

Discrete valve ISO size 1
 DIN terminal box type
 5 port pilot operated valve ISO conformed valve

PV5G-6 Series

● Applicable cylinder bore size: Max. $\phi 100$



Refer to Intro 17 for details.



MN3E0
MN4E0

4GA/B

M4GA/B

MN4GA/B

4GA/B
(Master)

W4GA/B2

W4GB4

MN3S0
MN4S0

4TB

4L2-4/
LMFO

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

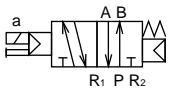
PCD/
FS/FD

Ending

JIS symbol

● 5 port valve

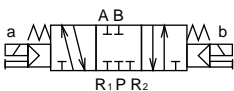
2-position single solenoid (FG-S)



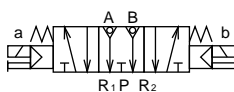
2-position double solenoid (FG-D)



3-position all ports closed (FHG)



3-position all ports closed
non-leak type (FPG)



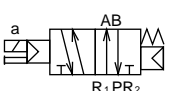
3-position A/B/R connection (FJG)



3-position P/A/B connection (FIG)



2-position single solenoid
exhaust pressurization type (YZ-S)



2-position double solenoid
exhaust pressurization type (YZ-D)



Common specifications

Descriptions	
Type of valve and operator	Pilot operated soft spool valve
Working fluid	Compressed air
Max. working pressure MPa	1.0
Min. working pressure MPa	0.15 0.20 (3-position) Note 1
Withstanding pressure MPa	1.50
Ambient temperature °C	-5 to 60 (no freezing)
Fluid temperature °C	5 to 60
Lubrication	Not required
Protective structure	Dust proof, jet-proof (IP65 or equivalent)
Leakage cm ³ /min. (A, B → R port)	10 (ANR) or less 3-position all ports closed non-leak type only 0.3 (ANR) or less Note 2
Vibration/impact m/s ²	50 or less / 300 or less
Working environment	Use in the environment containing corrosive gas is not permissible.

Note 1: Use the supply pressure at $R1 > R2 \geq 0.15$ MPa only for YZ-S.

Note 2: Indicates the default.

Electric specifications

Descriptions				
Rated voltage	AC	100 (50 / 60 Hz)		
		110 (50 / 60 Hz)		
	DC	12, 24		
Rated voltage fluctuation range	±10%			
Apparent power VA (Ampere A) Note 3	AC	100 V	Without light: 2.3 (0.023)	With light: 2.4 (0.024)
		110 V	2.5 (0.023)	2.6 (0.024)
	DC	12 V	1.0 (0.083)	1.2 (0.100)
		24 V	1.0 (0.042)	1.2 (0.050)
Heat proof class	B (molded coil)			
Wiring methods	Electric plug connector			

Note 3: The AC type current is the holding current.

Individual specifications

Descriptions		PV5G-6	
Port size	Note 1	Rc1/4	Rc3/8
Response time ms	2-position	Single solenoid	30 (when ON), 40 (when OFF)
		Double solenoid	30
Note 2	3-position	30 (when ON), 50 (when neutral)	
Weight kg	2-position	Single solenoid	0.40
		Double solenoid	0.44
Note 3	3-position	Other than non-leak type	0.48
		All ports closed non-leak type	1.14

Note 1: G threads and NPT threads are available for the piping port threads. Contact CKD for information.

Note 2: Response time is the value at an air supply of 0.5 MPa, and oil-free. The value will change based on quality of pressure and oil.

Note 3: Weight does not include the sub-plate.

Flow characteristics

Model no.	Port size	Solenoid position	P → A/B		A/B → R1/R2	
			C (dm ³ / (s·bar))	b	C (dm ³ / (s·bar))	b
PV5G-6	Rc1/4	2-position single solenoid	6.1	0.28	6.7	0.20
		2-position double solenoid	6.1	0.28	6.7	0.20
		3-position all ports closed	5.2	0.32	5.6	0.30
		3-position A/B/R connection	5.1	0.32	6.9	0.16
		3-position P/A/B connection	6.3	0.28	5.9	0.28
		3-position all ports closed non-leak	3.4	-	3.0	-

Note 1: Effective sectional area S and sonic conductance C are converted as $S \cong 5.0 \times C$.

Coolant proof specifications

Can be selected with "D" option "A" in How to Order on page 984.

