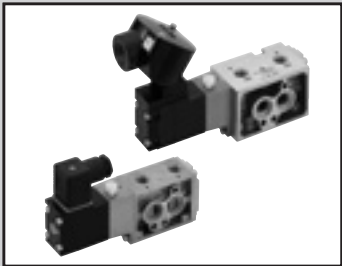


4GA/B
M4GA/B
MN4GA/B
4GA/B
(master)
4GB
With sensor
4GD/E
M4GD/E
MN4GD/E
4GA/B4
MN3E
MN4E
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B
(master)
4F
4F
(master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HNV
HSV
2QV
3QV
SKH
Silencer
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Ending



Discrete valve/body piping
Pilot operated 5-port pneumatic valve

4F1/3-NM Series

NAMUR standards option



Common specifications

1 MPa ≈ 145.0 psi, 1 MPa = 10 bar

Item	Description
Valve and operation	Pilot operated soft spool valve
Working fluid	Compressed air
Max. working pressure MPa	1.0 (≈145 psi, 10 bar)
Min. working pressure MPa	0.1 (≈15 psi, 1 bar)
Proof pressure MPa	1.5 (≈217 psi, 15 bar)
Ambient temperature °C	-10 (14°F) to 60 (140°F) *1
Fluid temperature °C	5 (41°F) to 60 (140°F)
Lubrication	Not required (use turbine oil ISO VG32 if necessary for lubrication)
Degree of protection	Dust-proof, IP65 (with round terminal box)
Vibration resistance m/s ²	50 or less
Impact resistance m/s ²	300 or less
Atmosphere	Cannot be used in corrosive gas environments

*1: The ambient temperature indicates the temperature for storage and upon installation, which will differ from the fluid temperature during operation.

Electrical specifications

Item			Description
Rated voltage V	AC		100, 200, 110, 220 (50/60 Hz)
	DC		12, 24
Rated voltage fluctuation range			±10%
Starting current A	AC	100 V	0.170/0.140
		200 V	0.090/0.070
		110 V	0.15/0.13
		220 V	0.08/0.06
	DC	12 V	0.500
		24 V	0.250
Holding current A	AC	100 V	0.100/0.080
		200 V	0.050/0.040
		110 V	0.09/0.07
		220 V	0.05/0.04
	DC	12 V	0.500
		24 V	0.250
Power consumption W	AC	100 V	5.0/4.0
		200 V	5.0/4.0
		110 V	5.0/4.0
		220 V	5.0/4.0
	DC	12 V	6.0
		24 V	6.0
Thermal class			B molded coil

Flow characteristics

Model No.	Solenoid position	Port size	Sonic conductance C[dm ³ /(s·bar)]
4F1	2-position	Single	1.6
		Double	
4F3	2-position	Single	3.1
		Double	

*1: Effective cross-sectional area S and sonic conductance C are converted as S ≈ 5.0 × C.

How to order

4F3 1 0 - NM - M2 B - AC100V

A Model No.

B Solenoid position

C Port size

D Manual override

E Electrical connections

F Other options

G Voltage

⚠ Precautions for model No. selection

- *1 : For 4F1, the repair parts, etc. of the body are 4F1 standard products. 4F3 products are used in coil assembly.
- *2 : Note that with 4F3, the repair parts of the body are dedicated parts.
- *3 : The piping port is Rc1/4 only.
The threads of port C1/C2 on the NAMUR face have not been machined.
- *4 : 12 VDC is not supported for BL with lamp or GL.
- *5 : When selecting W: Outdoor specification, only the round terminal box is available.
- *6 : For 4F1-W: Outdoor specification, the PE exhaust and breathing hole are connected to atmosphere. Install with an orientation preventing the direct ingress of rainwater, etc.

[Example of model No.]

4F310-NM-M2BW-AC100V

- A Model : 4F3
- B Solenoid position : 2-position single
- C Port size : Rc1/4
- D Manual override : Non-locking
- E Electrical connections : Round terminal box (G1/2)
- F Other options : None
- G Voltage : 100 VAC

