

Individual wiring block manifold Sub base porting **MN4GB1/2 Series**

- Applicable cylinder bore size: 20 to 80mm



CAD DATA AVAILABLE.

Manifold common specifications

Descriptions	
Manifold type	Block manifold
Installation method	DIN rail mount type
Air supply/exhaust air method	Common supply/exhaust (check valve incorporated)
Pilot exhaust method	Main/pilot valves' common exhaust (pilot exhaust check valve incorporated)
Piping direction	Sub-base side porting
Working fluid	Compressed air
Valve and solenoid type	Pilot operated soft spool valve
Min. working pressure MPa	0.2 (2,3-position)
Max. working pressure MPa	0.7
Withstanding pressure MPa	1.05
Ambient temperature °C	-5 to 55
Fluid temperature °C	5 to 55
Manual override	Non-locking/locking type
Lubrication Note 1	Not required
Protection structure Note 2	Dust proof
Vibration/impact m/s ²	50 or less/300 or less
Working environment	Not to be subject to corrosive gas

Electrical specifications

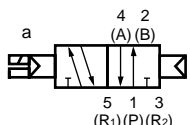
Descriptions		
Rated voltage V	DC	12, 24
	AC	100
Fluctuation range		±10%
Holding current	DC24	0.023(0.025)
	DC12	0.046(0.050)
	Note 3. A AC100	0.010(0.012)
Power consumption Note 3. W	DC24	0.55(0.6)
	DC12	0.55(0.6)
Apparent power VA	AC100	1.0(1.2)
Heat proof class		B
Temperature rise °C		50
Surge suppressor		Option
Indicator		(Option) indicator light

Note 3. For indicator light, refer to the value in ().

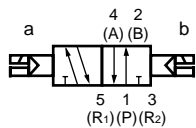
- Note 1. For lubrication, please use turbine oil Class 1 ISOVG32.
Too much lubrication, intermittent lubrication may cause unstable operation.
- Note 2. Protection structure is dust proof, but not drip proof.
Not to be subject to water drip, oil etc.
- <Reference> Pressure unit is MPa. Conversion ratio is 1MPa=10.1972kgf/cm².

• JIS symbol

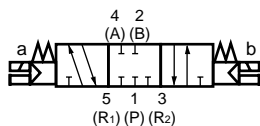
5 port valve 2-position single



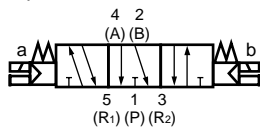
2-position double



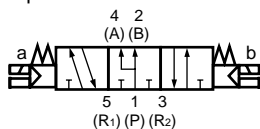
3-position all ports closed



3-position A/B/R connection



3-position P/A/B connection



Individual specifications

Descriptions	MN4GB1	MN4GB2
Max. station number	24 station	20 station
Port size	Port A/B	Push in joint 4,6 mm dia.
	Port P/R	Push in joint 6, 8,6.4 mm dia.

Refer to "3 About installation attitude" on Page 82 about DIN rail mount.
Please refer to Page 256 about mass.

Descriptions	MN4GB1		MN4GB2		
	P → A/B	A/B → R	P → A/B	A/B → R	
Effective sectional area mm ²	Port size	Port A/B	Push in joint 6 mm dia.		
	2-position		4.5	4.0(5.0)	
	3-position	All ports closed	4.5	4.5	10
		ABR connection	4.5	4.0(5.5)	10
	PAB connection	5.5	4.5	13	

- Effective sectional area of 2-position and ABR connection is the value when check valve incorporated.
- When no check valve installed, refer to the value in ().

Descriptions	MN4GB1		MN4GB2	
	When ON	When OFF	When ON	When OFF
Response time ms	2-position	Single	12	12
		Double	9	-
	3-position	ABR connection	8	15

The value of light, surge suppressor is shown. Response time is the value at supply pressure 0.5MPa, 20°C, not lubricated.

The value varies depending on pressure and oil quality.

MN4GB1/2 Series

Individual wiring type block manifold: Body porting

How to order

Manifold model No.

