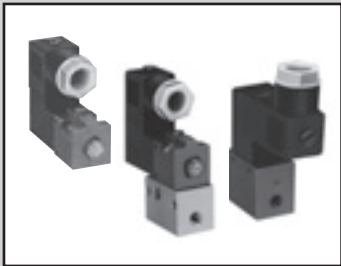


4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA/B4
MN3E MN4E
W4GA/B2
W4GB4
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G GMF
PV5 GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4G*0EJ
4F*0EX
4F*0E
HMV HSV
2QV 3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys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



Single unit
Pilot operated 2, 3, 5-port miniature pneumatic valve

P/M/B Series

● Cylinder bore size: ø6 to ø16

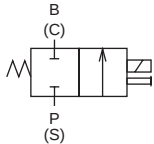


Refer to the Ending for details.

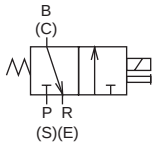


JIS symbol

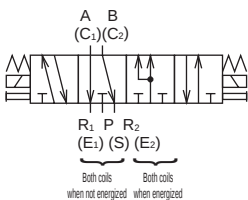
● 2-port valve



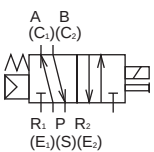
● 3-port valve



● 5-port valve 4-position double



2-position single



Common specifications

Item	Description
Valve and operation	Pilot operated poppet valve
Working fluid	Compressed air (low vacuum)
Max. working pressure MPa	Refer to Individual specifications listed below
Min. working pressure MPa	Refer to Individual specifications listed below
Proof pressure MPa	Refer to Individual specifications listed below
Ambient temperature °C	-10 (14°F) to 50 (122°F) (no freezing)
Fluid temperature °C	5 (41°F) to 50 (122°F)
Lubrication	Not required
Degree of protection	Dust-proof
Vibration resistance m/s ²	50 or less
Shock resistance m/s ²	300 or less
Atmosphere	Cannot be used in corrosive gas environment.

Electrical specifications

Item	Description
Rated voltage	AC 100, 200 (50/60 Hz)
V	DC 12, 24
Voltage fluctuation range	±10%
Starting current	AC 100 V 0.056 / 0.044
	200 V 0.034 / 0.026
A	DC 12 V 0.150
	24 V 0.075
Holding current	AC 100 V 0.028 / 0.022
	200 V 0.017 / 0.013
A	DC 12 V 0.150
	24 V 0.075
Power consumption W	AC 100 V 1.8 / 1.4 (2.0/1.6)
():With indicator lamp	200 V 2.1 / 1.6 (2.3/1.8)
	DC 12 V 1.8(2.0)
	24 V 1.8(2.0)
Thermal class	B (molded coil)
Temperature rise °C	45 (113°F)

Reference: 100 VAC 50/60 Hz can be used with a rated voltage of 110 VAC 60 Hz and 200 VAC 50/60 Hz can be used with 220 VAC 60 Hz.

Performance/characteristics by model (2-port valve)

Item	2-port valve					
	P5122	M5122	B5122	P5126	M5126	B5126
Max. working pressure MPa	1.0 (≈150 psi, 10 bar)			0.6 (≈87 psi, 6 bar) *2		
Min. working pressure MPa	0.1 (≈15 psi, 1 bar)			0.1 (≈15 psi, 1 bar) *2		
Proof pressure MPa	1.5 (≈220 psi, 15 bar)			1.5 (≈220 psi, 15 bar)		
Port size	-	M5		-	M5	
Response time *1 ms	30 or less			30 or less		

Performance/characteristics by model (3, 5-port valve)

1 MPa ≈ 145.0 psi, 1 MPa = 10 bar

Item	3-port valve						5-port valve			
	P5132	M5132	B5132	P5136	M5136	B5136	W2P5132	W2P5136	P5142	B5142
Max. working pressure MPa	1.0 (≈150 psi, 10 bar)			0.6 (≈87 psi, 6 bar)			1.0	0.6	0.70 (≈100 psi, 7 bar)	
Min. working pressure MPa	0.1 (≈15 psi, 1 bar)			0.1 (≈15 psi, 1 bar) (*2)			0.1 (≈15 psi, 1 bar)		0.15 (≈22 psi, 1.5 bar)	
Proof pressure MPa	1.5 (≈220 psi, 15 bar)			1.5 (≈220 psi, 15 bar)			1.5 (≈220 psi, 15 bar)		1.05 (≈150 psi, 10.5 bar)	
Port size	-	M5		-	M5		M5		-	M5
Response time *1 ms	30 or less						60 or less			

*1: The response time is the value at 0.5 MPa supply pressure, with no lubrication, and with the power ON. It depends on the pressure and the lubricant quality.