Code	Description	4F1	4F3
A Model No.			
4F1	4F1 Series	●	
4F3	4F3 Series		●
B Solenoid position			
1	2-position single	●	●
2	2-position double	●	●
C Port size			
NM	NAMUR standard (port size Rc1/4) (*3)	●	●
D Manual override			
Blank	Locking (resin)	●	●
M2	Non-locking (metal)	●	●
M3	Locking with manual lever (resin)	●	●
R	Position change of manual override	●	●
E Electrical connections			
Blank	DIN terminal box (Pg11)	●	●
L	DIN terminal box (Pg11) with lamp	●	●
F	DIN terminal box (G1/2)	●	●
E	Grommet lead wire	●	●
E1	Conduit lead wire (CTC19)	●	●
E2	Conduit lead wire (G1/2)	●	●
B1	Round terminal box (G3/4)	●	●
B	Round terminal box (G1/2)	●	●
BL	Round terminal box (G1/2) with lamp (*4)	●	●
G	Round terminal box (G1/2) With gland (A-15a)	●	●
GL	Round terminal box (G1/2) with lamp (*4) Gland (A-15a) included	●	●
F Other options			
Blank	No option	●	●
W	Outdoor specification (*5) (*6)	●	●
S	Surge suppressor (varistor) included	●	●
G Voltage			
AC100V	100 VAC 50/60 Hz	●	●
AC200V	200 VAC 50/60 Hz	●	●
AC110V	110 VAC 50/60 Hz	●	●
AC220V	220 VAC 50/60 Hz	●	●
DC12V	12 VDC (*4)	●	●
DC24V	24 VDC	●	●
* Other made-to-order products			
DC48V		●	●
DC100V		●	●
DC110V		●	●

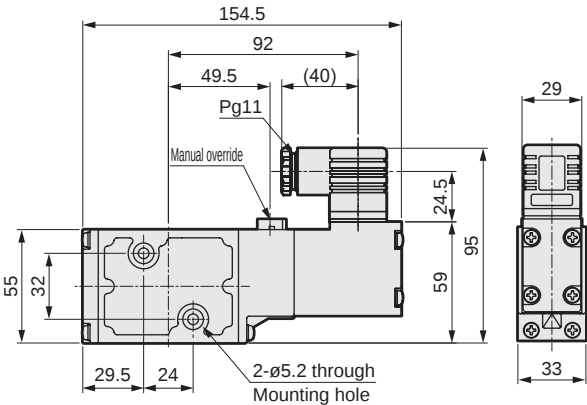
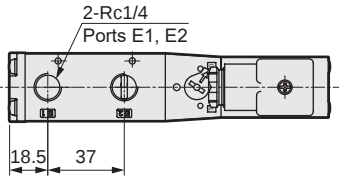
4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

4F1/4F3-NM Series

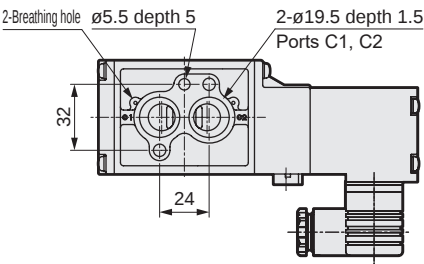
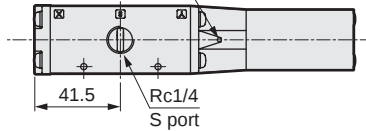
Dimensions

● 4F110-NM

2-position single: DIN terminal box: (blank)
DIN terminal box with lamp: (L)

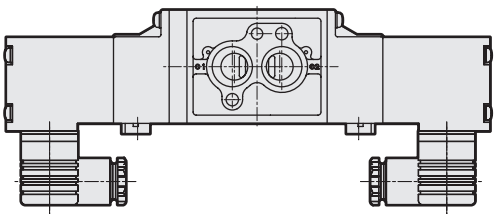
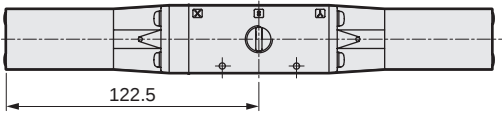
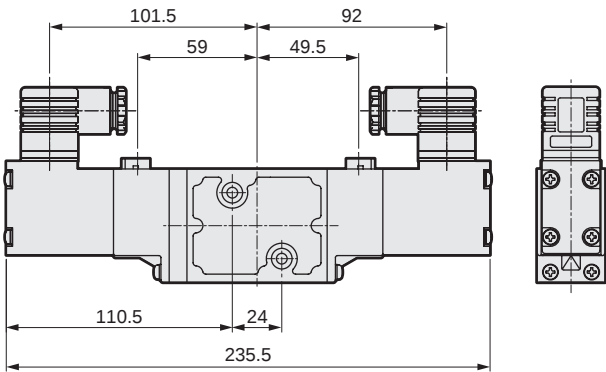
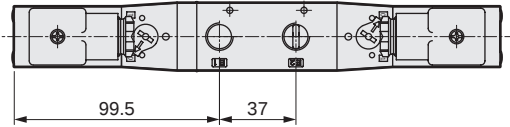