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

Discrete 5 port pilot operated valve

PV5G-6 Series

Discrete valve: ISO size 1

How to order DIN terminal box type

● ISO size 1

PV5G - 6 - FG-S - 3 - N - A03

Model no.

ISO size 1

A Solenoid position

B Rated voltage

C Light and surge suppressor

D Option

E Sub-plate and port size

⚠ Note on model no. selection

Note 1: Refer to page 978 for the circuit diagram of the type with indicator light and surge suppressor.

<Example of model number>

PV5G-6-FG-S-3-N-A03

Model: PV5G/ISO size 1 (DIN terminal box type)

A Solenoid position : P pressurization type 2-position single solenoid

B Rated voltage : 24 VDC

C Power indicator light : With light and surge suppressor

D Option : None

E Sub-plate port size : Side porting Rc3/8

Symbol	Descriptions	Model no.
A Solenoid position		
FG-S	P pressurization type	2-position single solenoid ●
FG-D		2-position double solenoid ●
FHG-D		3-position all ports closed ●
FJG-D		3-position A/B/R connection ●
FIG-D		3-position P/A/B connection ●
FPG-D		3-position all ports closed non-leak ●
YZ-S	Exhaust	2-position single solenoid ●
YZ-D	pressurization type	2-position double solenoid ●
B Rated voltage		
1	100 VAC	●
3	24 VDC	●
4	12 VDC	●
5	110 VAC	●
C Light and surge suppressor		
Blank	None	●
N	With light / surge suppressor Note 1	●
D Option		
Blank	None	●
A	Coolant proof	●
E Sub-plate and port size		
Blank	Without sub-plate	●
A02	Side porting Rc1/4 (Rc3/8 for R port)	●
A03	Side porting Rc3/8	●
B02	Back porting Rc1/4 (Rc3/8 for R port)	●
B03	Back porting Rc3/8	●

ISO size 1 Sub-plate specifications and how to order

CB1 - A02

A Port connection

Symbol	Method	P/A/B port	R1/R2 port	Weight (kg)
A Port connection				
A02	Side porting	Rc1/4	Rc3/8	0.36
A03		Rc3/8		
B02	Back porting	Rc1/4	Rc3/8	
B03		Rc3/8		

PV5G-6 Series

Discrete valve: ISO size 1

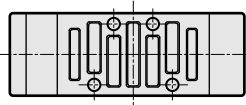
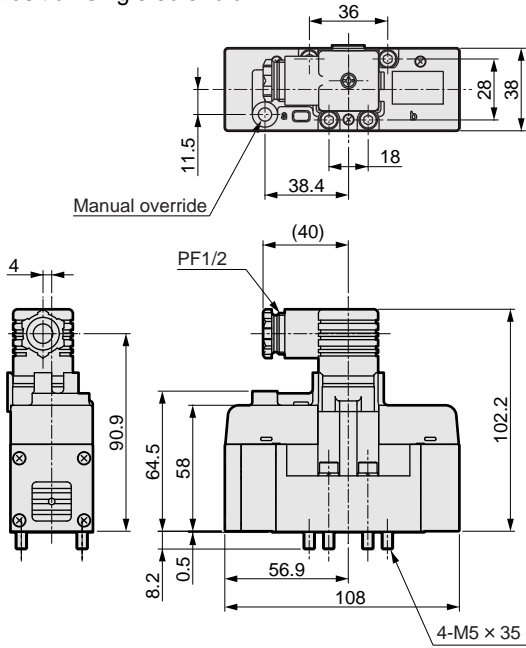
Dimensions: DIN terminal box type (without sub-plate)

MN3E0
MN4E0
4GA/B
M4GA/B
MN4GA/B
4GA/B (Master)
W4GA/B2
W4GB4
MN3S0
MN4S0
4TB
4L2-4/LMFO
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