MN4GB1 1 0 C6 E2 H 10 3

Discrete valve block with solenoid valve

N4GB1 1 0 C6 E2 H 3

Discrete solenoid valve

4GB1 1 9 00 E2 H 3

A Solenoid position

Model

B Port size
Note 1
Note 2
Note 3

D Options

C Electric connection

E station #

F Voltage

• Complete "manifold specification sheet" (Page 307 to 309).

		Model					
		Manifold		Discrete valve block with solenoid valve		Discrete solenoid valve	
		MN4GB1	MN4GB2	N4GB1	N4GB2	4GB1	4GB2
Symbol	Descriptions						
A Solenoid position							
1	2-position single	●	●	●	●	●	●
2	2-position double	●	●	●	●	●	●
3	3-position all ports closed	●	●	●	●	●	●
4	3-position ABR connection	●	●	●	●	●	●
5	3-position PAB connection	●	●	●	●	●	●
8	Mix manifold	●	●				
B Port size (Port A/B)							
C4	4 mm push in joint	●	●	●	●		
C6	6 mm push in joint	●	●	●	●		
C8	8 mm push in joint	●	●	●	●		
CL4	4 mm push in joint radial type (upward)	●		●			
CL6	6 mm push in joint radial type (upward)	●		●			
CL8	8 mm push in joint radial type (upward)	●		●			
CX	Mix push in joint	●	●				
Single plug	Port A	Port B					
C4NC	4 mm push in joint	Plug		●	●	●	●
C6NC	6 mm push in joint	Plug		●	●	●	●
C8NC	8 mm push in joint	Plug		●	●	●	●
C4NO	Plug	4 mm push in joint		●	●	●	●
C6NO		6 mm push in joint		●	●	●	●
C8NO		8 mm push in joint		●	●	●	●
CL4NC	4 mm push in joint radial (upward)	Plug		●	●	●	●
CL6NC	6 mm push in joint radial (upward)	Plug		●	●	●	●
CL8NC	8 mm push in joint radial (upward)	Plug		●	●	●	●
CL4NO	Plug	4 mm push in joint radial (upward)		●	●	●	●
CL6NO		6 mm push in joint radial (upward)		●	●	●	●
CL8NO		8 mm push in joint radial (upward)		●	●	●	●
C Electric connection							
Blank	Grommet lead wire (300mm)	Note 4		●	●	●	●
B	DIN terminal box (Pg7)	surge suppressor/indicator light		●	●	●	●
E-conductor (up/lateral common)							
E0	Lead wire (300mm)	●	●	●	●	●	●
E00	Lead wire (500mm)	●	●	●	●	●	●
E01	Lead wire (1000mm)	●	●	●	●	●	●
E02	Lead wire (2000mm)	●	●	●	●	●	●
E03	Lead wire (3000mm)	●	●	●	●	●	●
E2	Lead wire (300mm)	surge suppressor/light		●	●	●	●
E20	Lead wire (500mm)	surge suppressor/light		●	●	●	●
E21	Lead wire (1000mm)	surge suppressor/light		●	●	●	●
E22	Lead wire (2000mm)	surge suppressor/light		●	●	●	●
E23	Lead wire (3000mm)	surge suppressor/light		●	●	●	●
E0N	No lead wire (no socket)	●	●	●	●	●	●
E2N	No lead wire (no socket)	surge suppressor/light		●	●	●	●
E3	No lead wire (socket/terminal attached)	surge suppressor/light		●	●	●	●
E1	No lead wire (socket/terminal attached)	●	●	●	●	●	●
EJ-conductor (socket with cover, radial/axial common)							
E01J	Lead wire (1000mm)	●	●	●	●	●	●
E02J	Lead wire (2000mm)	●	●	●	●	●	●
E03J	Lead wire (3000mm)	●	●	●	●	●	●
E21J	Lead wire (1000mm)	surge suppressor/light		●	●	●	●
E22J	Lead wire (2000mm)	surge suppressor/light		●	●	●	●
E23J	Lead wire (3000mm)	indicator light		●	●	●	●
D Option							
Blank	Blank	●	●	●	●	●	●
H	Check valve (standard)	Note 5		●	●	●	●
K	External pilot	Note 6		●	●	●	●
A	Ozone/coolant proof	●	●	●	●	●	●
F	Filter incorporated in Port A/B (Port P: Provided as STD)	●	●	●	●	●	●
E Station #							
1	1 station						
to	to	●	●	●	●		
24	24 station (max. station number of MN4GB2 is 20.)						
F Voltage							
1	AC100V (rectified bridge incorporated)	●	●	●	●	●	●
3	DC24V	●	●	●	●	●	●
4	DC12V	●	●	●	●	●	●

