

Discrete master valve, manifold (metal base) Body porting

3GA1/2/3, 4GA1/2/3 Series

● Applicable cylinder bore size: $\varnothing 20$ to $\varnothing 100$



Common specifications

Descriptions	
Type of valve and operation method	Pilot operated soft spool valve
Working fluid	Compressed air
Max. working pressure MPa	0.7
Min. working pressure Note 1 MPa	Refer to main pressure in the table below.
Withstanding pressure MPa	1.05
Ambient temperature °C	-5 to 55 (no freezing)
Fluid temperature °C	5 to 55
Manual override	Non-locking/locking common
Pilot exhaust method (Manual override)	Main valve/pilot operated valve common exhaust type
Lubrication Note 2	Not required
Protective structure Note 3	Dust proof
Vibration/impact m/s ²	50 or less / 300 or less
Working environment	Containing corrosive gas is impermissible.

Note 1: The pressure below must be supplied to the P port when using manual override.

2-position 0.1MPa and over
3-position 0.2MPa and over

Note 2: Use the turbine oil Class 1 ISO VG32 if lubricated.

Excessive or intermittent lubrication results in instable operation.

Note 3: Check that water drops or oil, etc., do not come into contact.

Each model's specifications

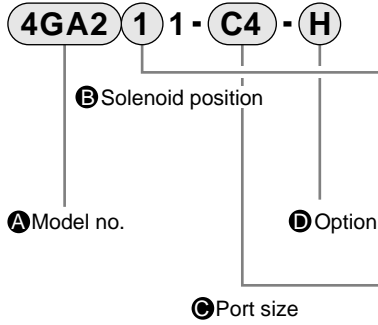
Body porting (discrete, manifold)

No. of port	Model no.		Solenoid position	Pilot port PA/PB	Main pressure	Pilot signal pressure MPa	Other specifications page Note
	Discrete	Manifold					
3 port	3GA1**1	M3GA1**1	2-position single N.C./N.O.	M5	0.2 to 0.7	(0.6 x main pressure + 0.06) to 0.7	Discrete: Page 90 Manifold: Page 156
	3GA2**1	M3GA2**1					
	3GA3**1	M3GA3**1					
5 port	4GA111	M4GA111	2-position single	M5	0.2 to 0.7	(0.6 x main pressure + 0.06) to 0.7	
	4GA121	M4GA121	2-position double		0 to 0.7	0.2 to 0.7	
	4GA131	M4GA131	3-position		0.2 to 0.7	(0.6 x main pressure + 0.06) to 0.7	
	4GA211	M4GA211	2-position single	M5	0 to 0.7	0.2 to 0.7	
	4GA221	M4GA221	2-position double		0.2 to 0.7	(0.6 x main pressure + 0.06) to 0.7	
	4GA231	M4GA231	3-position		0 to 0.7	0.2 to 0.7	
	4GA311	M4GA311	2-position single	M5	0.2 to 0.7	(0.6 x main pressure + 0.06) to 0.7	
	4GA321	M4GA321	2-position double		0 to 0.7	0.2 to 0.7	
	4GA331	M4GA331	3-position		0.2 to 0.7	(0.6 x main pressure + 0.06) to 0.7	

Note: Other specifications are common with 4G series. Refer to pages of each specifications.

How to order

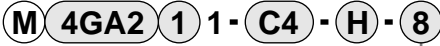
Discrete master valve



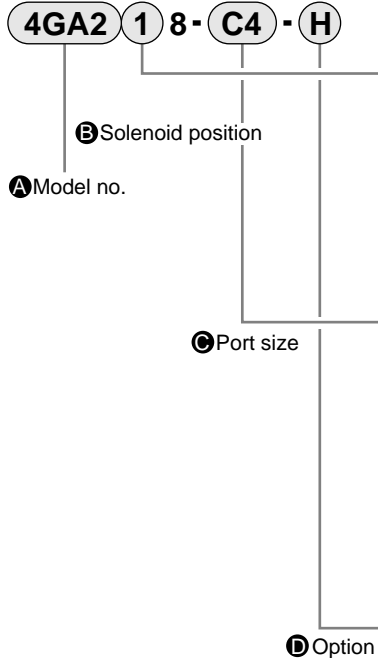
⚠ Note on model no. selection

- Note 1: For the 3GA*, the piping connection port is plugged.
- Note 2: The check valve specifications (H) are not available for the 3-position all ports closed or P/A/B connection. Refer to page 382 for details on the check valve.
- Note 3: For option symbol P, unless single is designated, normal mounting is not possible because of pilot port orientation.

