

Air-operated valve for chemical liquids (manifold/branch valve)

D₅³*2 Series

Orifice: GAMD3*2 Ø6 to Ø10 GAMD4*2 Ø14.7 to Ø16 GAMD5*2 Ø20

No. of stations: 1 to 5 stations

Subject to Export Trade Control Ordinances

*Target: GAMD4*2 and 5*2 only

Specifications

Descriptions		GAMD3*2	GAMD4*2	GAMD5*2								
Working fluid		Chemical liquids, pure water (Note 1)										
Fluid temperatu	e °C	5 to 90 (5 to	160) (Note 5)	5 to 90 (Note 5)								
Withstanding pressure MPa 0.9												
Working pressure range (A → B) MPa 0 to 0.3 (Note 4)												
Working pressure range (B→A) MPa 0 to 0.1 (Note 4)												
Valve seat leakag	e cm³/min		0 (at, water pressure)									
Back pressure	MPa		0 to 0.1 (Note 4)									
Ambient temper	ature °C		0 to 60									
Frequency		30 times/min or less 20 times/min or less										
Installation attitu	de	Free										
Connection		ODØ10, Ø12 tube connection (fitting integrated type) OD3/8", 1/2 tube connection (fitting integrated type)	OD3/4" tube connection (fitting integrated type)	ODØ25 tube connection (fitting integrated type) OD1" tube connection (fitting integrated type)								
Orifice		Ø6 to Ø10 (Note 3)	Ø14.7 to Ø16 (Note 3)	Ø20								
Operation Operation pressi	e range MPa	N	NC/NO 0.3 to 0.5, double acting 0.3 to 0.4									
section Operation pressur	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: Confirm the orifice for each connection in the Model indication section.

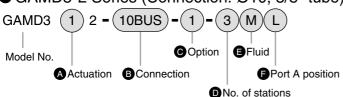
Note 4: See page 56 for high-pressure specifications.

Note 5: 5 to 40 $^{\circ}\text{C}$ for hydrofluoric acids.

GAMD3*2Series

How to order

● GAMD3*2 Series (Connection: Ø10, 3/8" tube)



		B Connection												
		10US	10BUS	10UJ	10BUJ	10UP	10BUP	10UA	10BUA	10UR	10BUR	10UK	10BUK	10BUW
		Super type Pillar fitting		Super 300 type		Super 300 type		F-LOCK 20A series		F-LOCK 60 series		Final lock fitting		FLARTEC
		integrated type		Pillar fitting J series		Pillar fitting P series		fitting integrated type		fitting integrated type		integrated type		fitting integrated type
					integrated type		integrated type							
		Ø10	3/8	Ø10	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% 8ª	Ø10 X Ø8 tube connection	3/8"	Ø10 X Ø8 tube connection	3/8" X 1/4" tube connection	3/8" X 1/4" tube connection
		×	X 1/2	×	X 1/2	×	X 1/2	×	X 1/2	×	X 1/2	×	X 1/2	X 1/2
		Ø10 X Ø8 tube connection	3/8" X 1/4" tube connection	Ø10 X Ø8 tube connection	r"tub	8 6	T,	8 tb	3/8" X 1/4" tube connection	at b	3/8" X 1/4" tube connection	8 tub	T.	r" tub
		e 8	ie 00	e 00	e 8	e 00	e 8	e 8	e 8	e 00	le 00	e 00	e co	8
		nec	nec	nnec	nec	nec	nec	nec	l nec	nnec	nec	nnec	nec	nec
		tion	fion	tion	fion	tion	fion	tion	tion	tion	tion	tion	lion	tion
Symbol	Descriptions Orifice	Ø8		Ø8		Ø8		Ø8		Ø7 Ø6		Ø8		Ø6.3
A Act	uation													
1	NC (normally closed)	•	•	•	•	•	•	•	•	•	•	•	•	•
2	NO (normally open)	•	•	•	•	•	•	•	•	•	•	•	•	•
3	Double acting	•	•	•	•	•	•	•	•	•	•	•	•	
Opt							_							
0	ON/OFF only	•	•	•	•	•	•	•	•	•	•	•	•	
6	With flow adjustment With indicator	•	•	•	•	•	•	•	•					
	of stations													
to	1 station to	_				۱ 🕳		۱ 🕳						
5	5 stations	•			•	•		•						•
⑤ Flu														
Blank	Standard				•							● (Note 1)	● (Note 1)	
M	For ammonia	ě	•	•		•	•	•	•	•	•	(Note 1)	- ()	
Р	For nitric acid, for hydrofluoric acid (Note 3)	•	•	•	•	•	•	•	•	•	•	● (Note 1)	● (Note 1)	
Υ	For high temperature (5 to 160°C) (Note 2)	•	•	•	•	•	•	•	•			● (Note 1)	● (Note 1)	
● Por	t A position													
Blank	Right		•	•	•		•	•	•	•		•	•	
L	Left	•	•	•	•	•	•	•	•	•	•	•	•	•
W	Both sides	•	•	•	•		•	•	•	•		•	•	
Availab	le with PTFF machined body.													