ø2 pilot exhaust port
Atmospheric release



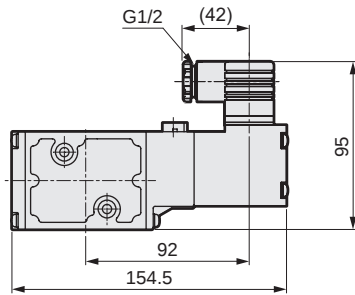
● 4F120-NM

2-position double: DIN terminal box: (blank)
DIN terminal box with lamp: (L)

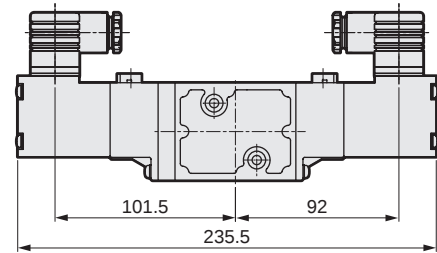


Dimensions

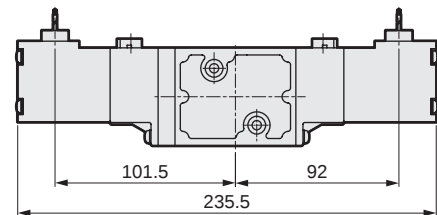
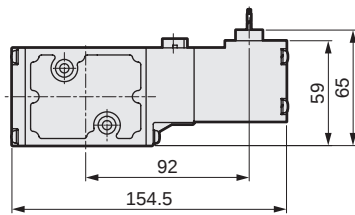
● 2-position single
DIN terminal box: (F)



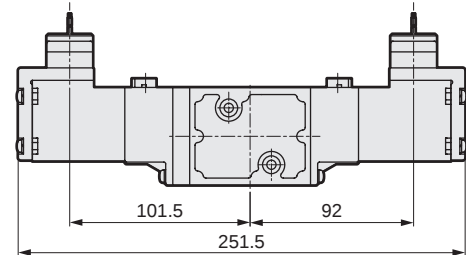
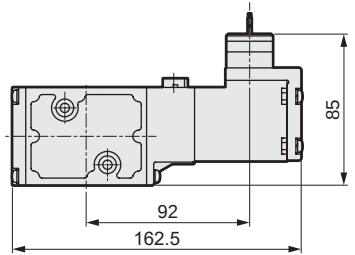
● 2-position double



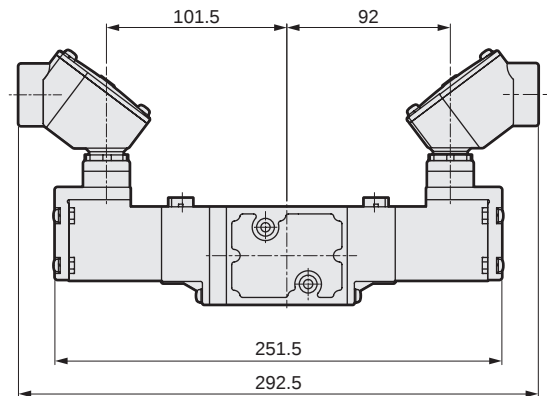
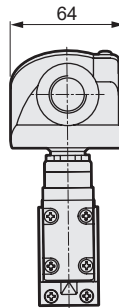
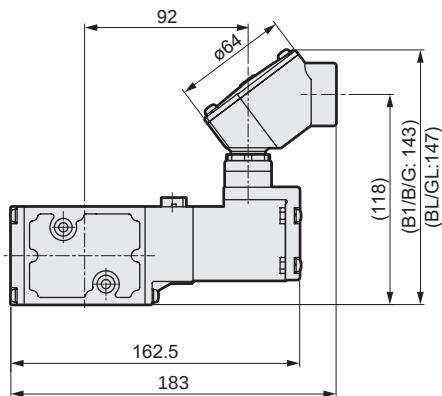
Grommet lead wire: (E)