PV5G-6-FG-S-*

PV5G-6-YZ-S-*

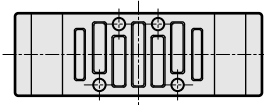
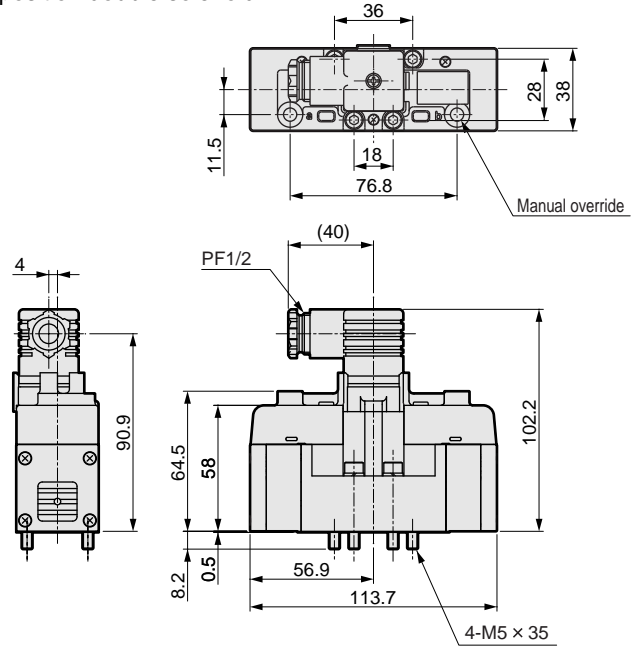
● 2-position single solenoid



PV5G-6-FG-D-*

PV5G-6-YZ-D-*

● 2-position double solenoid

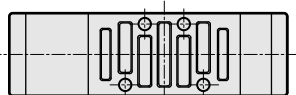
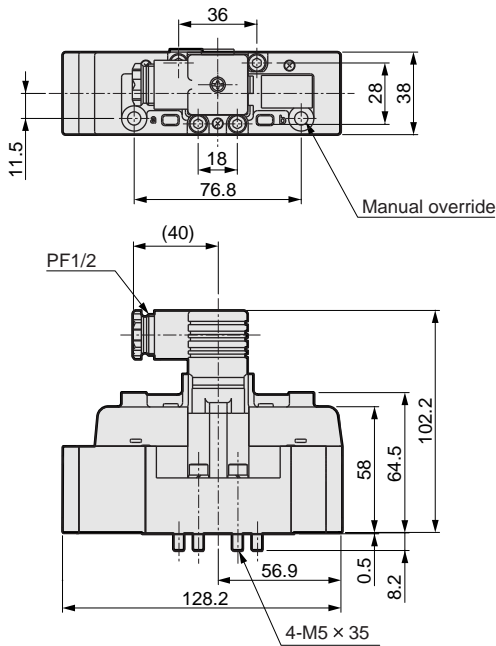


PV5G-6-FHG-D-*

PV5G-6-FJG-D-*

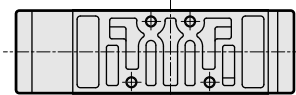
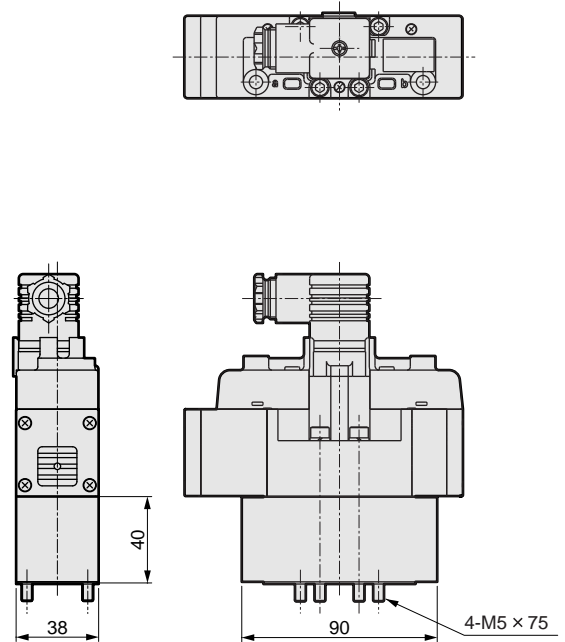
PV5G-6-FIG-D-*