4SA/B0

4SA/B1

4GA/B

MN4GA/B

4GA/B (master)

MN3S0/ MN4S0

4TB

4L2-4/ LMFO

4KA/B

4F

PV5/ CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/ NVP

4F**0E

HMV/ HSV

Uniwire system

SKH

PCD/ FS/FD

3, 5 port pilot operated valve Individual wiring block manifold

Precautions for selection guide

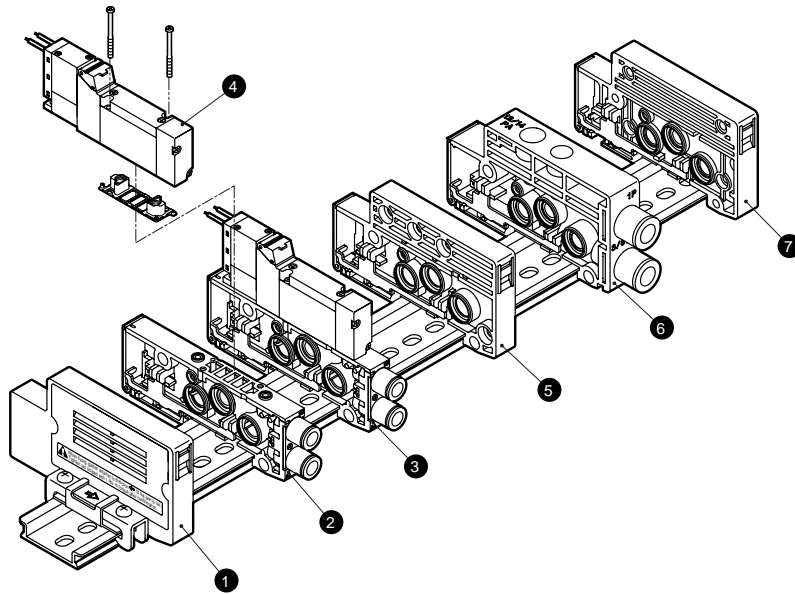
- Note 1. Plug specification of Port A or B is available only for 2-position single. Designate port size of Port P/R in supply and exhaust block model No.
- Note 2. CL* push in joint radial type (upward) is available only for single solenoid manifold, while Port A: Long elbow, Port B: short elbow.
- Note 3. When mix (CX) push in joint radial type (upward), Port A/B sizes are same. When CL*NC/NO is designated, short elbow joint is provided.
- Note 4. AC100V is not available for grommet lead wire specifications.
- Note 5. For 3-position all ports closed and PAB connection, check valve specifications (H) is not available.
- Note 6. Consult with CKD about vacuuming of external pilot (K).

is not available.

MN4GB1/2 Series

Individual wiring type block manifold: Body porting

Explanation of manifold components and parts list



Main parts list (please refer to Page 294 to 303 about details.)