*2: When specifying the pressure classification V (for low pressure, for low vacuum pressure), the units can be used with low pressure (0 to 0.29 MPa) or low vacuum (3.3 to 101.00 kPa (abs) {25 to 760 Torr}).

Weight (2-port valve)

Item	2-port valve					
	P5122	M5122	B5122	P5126	M5126	B5126
Weight g	47		93	47		93

Weight (3, 5-port valve)

Item	3-port valve						5-port valve			
	P5132	M5132	B5132	P5136	M5136	B5136	W2P5132	W2P5136	P5142	B5142
Weight g	47	93	47	93	186		68		118	

Flow characteristics

Model No.	Solenoid position	Port size	C[dm ³ /(s·bar)]	b
P5122	2-port	-	0.10	0.13
M5122		M5		
B5122		-		
P5126		-	0.15	0.14
M5126		M5		
B5126		-		

Model No.	Solenoid position	Port size	P→B		B→R	
			C[dm ³ /(s·bar)]	b	C[dm ³ /(s·bar)]	b
P5132	3-port	-	0.10	0.13	0.15	0.17
M5132		M5				
B5132		-				
P5136		-	0.15	0.14	0.15	0.20
M5136		M5				
B5136		-				

Model No.	Solenoid position	Port size	P→A/B		A/B→R1/R2	
			C[dm ³ /(s·bar)]	b	C[dm ³ /(s·bar)]	b
W2P5132	5-port	M5	0.12	0.13	0.15	0.20
W2P5136			0.15	0.07	0.15	0.24
P5142		-	0.09	0.21	0.11	0.24
B5142		M5				

*1: Effective cross-sectional area S and sonic conductance C are converted as $S \approx 5.0 \times C$.

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

P/M/B Series

Discrete valve; 2, 3, 5-port valve

How to order

● 2, 3-port valve

B **513** **2** - **M6** **B** **R** - **M5** - **U** - **DC24V**

● Double 5-port valve

W2P513 **2** - **M6** **B** **M5** - **DC24V**

● 5-port valve

B **514** **2** - **M6** **B** **M5** - **U** - **DC24V**

A Model No.

B Orifice

C Manual override

D Electrical connections

Note Refer to page 1637 for the circuit diagram with a surge suppressor/lamp.

E Pressure classification

F Coil direction

G Port size

H Other options

I Bracket

J Voltage

Number of ports

A Model No.									
Pilot			Direct mounting			Sub-base			Double 5-port valve
2	3	5	2	3	5	2	3	5	5
P512	P513	P514	M512	M513	B512	B513	B514	W2P513	

Code	Description	P512	P513	P514	M512	M513	B512	B513	B514	W2P513
B Orifice										
2	ø1.2	●	●	●	●	●	●	●	●	●
6	ø1.6	●	●	●	●	●	●	●	●	●

C Manual override										
M0	Lateral non-locking (std) *2	●	●	●	●	●	●	●	●	●
M1	Lateral lock (option) *2	●	●	●	●	●	●	●	●	●
M4	Dust cover, non-locking (comes standard)	●	●	●	●	●	●	●	●	●
M6	Upward non-locking (standard)	●	●	●	●	●	●	●	●	●
N	No manual override (option)	●	●	●	●	●	●	●	●	●

D Electrical connections										
Refer to the next page for electrical connections.										