● 3-position



PV5G-6-FPG-D-*

● 3-position, non-leak type

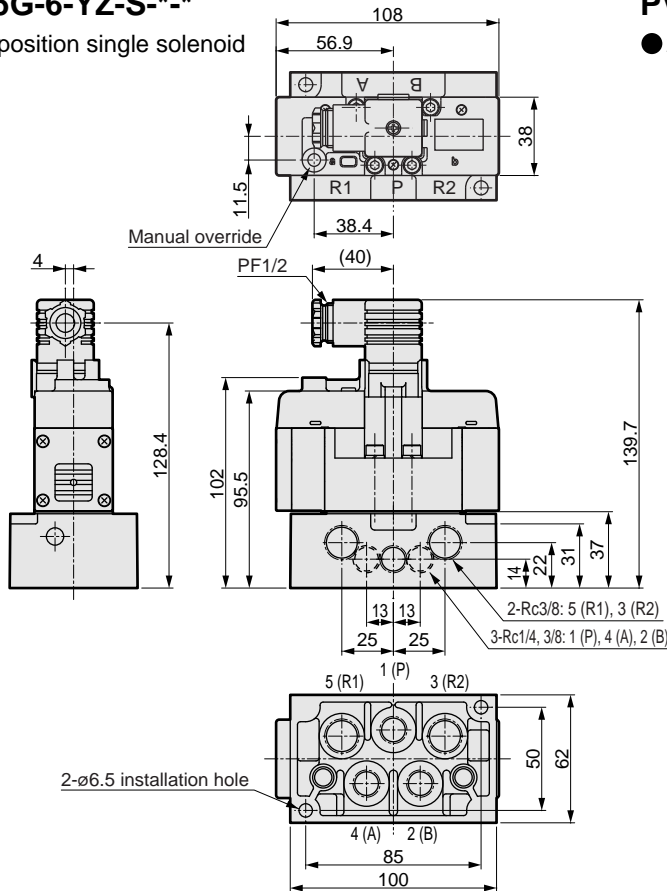


Dimensions: DIN terminal box type (with sub-plate)