No.	Components name	Model No. (e.g.)	No.	Components name	Model No. (e.g.)
1	End block L	N4G1-EL	5	Partition block	N4G1-S
2	Discrete valve block	N4GB1-V1-C6	6	Supply and exhaust block	N4G1-Q-8
3	Discrete valve block with solenoid valve	N4GB110-C6-H-3	7	End block R	N4G1-ER
4	Electromagnetic valve body	4GB119-00-H-3			

B type individual wiring mass

4GB1

Block type	Model No.	Mass	Block type	Model No.	Mass
Valve block with solenoid valve	N4GB110-C6	69	Supply and exhaust block	N4G1-Q-8	63
	N4GB120-C6	84		N4G1-QK-8	68
	N4GB1 $\frac{3}{5}$ 0-C6	85	End block	N4G1-E*	57
Valve block with masking plate	N4GB1-MP-C6	37		N4G1-EX*	57
			Partition block	N4G1-S	45


4GB2

Block type	Model No.	Mass	Block type	Model No.	Mass
Valve block with solenoid valve	N4GB210-C8	133	Supply and exhaust block	N4G2-Q-10	99
	N4GB220-C8	148		N4G2-QK-10	104
	N4GB2 $\frac{3}{5}$ 0-C8	159	End block	N4G2-E*	83
Valve block with masking plate	N4GB2-MP-C8	76		N4G2-EX*	84
			Partition block	N4G2-S	60

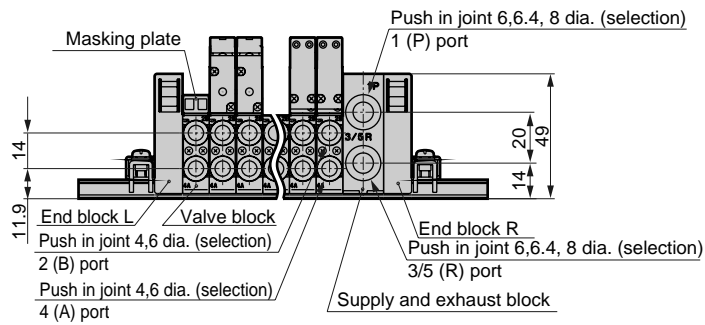
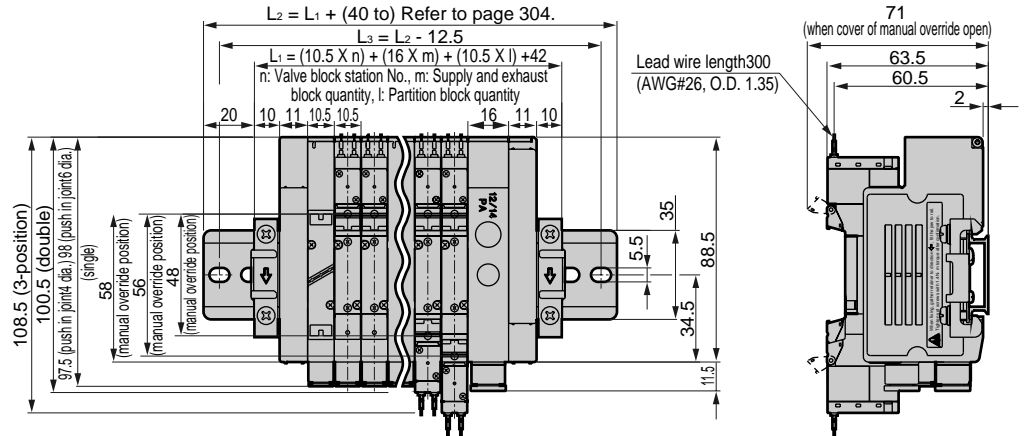
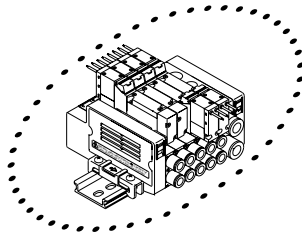
Repair parts and related part list