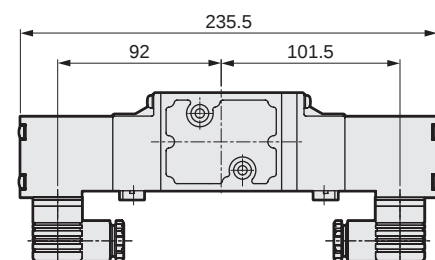
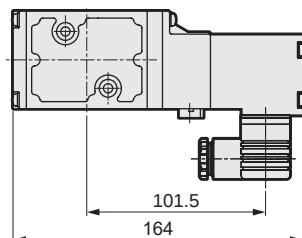
Conduit lead wire: (E1/E2)



Round terminal box: (B1/B/BL/G/GL)



Position change of manual override: (R)

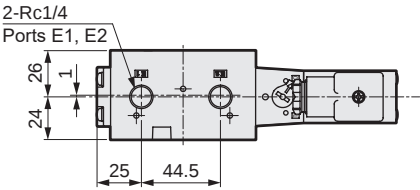


4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

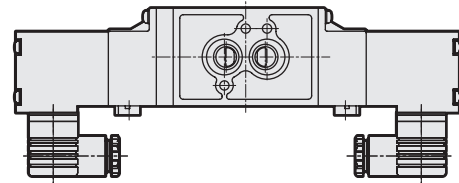
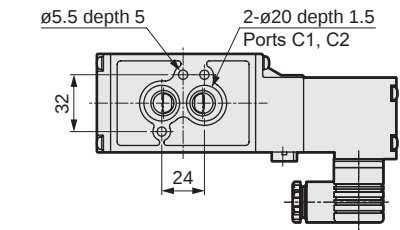
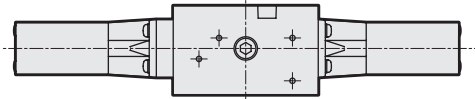
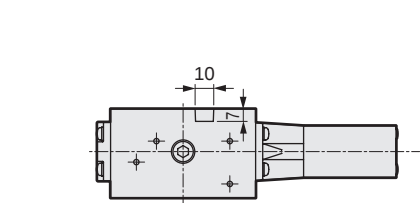
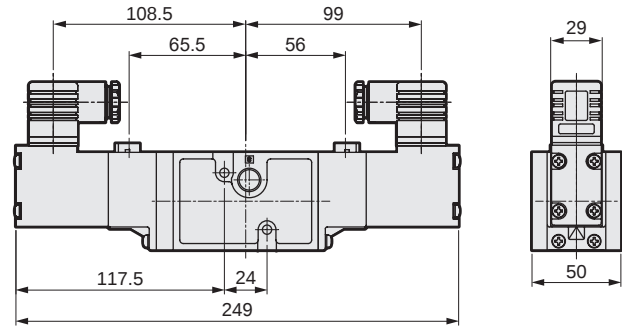
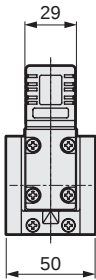
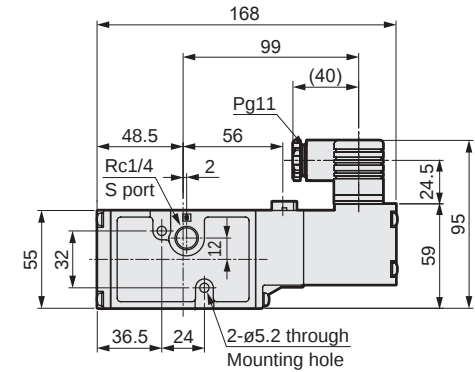
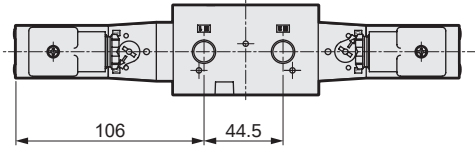
4F1/4F3-NM Series

Dimensions

- 4F310-NM
2-position single: DIN terminal box: (blank)
DIN terminal box with lamp: (L)

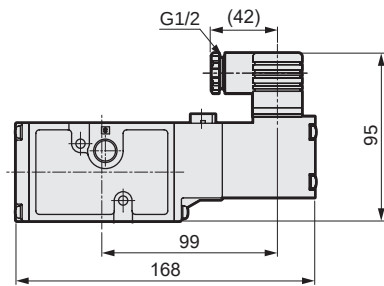


- 4F320-NM
2-position double: DIN terminal box: (blank)
DIN terminal box with lamp: (L)