PV5G-6-FG-S-**-*

PV5G-6-YZ-S-**-*

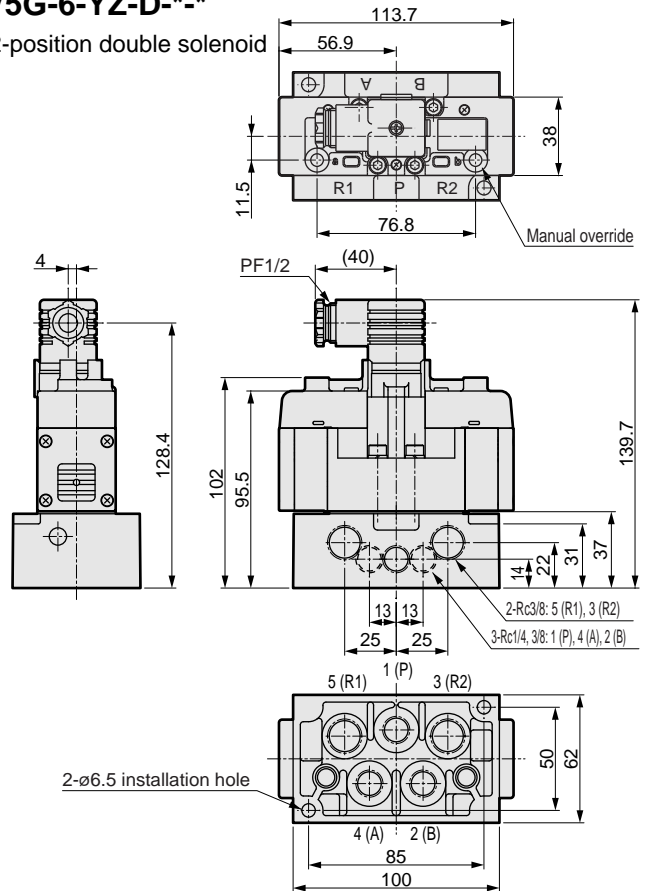
● 2-position single solenoid



PV5G-6-FG-D-**-*

PV5G-6-YZ-D-**-*

● 2-position double solenoid

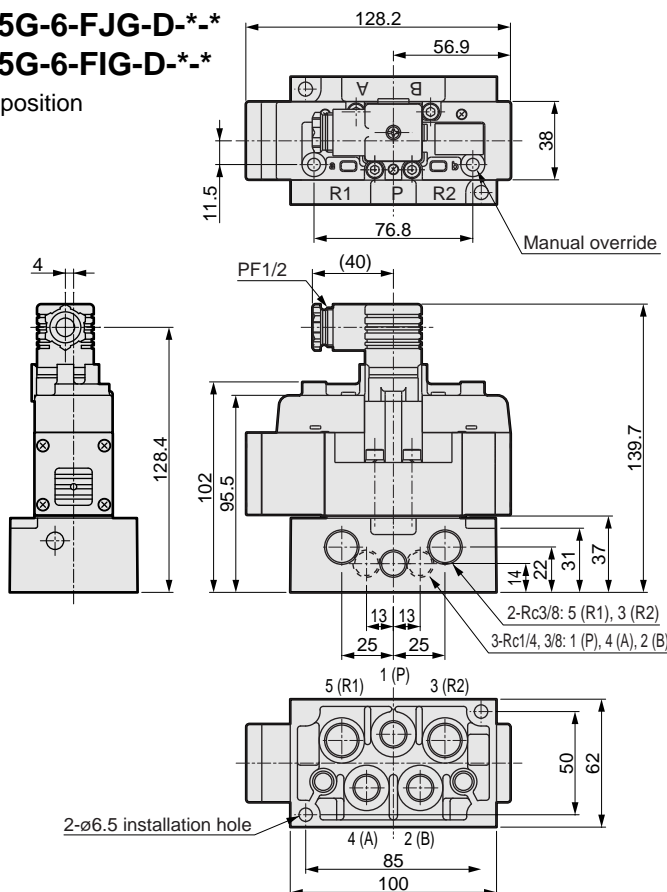


PV5G-6-FHG-D-**-*

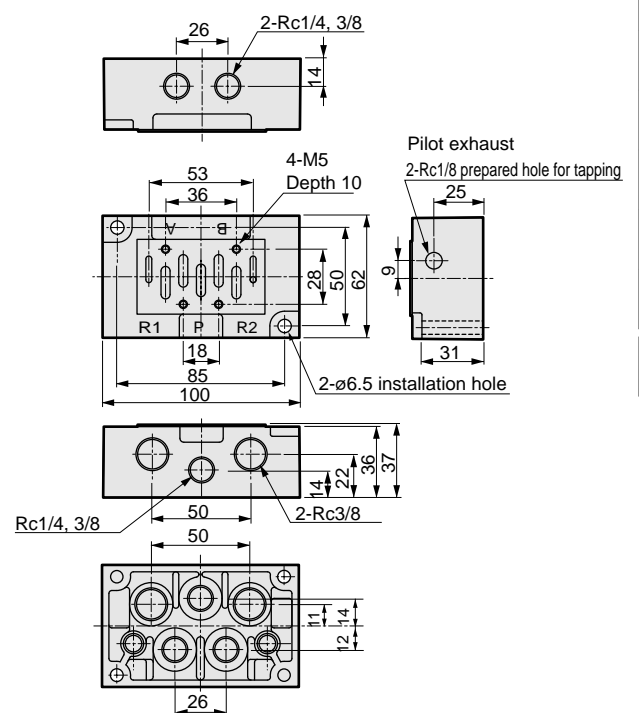
PV5G-6-FJG-D-**-*

PV5G-6-FIG-D-**-*

● 3-position



● Sub-plate dimensions (CB1-*)



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*OE

HMV
HSV

2QV
3QV

SKH

PCD/
FS/FD

Ending

Discrete
5 port pilot operated valve

PV5G-6 Series

Discrete valve: ISO size 1

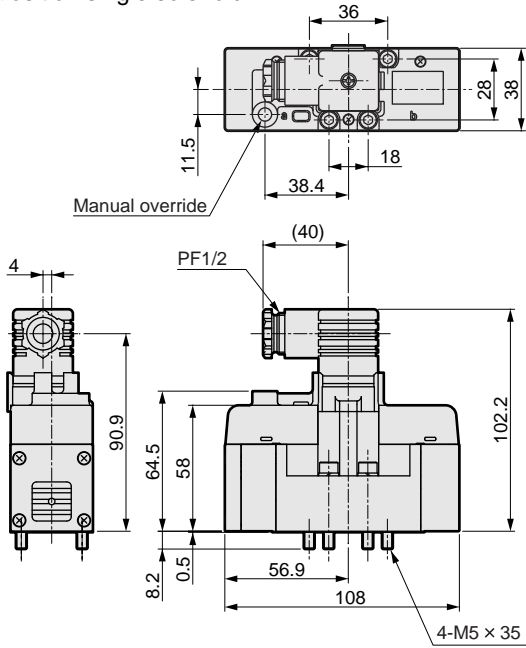
Dimensions: DIN terminal box type (without sub-plate)