No.	Parts name	Model No.	No.	Parts name	Model No.		
-	Coil assembly	4G [Electric connection] * - COIL - [Voltage]	-	E-connector	4G - SOCKET ASSY - [Electric connection]		
		Blank: Standard A: Ozone proof Page 255 Select according to Ⓒ Electric connection.	-	Socket assembly	- [Voltage]		
-	Cartridge type quick connector and related parts	4G1	4 dia. straight type	-	EJ-connector	4G - SOCKET ASSY : [Electric connection]	
			6 dia. straight type	4G1-JOINT-C4	-	Socket assembly	4G - SOCKET ASSY : [Voltage]
			4 dia. radial	4G1-JOINT-CL4, CLL4	-	DIN terminal box assembly	4G - TERMINAL BOX - [Voltage]
			6 dia. radial	4G1-JOINT-CL6, CLL6	-	Silencer	For 6 dia : SLW-H6
			Plug cartridge	4G1-JOINT-CPG			For 8 dia : SLW-H8
			Blanking plug	For 4 dia: GWP4-B, for 6 dia: GWP6-B			For 10 dia : SLW-H10
		4G2	4 dia. straight type	4G2-JOINT-C4			
			6 dia. straight type	4G2-JOINT-C6			
			8 dia. straight type	4G2-JOINT-C8			
			6 dia. radial	4G2-JOINT-CL6, CLL6			
			8 dia. radial type	4G2-JOINT-CL8, CLL8			
			Plug cartridge	4G2-JOINT-CPG			
			Blanking plug	For 4 dia : GWP4-B			
				For 6 dia : GWP6-B, for 8 dia: GWP8-B			

Dimensions

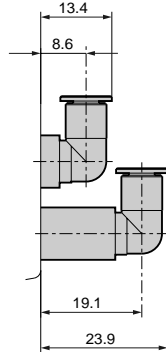
MN4GB1  (File name: Page 314 or Ending 19)

- Grommet lead wire (blank)

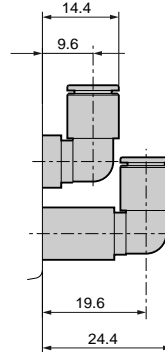


- Push in joint radial type (upward)

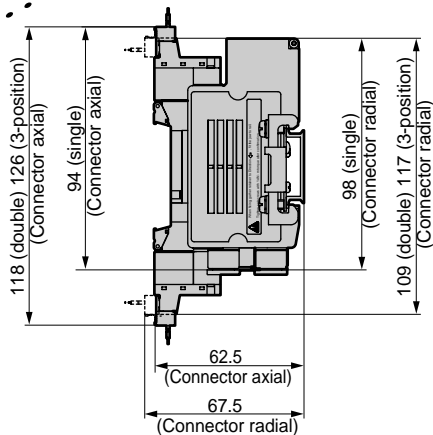
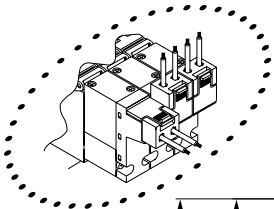
- 4 dia. (CL4)



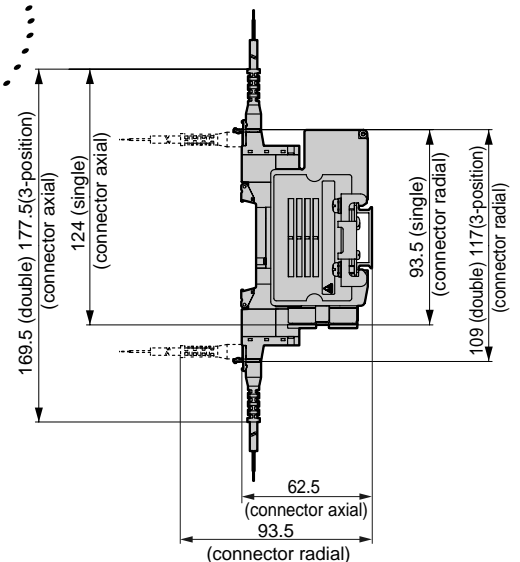
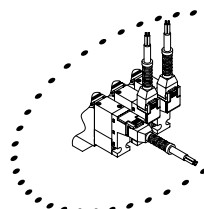
- 6 dia. (CL6)



- E-connector type (E)



- EJ-connector type (E**J)



4SA/B0

4SA/B1

4GA/B

MN4GA/B

4GA/B (master)

