautions for model No. selection

*1: Can also be used for ø25 x ø22 tube connection.

Part3R	Part2	Part1	High pressure	Metal-free	Large bore size	Polyvinyl chloride	Drainage	Part3RN	Part2	High pressure	Metal-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

Station No.	Model No.	A	C	D	E	F	G	I	L	M	N
1	GMMD302	21	120	35	18	38	36	36	-	22±0.3	M6 depth 9
	GMMD402	27	153	46	23	48	46	46	-	28±0.3	M8 depth 10
	GMMD502	35	192	60	30	62	60	60	-	40±0.3	M8 depth 13
2	GMMD302	21	120	35	18	38	74	36	38±0.3	22±0.3	M6 depth 9
	GMMD402	27	153	46	23	48	94	46	48±0.4	28±0.3	M8 depth 10
	GMMD502	35	192	60	30	62	122	60	62±0.4	40±0.3	M8 depth 13
3	GMMD302	21	120	35	18	38	112	36	76±0.4	22±0.3	M6 depth 9
	GMMD402	27	153	46	23	48	142	46	96±0.5	28±0.3	M8 depth 10
	GMMD502	35	192	60	30	62	184	60	124±0.5	40±0.3	M8 depth 13
4	GMMD302	21	120	35	18	38	150	36	114±0.5	22±0.3	M6 depth 9
	GMMD402	27	153	46	23	48	190	46	144±0.5	28±0.3	M8 depth 10
	GMMD502	35	192	60	30	62	246	60	186±0.7	40±0.3	M8 depth 13
5	GMMD302	21	120	35	18	38	188	36	152±0.7	22±0.3	M6 depth 9
	GMMD402	27	153	46	23	48	238	46	192±0.7	28±0.3	M8 depth 10

GMMD302 (10mm)

*1 (Connector No.)	H	O
10US	25	8
10BUS	25	8
10UP	25	8
10BUP	25	8
10UA	21	8
10BUA	21	8
10UR	37	7
10BUR	39	6
10UK	30	8
10BUK	30	8
10BUW	31	6.3

GMMD302 (12mm)

*1 (Connector No.)	H	O
12US	29.5	10
15BUS	29.5	10
12UP	29	10
15BUP	29	10
12UA	25	10
15BUA	25	10
12UR	37	9.5
15BUR	39	9.5
12UK	33	10
15BUK	33	10
15BUW	33.5	9.4

GMMD402

*1 (Connector No.)	H	O
20BUS	39	16
20BUP	36	16
20BUA	31	16
20BUR	44	15.9
20BUK	36.5	16
20BUW	38	14.7

GMMD502

*1 (Connector No.)	H	O
25US	43.5	20
25BUS	43.5	20
25UP	43	20
25BUP	43	20
25BUA	40	20
25UR	49.5	20
25BUR	51	20
25UK	40.5	20
25BUK	40.5	20
25BUW	48	20

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