Model No. for type with coated metal section

Model No. with operation port reinforcement ring (Designate R at end of Model No.)

Model No. for type with coated metal section + operation port reinforcement ring

Note on model No. selection

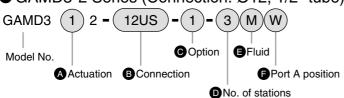
Note 1: The final lock fitting nut and operation air piping could interfere, so check dimensions before selecting.

Note 2: This valve is not compatible with nitric acid, hydrofluoric acid, or chlorine.

Note 3: C (with coated metal section) is included in the Fluid P item.

How to order

● GAMD3*2 Series (Connection: Ø12, 1/2" tube)



		B Connection												
		12US	15BUS	12UJ	15BUJ	12UP	15BUP	12UA	15BUA	12UR	15BUR	12UK	15BUK	15BUW
			Super type Pillar fitting		Super 300 type		Super 300 type		F-LOCK 20A series		F-LOCK 60 series		Final lock fitting	
		integrated type		Pillar fitting J series		Pillar fitting P series		fitting integrated type		fitting integrated type		integrated type		fitting
					integrated type		integrated type							
		Ø12	1/2"	Ø12	1/2"	Ø12	1/2"	012	1/2"	012	1/2"	012	1/2	1/2"
		×	X 3/	×ø	× 3/	×	× ₃	×	× 3/	×	× 3/	XØ	×s	×s
		10 tu	8" tu	10 tu	8" EL	10 tr	8 ₁	10 ±	8" tu	10 tř	8" tu	10 tu	8 ₁	8" tu
		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	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	1/2" X 3/8" tube connection
		nne	nne	nne										
		tion	tion	tion	l tion	ion i	i ii	ion i	tion	ăi.	tion	tion	tion	tion I
Symbol	Descriptions Orifice			Ø10		Ø10		Ø10		Ø9		Ø10		Ø9.4
A Act														
1	NC (normally closed)	•	•	•	•	•	•	•	•	•	•	•	•	
2	NO (normally open)	•	•	•	•	•	•	•	•	•	•	•	•	•
3	Double acting	•	•	•	•	•	•	•	•	•	•	•	•	
Opt	ion													
0	ON/OFF only	•	•	•	•	•	•	•	•	•	•	•	•	•
1	With flow adjustment	•	•	•	•	•	•	•	•	•	•	•	•	•
6	With indicator		•	•	•	•	<u> </u>	<u> </u>	•			•		
D No.	of stations													
1	1 station													
to	to	•	•	•	•	•	•	•	•	•	•	•	•	•
5	5 stations													
Flui														
Blank	Standard	•	•	•	•	•	•	•	•	•	•	● (Note 1)	- (/	•
M	For ammonia	•	•	•	•	•	•	•	•	•	•	(Note 1)	- (/	•
Р	For nitric acid, for hydrofluoric acid (Note 3)	•	•	•	•	•	•	•	•	•	•	(Note 1)	- (/	•
Y	For high temperature (5 to 160°C) (Note 2)	•	•	•	•	•	•	•	•			● (Note 1)	● (Note 1)	
	t A position													
Blank	Right	•	•	•	•	•	•	•	•	•		•		
L	Left	•	•	•	•	•	-		•	-		•		
W	Both sides													

Available with PTFE machined body.

Model No. for type with coated metal section

Coated

Model No. with operation port reinforcement ring (Designate R at end of Model No.)

GAMD3 (A) 2 -В With reinforcement ring

Model No. for type with coated metal section + operation port reinforcement ring

GAMD3 (A) 2 --(D)(E) С R Coated With reinforcement ring



A Note on model No. selection

Note 1: The final lock fitting nut and operation air piping could interfere, so check dimensions before selecting.

Note 2: This valve is not compatible with nitric acid, hydrofluoric acid, or chlorine.

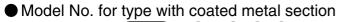
Note 3: C (with coated metal section) is included in the Fluid P item.