MN3S0/
MN4S0

4TB

4L2-4/
LMF0

4KA/B

4F

PV5/
CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/
NVP

4F**0E

HMV/
HSV

Uniwire
system

SKH


PCD/
FS/FD

3.5 port pilot operated valve
Individual wiring block manifold

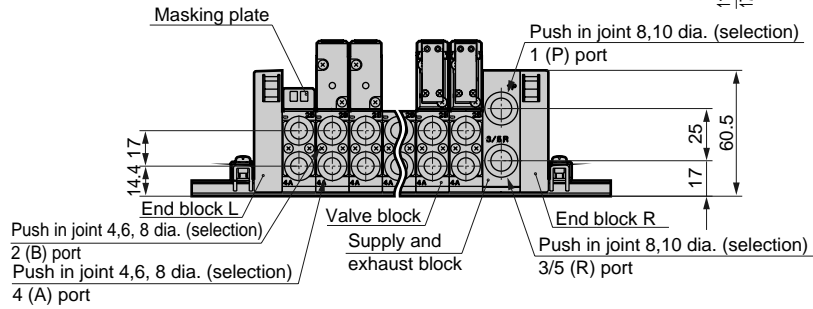
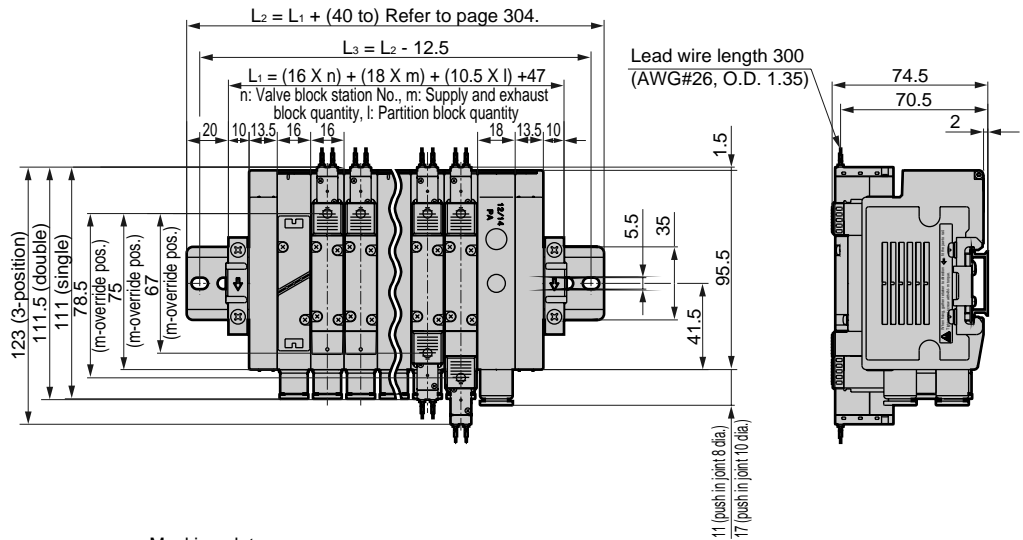
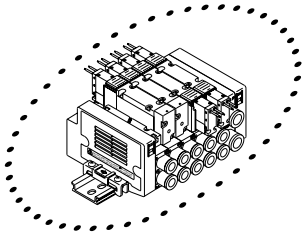
MN4GB2 Series

Individual wiring type block manifold: Body porting

Dimensions

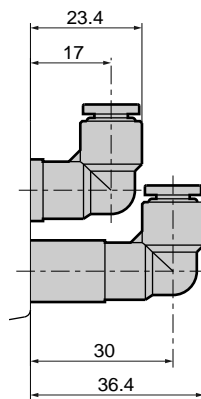
MN4GB2  (File name: Page 314 or Ending 19)

- Grommet lead wire (blank)

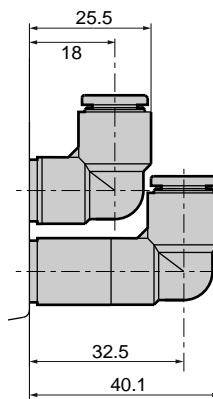


- Push in joint radial type (upward)