E Pressure classification										
Blank	Standard	●	●	●	●	●	●	●	●	●
V	For low pressure and low vacuum *4	●	●	●	●	●	●	●	●	●

F Coil direction										
Blank	Standard direction	●	●	●	●	●	●	●	●	●
R	180° rotation direction	●	●	●	●	●	●	●	●	●

G Port size										
Blank	No piping	●	●	●	●	●	●	●	●	●
M5	M5 (standard)	●	●	●	●	●	●	●	●	●
06	Rc1/8 (optional)	●	●	●	●	●	●	●	●	●

H Other options										
Blank	None	●	●	●	●	●	●	●	●	●
S	Surge suppressor attached *5, *7	●	●	●	●	●	●	●	●	●
X	Continuous energization (custom order) *6	●	●	●	●	●	●	●	●	●

I Bracket										
U	U bracket attached	●	●	●	●	●	●	●	●	●
L	L bracket attached	●	●	●	●	●	●	●	●	●

J Voltage										
AC100V	100 VAC 50/60 Hz	●	●	●	●	●	●	●	●	●
AC200V	200 VAC 50/60 Hz	●	●	●	●	●	●	●	●	●
DC24V	24 VDC	●	●	●	●	●	●	●	●	●
DC12V	12 VDC	●	●	●	●	●	●	●	●	●
AC110V	110 VAC 50/60 Hz	●	●	●	●	●	●	●	●	●
AC220V	220 VAC 50/60 Hz	●	●	●	●	●	●	●	●	●

* Other custom order products										
AC24V		●	●	●	●	●	●	●	●	●
AC48V		●	●	●	●	●	●	●	●	●
DC6V		●	●	●	●	●	●	●	●	●
DC48V		●	●	●	●	●	●	●	●	●

⚠ Precautions for model No. selection

- *1 : The single unit sub-base (B) is the pilot (P).
- *2 : M0 and M1 are not available as the M (direct mounting) or for low vacuum pressure (V).
- *4 : When pressure classification V (for low pressure/for low vacuum) has been specified, the orifice will be "6". Draw in the vacuum as vacuum from port P (S) or R (E). When using at low pressure, supply from the P(S).
- *5 : The unit is a suppression connector for 24 VDC or less.
- *6 : Other option code X is applicable to the 514* type.
- *7 : The surge suppressor can only be selected when the grommet lead wire or compact terminal box "B" has been selected for the electrical connections.

[Example of model No.]

B5142-M6B-M5-U-AC100V

- A** Model No. : Sub-base 5-port valve B514
- B** Orifice : ø1.2
- C** Manual override : Upward non-locking
- D** Electrical connections : Compact terminal box
- E** Pressure classification : Standard
- F** Coil direction : Standard direction
- G** Port size : M5
- H** Other options : None
- I** Bracket : U bracket attached
- J** Voltage : 100 VAC

CE marking specifications

** - Voltage - **ST**

• Standard voltage of 24 VDC or less is CE marking-compatible even if the model No. is not indicated with "ST".

Copper and PTFE free specifications

● Copper- and PTFE-based materials are not used in the flow path.

** - Voltage - **P6**

(Electrical connection list)