MN3E0
MN4E0
4GA/B
M4GA/B
MN4GA/B
4GA/B (Master)
W4GA/B2
W4GB4
MN3S0
MN4S0
4TB
4L2-4/LMFO
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

PV5G-6-FG-S-*

PV5G-6-YZ-S-*

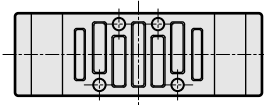
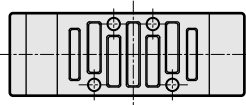
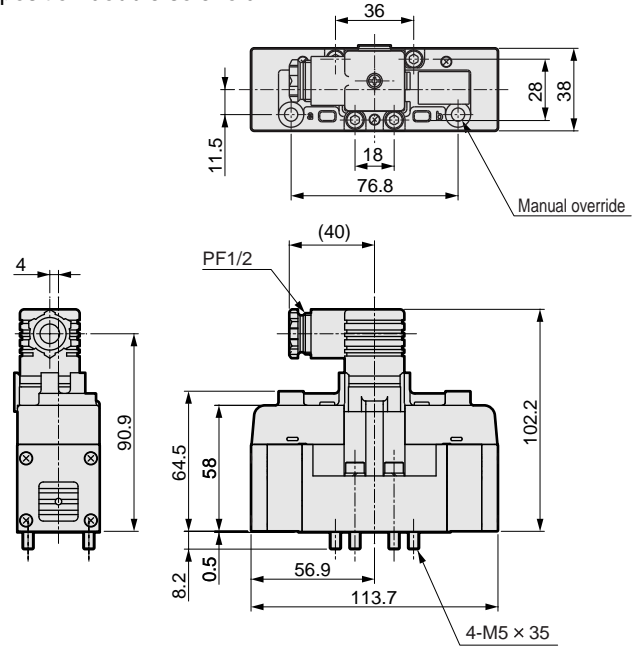
● 2-position single solenoid



PV5G-6-FG-D-*

PV5G-6-YZ-D-*

● 2-position double solenoid

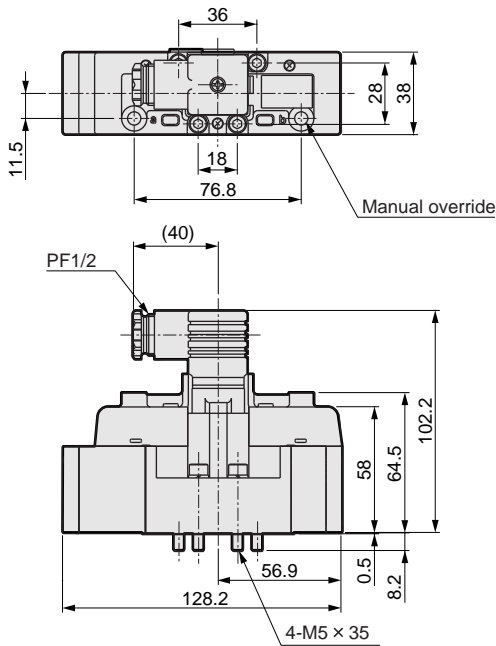


PV5G-6-FHG-D-*

PV5G-6-FJG-D-*

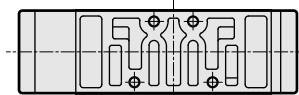
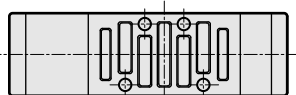
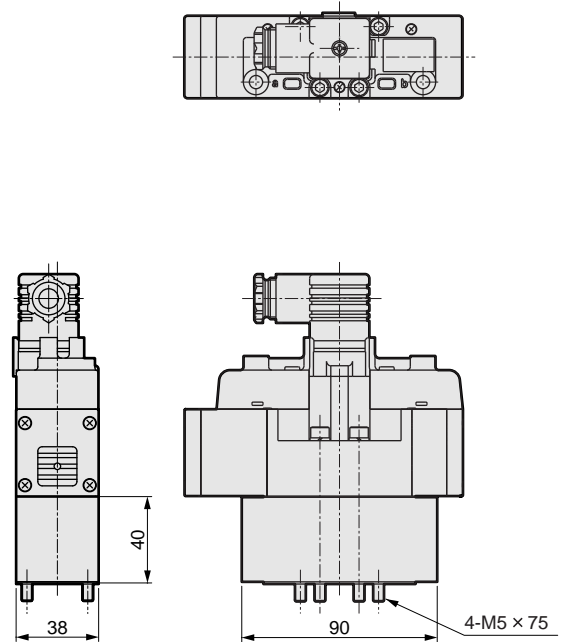
PV5G-6-FIG-D-*