• 6 dia. (CL6)

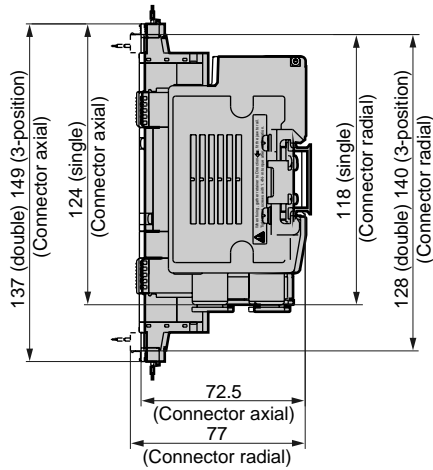
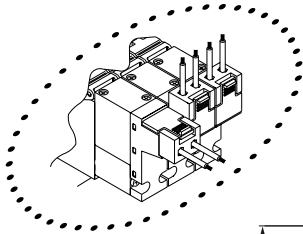


• 8 dia. (CL8)

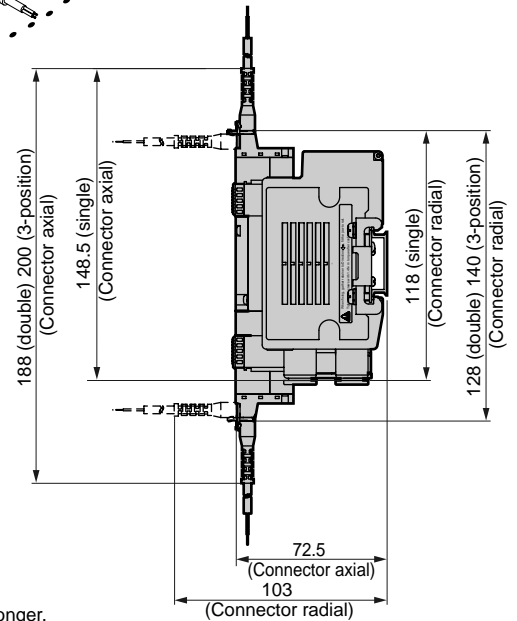
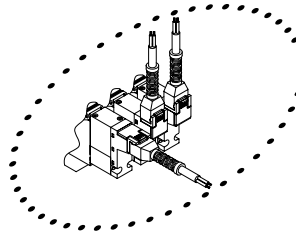


Dimensions

- E-connector type (E)



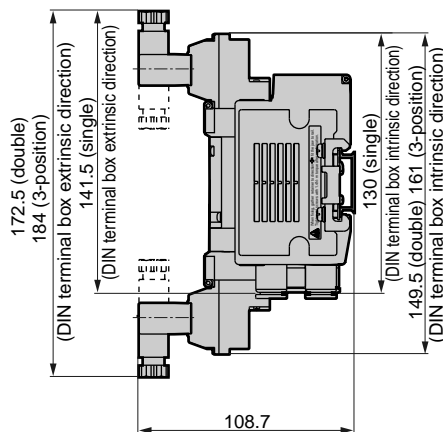
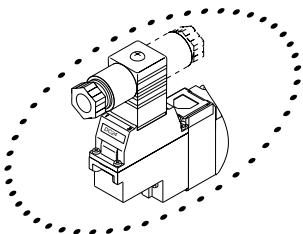
- EJ-connector type (E**J)



Note. Figure of E-connector (E), EJ-connector (E**J) shows dimensions of DC specifications.
For AC specifications, valve overall length is single: 3.5mm longer, while double/3-position: 7mm longer.

- DIN terminal box type (B)

Reduced wiring not available.



4SA/B0

4SA/B1

4GA/B

MN4GA/B

4GA/B (master)

MN3S0/ MN4S0

4TB

4L2-4/ LMFO

4KA/B

4F

PV5/ CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/ NVP

4F**0E

HMV/ HSV

Uniwire system

SKH

PCD/ FS/FD

3.5 port pilot operated valve
Individual wiring block manifold