			A Model No.								
			Pilot			Direct mounting		Sub-base			*1 Double 5-port valve
			2	3	5	2	3	2	3	5	5
			P512	P513	P514	M512	M513	B512	B513	B514	W2P513
			Number of ports								
Code			Description								
D Electrical connections											
E	Standard	Grommet lead wire (300 mm)		●	●	●	●	●	●	●	●
B		Compact terminal box		●	●	●	●	●	●	●	●
C-connector (lead wire lateral direction)											
C	Std.	Lead wire length (300 mm)		●	●	●	●	●	●	●	●
C00	Option	Lead wire length (500 mm)		●	●	●	●	●	●	●	●
C01		Lead wire length (1000 mm)		●	●	●	●	●	●	●	●
C02		Lead wire length (2000 mm)		●	●	●	●	●	●	●	●
C03		Lead wire length (3000 mm)		●	●	●	●	●	●	●	●
C1		Without lead wire		●	●	●	●	●	●	●	●
C2		Lead wire (300 mm), surge suppressor/indicator lamp		●	●	●	●	●	●	●	●
C20		Lead wire (500 mm), surge suppressor/indicator lamp		●	●	●	●	●	●	●	●
C21		Lead wire (1000 mm), surge suppressor/indicator lamp		●	●	●	●	●	●	●	●
C22		Lead wire (2000 mm), surge suppressor/indicator lamp		●	●	●	●	●	●	●	●
C23		Lead wire (3000 mm), surge suppressor/indicator lamp		●	●	●	●	●	●	●	●
C3	No lead wire, with surge suppressor/indicator lamp		●	●	●	●	●	●	●	●	
D-connector (lead wire upward direction)											
D	Option	Lead wire length (300 mm)		●	●	●	●	●	●	●	●
D00		Lead wire length (500 mm)		●	●	●	●	●	●	●	●
D01		Lead wire length (1000 mm)		●	●	●	●	●	●	●	●
D02		Lead wire length (2000 mm)		●	●	●	●	●	●	●	●
D03		Lead wire length (3000 mm)		●	●	●	●	●	●	●	●
D1		Without lead wire		●	●	●	●	●	●	●	●
D2		Lead wire (300 mm), surge suppressor/indicator lamp		●	●	●	●	●	●	●	●
D20		Lead wire (500 mm), surge suppressor/indicator lamp		●	●	●	●	●	●	●	●
D21		Lead wire (1000 mm), surge suppressor/indicator lamp		●	●	●	●	●	●	●	●
D22		Lead wire (2000 mm), surge suppressor/indicator lamp		●	●	●	●	●	●	●	●
D23		Lead wire (3000 mm), surge suppressor/indicator lamp		●	●	●	●	●	●	●	●
D3		No lead wire, with surge suppressor/indicator lamp		●	●	●	●	●	●	●	●
Compact terminal box											
L	Option	Without lead wire With indicator lamp		●	●	●	●	●	●	●	●
LS		Without lead wire With surge suppressor and indicator lamp		●	●	●	●	●	●	●	●

*3: With DC voltage, L is equipped with a surge suppressor.