● 3-position



PV5G-6-FPG-D-*

● 3-position, non-leak type

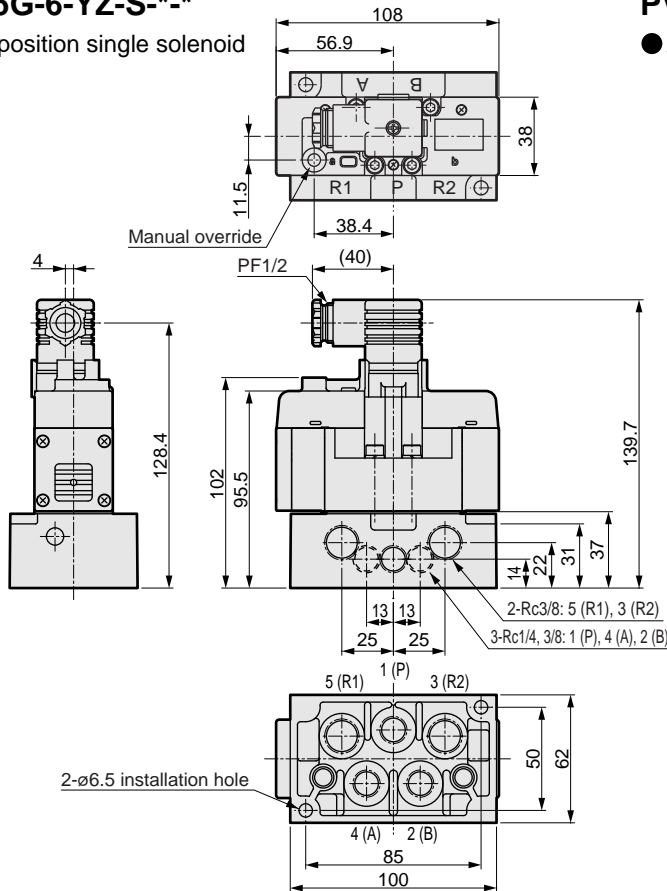


Dimensions: DIN terminal box type (with sub-plate)