Manifold



Discrete master valve for manifold (gasket, set screw attached)



⚠ Note on model no. selection

- Note 1: For the 3GA1, the piping connection port is plugged.
- Note 2: The check valve specifications (H) are not available for the 3-position all ports closed or P/A/B connection. Refer to page 382 for details on the check valve.
- Note 3: Specify the spacer mounting location and quantity in manifold specifications. Refer to pages 234 to 236 for details.
- Note 4: Cannot be selected for discrete master valves for manifolds.
- Note 5: The push-in joint cannot be mixed with the discrete valve's 4 (A) or 2 (B) port.

		A Model no.					
		3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
Symbol	Descriptions						
B Solenoid position							
1	2-position single				●	●	●
2	2-position double				●	●	●
3	3-position all ports closed				●	●	●
4	3-position A/B/R connection				●	●	●
5	3-position P/A/B connection				●	●	●
1	2-position single normally closed	●	●	●			
11	2-position single normally open	●	●	●			
C Port size							
Port	A/B port	P/R1/R2 port (1)=M5 (2)=Rc1/8 (3)=Rc1/4					
C4	ø4 push-in joint	(1)	(2)	(3)	(1)	(2)	(3)
C6	ø6 push-in joint	(1)	(2)	(3)	(1)	(2)	(3)
C8	ø8 push-in joint		(2)	(3)		(2)	(3)
C10	ø10 push-in joint			(3)			(3)
M5	M5	(1)			(1)		
06	Rc1/8		(2)			(2)	
08	Rc1/4			(3)			(3)
D Option							
Blank	None	●	●	●	●	●	●
H	Check valve	●	●	●	●	●	●
P	Mounting plate	●	●	●	●	●	●
A	Ozone and coolant proof	●	●	●	●	●	●
F	P/A/B port filter integrated	●	●	●	●	●	●

is not available.

		A Model no.					
		3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
Symbol	Descriptions						
B Solenoid position							
1	2-position single				●	●	●
2	2-position double				●	●	●
3	3-position all ports closed				●	●	●
4	3-position A/B/R connection				●	●	●
5	3-position P/A/B connection				●	●	●
1	2-position single normally closed (Note 1)	●	●	●			
11	2-position single normally open (Note 1)	●	●	●			
8	Mix manifold	●	●	●	●	●	●
C Port size							
Port	A/B port	P/R1/R2 port (2)=Rc1/8 (3)=Rc1/4 (4)=Rc3/8					
C4	ø4 push-in joint	(2)	(3)	(4)	(2)	(3)	(4)
C6	ø6 push-in joint	(2)	(3)	(4)	(2)	(3)	(4)
C8	ø8 push-in joint		(3)	(4)		(3)	(4)
C10	ø10 push-in joint			(4)			(4)
CX	Push-in joint mix	(2)	(3)	(4)	(2)	(3)	(4)
M5	M5	(2)			(2)		
06	Rc1/8		(3)			(3)	
08	Rc1/4			(4)			(4)
D Option							
Blank	None	●	●	●	●	●	●
H	Check valve	●	●	●	●	●	●
A	Ozone and coolant proof	●	●	●	●	●	●
F	A/B port filter integrated (P port: provided as standard)	●	●	●	●	●	●
Z1	Air supply spacer	●	●	●	●	●	●
Z2	In stop valve spacer	●	●	●	●	●	●
E Station number							
2	2 stations	●	●	●	●	●	●
to	to	●	●	●	●	●	●
20	Refer to page 156 for maximum station number.	●	●	●	●	●	●

is not available.

- MN3E0
- MN4E0
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (Master)
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4TB
- 4L2-4/LMF0
- 4SA/B0
- 4SA/B1
- 4KA/B
- 4F
- PV5G/CMF
- PV5/CMF
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP/NVP
- 4F*0E
- HMV
- HSV
- 2QV
- 3QV
- SKH
- PCD/FS/FD
- Ending
- Master valve
- 3, 5 port pilot operated valve