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

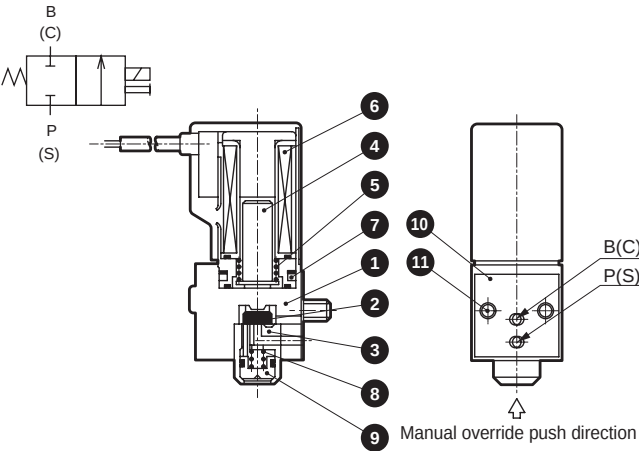
P/M/B 512, 513 Series

Discrete valve; 2, 3-port valve

Internal structure and parts list

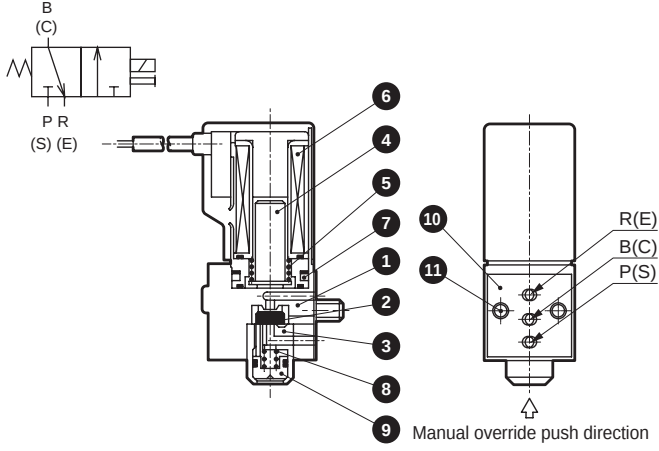
P/B 512

● Manual override lateral direction (M0) 2-port valve



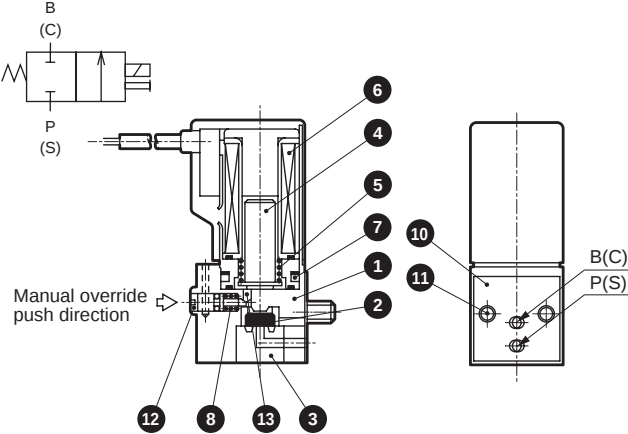
P/B 513

● Manual override lateral direction (M0) 3-port valve



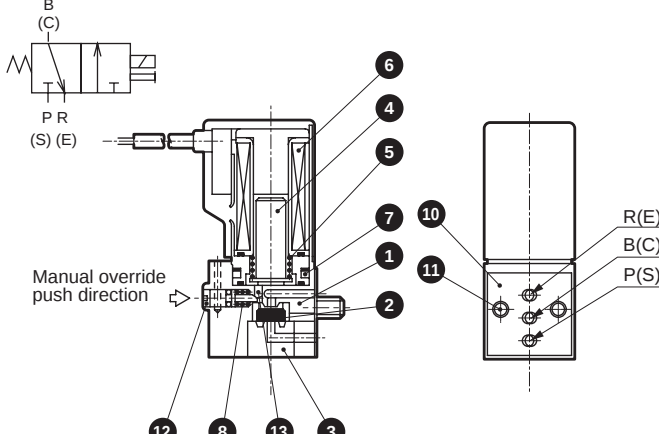
P/M/B 512

● Manual override upward direction (M6) 2-port valve



P/M/B 513

● Manual override upward direction (M6) 3-port valve



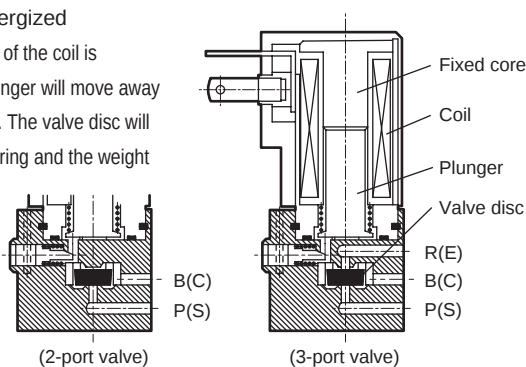
Main parts list

No.	Part name	Material	No.	Part name	Material
1	Body	Zinc die-casting	10	Body gasket	Cork
2	Valve disc	Nitrile rubber	11	Cross-recessed pan head machine screw with spring washer	Steel
3	Bottom seat	Copper alloy	12	Manual shaft	Resin
4	Plunger	Stainless steel	13	Manual pin	Resin
5	Plunger spring	Stainless steel			
6	Coil assembly	-			
7	Wave pin	Piano wire			
8	Manual spring	Stainless steel			
9	Push button	Copper alloy			

Operational principle

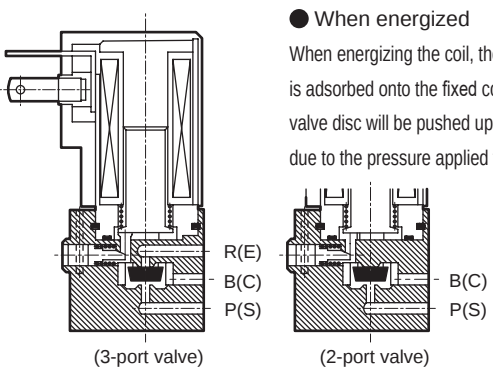
● When not energized

When energization of the coil is suspended, the plunger will move away from the fixed core. The valve disc will close due to the spring and the weight of the plunger.