GAMD4*2Series

How to order ● GAMD4*2 Series GAMD4 (1) 2 - (20BUS) **-**(6 **O**ption Fluid Model No. A Actuation B Connection Port A position **D**No. of stations

	B Connection											
		20BUS	20BUJ	20BUP	20BUA	20BUR	20BUK	20BUW				
		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 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 c	onnectio	n					
Symbol	Descriptions Orifice	Ø16	Ø16	Ø16	Ø16	Ø15	Ø16	Ø14.7				
A Act	uation											
1	NC (normally closed)	•	•	•	•	•	•					
2	NO (normally open)	•	•	•	•	•	•					
3	Double acting	•	•	•	•	•	•					
Opt	ion											
0	ON/OFF only	•	•	•	•	•	•	•				
1	With flow adjustment	•	•	•	•	•	•	•				
6	With indicator	•	•	•	•	•	•					
D No.	of stations											
1	1 station											
to	to	•	•	•	•	•	•	●				
5	5 stations											
🖪 Flui	id											
Blank	Standard	•	•	•	•	•	•					
М	For ammonia	•	•	•	•	•	•	•				
Р	For nitric acid, for hydrofluoric acid (Note 2)	•	•	•	•	•	•	•				
Υ	For high temperature (5 to 160°C) (Note 1)	•	•	•	•		•					
	t A position											
Blank	Right	•	•	•	•	•	•	•				
L	Left	•	•	•	•	•	•	•				
W	Both sides	•	•		•							
Availah	le with PTFF machined hody											

Available with PTFE machined body.



Coated

• Model No. with operation port reinforcement ring (Designate R at end of Model No.)

GAMD4 (A) 2 **-**В

With reinforcement ring

Model No. for type with coated metal section + operation port reinforcement ring

GAMD4 (A) 2 -C -(D)(E)(F) C R

Coated With reinforcement ring

A Note on model No. selection

Note 1: This valve is not compatible with nitric acid, hydrofluoric acid, or chlorine.

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

How to order GAMD5*2 Series GAMD5 (1) 2 - (25US -(1)Option Fluid Model No. A Actuation B Connection Port A position **D**No. of stations

		B Connection												
		25US	25BUS	25UJ	25BUJ	25UP	25BUP	25BUA F-LOCK	25UR	25BUR	25UK	25BUK	25BUW	
			Super type Pillar fitting integrated type		Pillar fitting J series		Super 300 type Pillar fitting P series		F-LOCK 60 series fitting integrated type		Final lock fitting integrated type		FLARTEC	
													fitting	
	ļ				integrated type		integrated type						integrated type	
		025	1" X	025	_ <u>+</u> ×	Ø25	1" X 7/8" tube connection	1" X 7/8" tube connection (Note 2)	Ø25 X Ø22 tube connection	1" X 7/8" tube connection	Ø25	1" X 7/8" tube connection	1" X 7/8" tube connection	
			. 7/8'	×	7/8	×	7/8	7/8	×	7/8	Χø	7/8	7/8	
		Ø25 X Ø22 tube connection	1" X 7/8" tube connection	Ø25 X Ø22 tube connection	1" X 7/8" tube connection	Ø25 X Ø22 tube connection	tb	th.	22 til	tub	Ø25 X Ø22 tube connection	th	tub	
		De CC	9 cor	06 00	8) e 00	8	8) e cc	800	De 00	800	e cor	
		nnec	ınec	nnec	linec	nnec	inec)nec	nnec	inec	nnec	nec	inec:	
		tion	tion	tion	l g	för	fion	tion e 2)	fion	tion	tion	lön	fion	
Symbol	mbol Descriptions Orifice		20	Ø20		Ø20		Ø20	Ø	20	Ø20		Ø20	
A Act	uation													
1	NC (normally closed)	•	•	•	•	•	•	•	•	•	•	•	•	
2	NO (normally open)	•	•	•	•	•	•	•	•	•	•	•	•	
3	Double acting	•	•	•	•	•	•	•	•	•	•	•		
Opt	tion													
0	ON/OFF only	•	•	•	•	•	•	•	•	•	•	•		
1	With flow adjustment	•	•	•	•	•	•	•	•	•	•	•	•	
6	With indicator	•	•	•	•	•	•	•	•	•	•	•		
● No.	of stations													
1	1 station	_	_	_	_	_	_	_	_	_	_	_		
to	to	•	•	•	•	•	•	•	•	•	•	•	•	
4	4 stations												<u></u>	
∃ Flui														
Blank	Standard	•	•	•	•	•	•	•	•	•	•	•		
M	For ammonia	•	•	•	•	•	•	•	•		•			
Р	For nitric acid, for hydrofluoric acid (Note 1)	•		•	•	•	•	_	•	•	•			
	t A position													
Blank	Right	•	•	•	•	•	•	•	•	•	•	•		
L	Left	-		•	•	•	•	-	-		•	•		
_ W	Both sides				•									

Available with PTFE machined body.

Model No. for type with coated metal section

GAMD5 (A) 2 -Coated

• Model No. with operation port reinforcement ring (Designate R at end of Model No.)

GAMD5 (A) 2 -В

With reinforcement ring

• Model No. for type with coated metal section + operation port reinforcement ring

GAMD5 (A) 2 -(C)-(D)(E) С R

Coated With reinforcement ring



A Note on model No. selection

Note 1: C (with coated metal section) is included in the Fluid P item.

Note 2: Also usable for the Ø25 x Ø22 diameter tube connection.