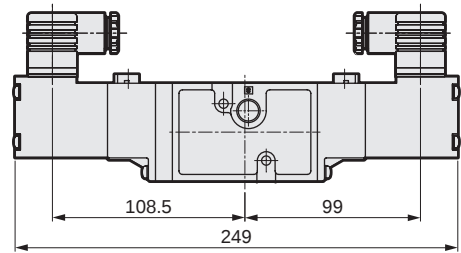


Dimensions

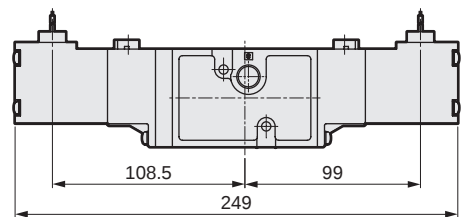
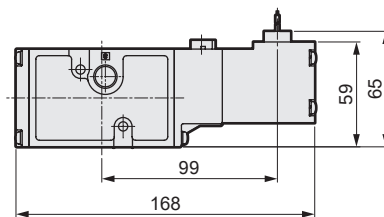
● 2-position single
DIN terminal box: (F)



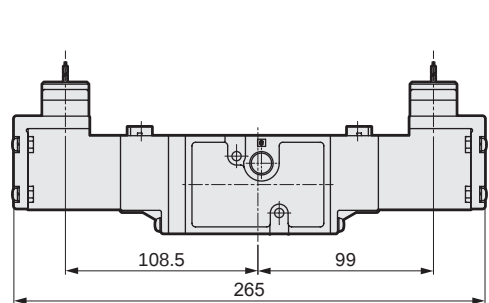
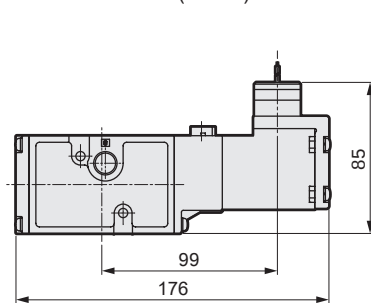
● 2-position double



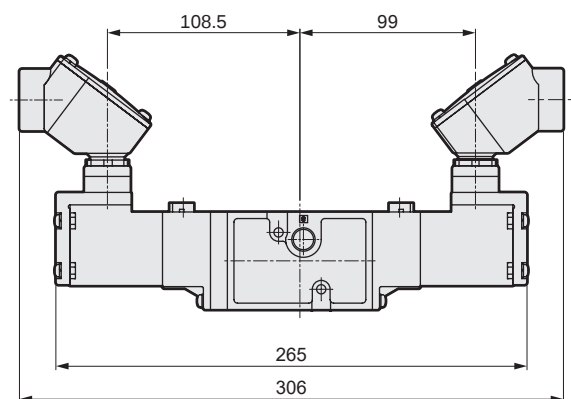
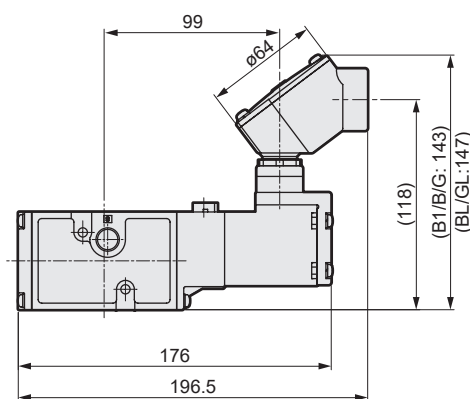
Grommet lead wire: (E)



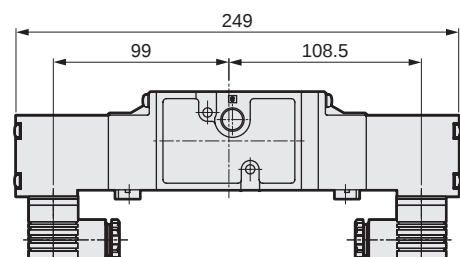
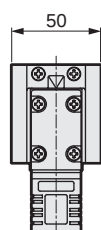
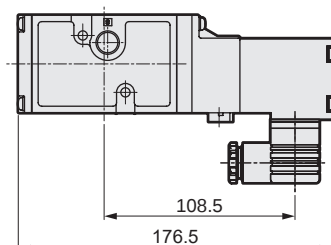
Conduit lead wire: (E1/E2)



Round terminal box: (B1/B/BL/G/GL)



Position change of manual override: (R)



4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
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SKH
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TotAirSys (Total Air)
TotAirSys (Gamma)
Ending