PV5G-6-FG-S-**-*

PV5G-6-YZ-S-**-*

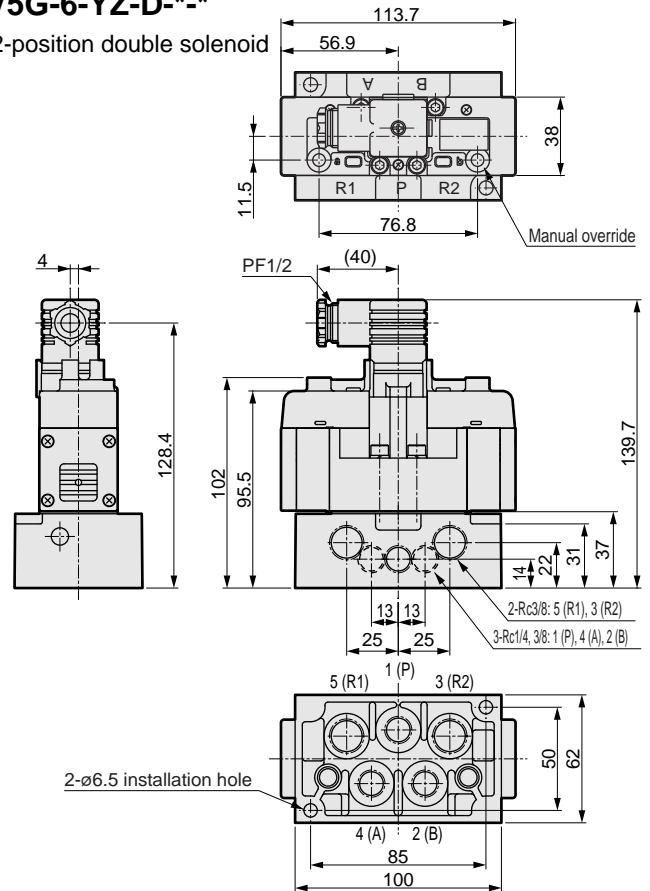
● 2-position single solenoid



PV5G-6-FG-D-**-*

PV5G-6-YZ-D-**-*

● 2-position double solenoid

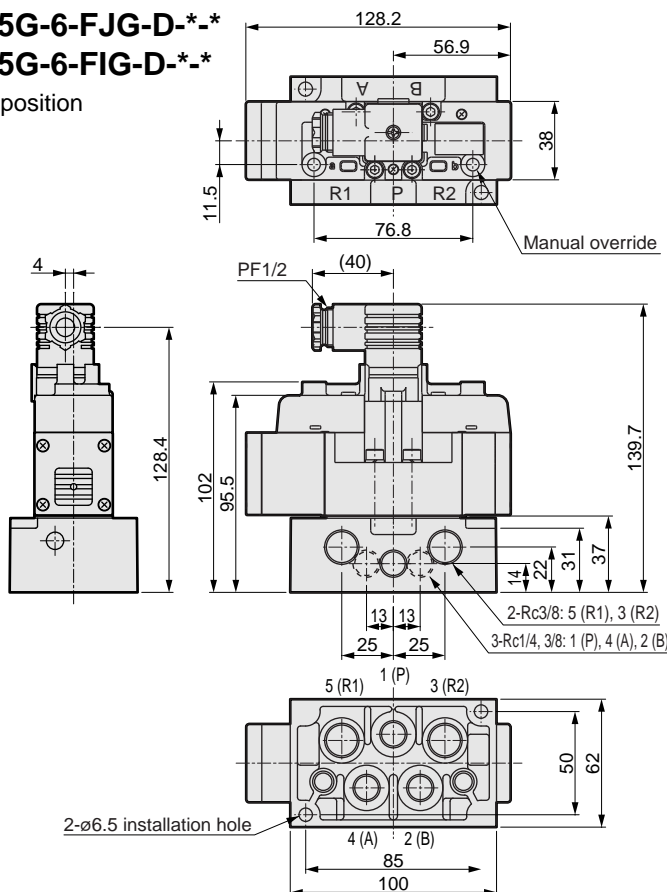


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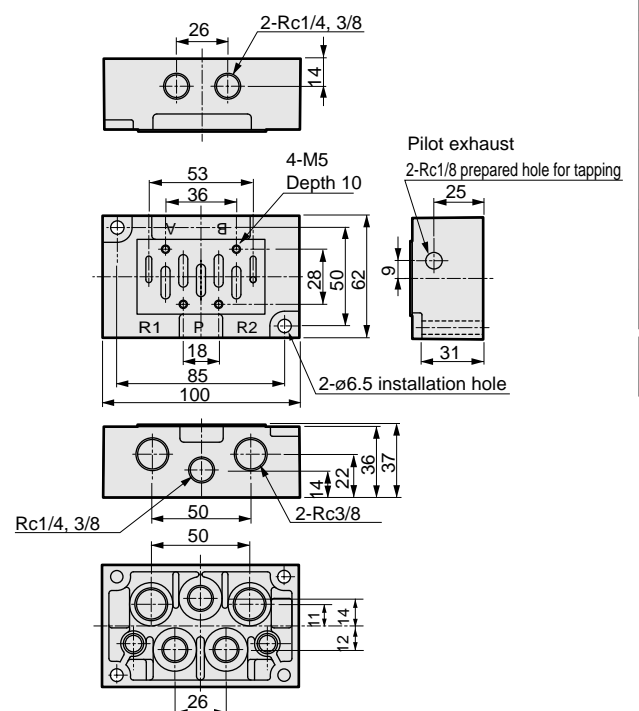
PV5G-6-FJG-D-**-*

PV5G-6-FIG-D-**-*

● 3-position



● Sub-plate dimensions (CB1-*)



MN3E0
MN4E0
4GA/B
M4GA/B
MN4GA/B
4GA/B (Master)
W4GA/B2
W4GB4
MN3S0
MN4S0
4TB
4L2-4/LMFO
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

Discrete 5 port pilot operated valve