● When energized

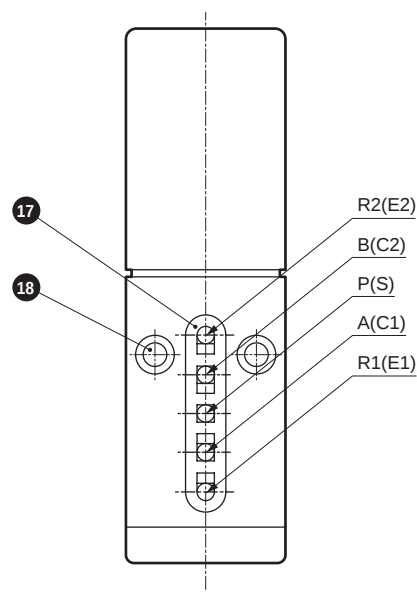
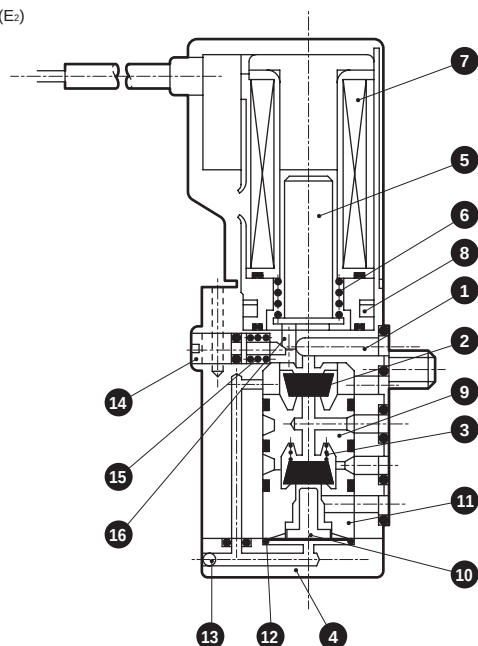
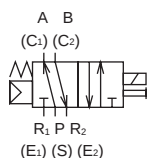
When energizing the coil, the plunger is adsorbed onto the fixed core and the valve disc will be pushed up to open due to the pressure applied from P (S).



Internal structure and parts list

P/B 5142

- Manual override upward direction (M6) 5-port valve
2-position single

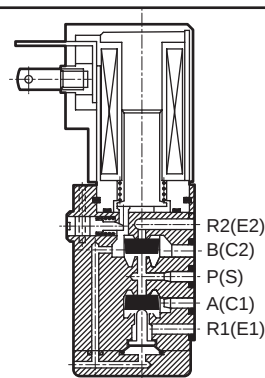
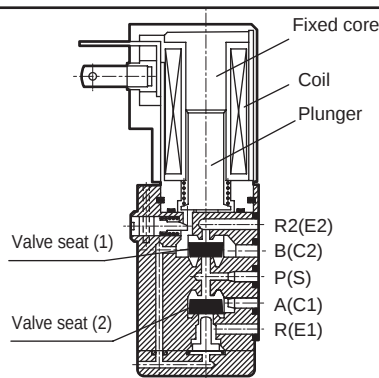


Main parts list

No.	Part name	Material	No.	Part name	Material
1	Body	Zinc die-casting	10	Piston	Copper alloy
2	Valve disc	Nitrile rubber	11	Bottom seat B	Copper alloy
3	Spring	Stainless steel	12	Diaphragm	Nitrile rubber
4	Cap	Zinc die-casting	13	Steel ball	Steel
5	Plunger	Stainless steel	14	Manual shaft	Resin
6	Plunger spring	Stainless steel	15	Manual spring	Stainless steel
7	Coil assembly	-	16	Manual pin	Resin
8	Wave pin	Piano wire	17	Body gasket	Nitrile rubber
9	Bottom seat A	Copper alloy	18	Cross-recessed pan head machine screw with spring washer	Steel

Operational principle

● When not energized
When energization of the coil is suspended, the plunger will lower and the pressure on the B (C2) side will be exhausted to the R2 (E2) side. At the same time, the valve seat (2) will lower due to the spring force and the pressure on the P (S) side will be guided to the A (C1) side.



● When energized
When the coil is energized, the plunger will rise and the pressure on the P (S) side will be guided to the B (C2) side. At the same time, the valve seat (2) will rise due to this pressure and the pressure on the A (C1) side will be exhausted to the R1 (E1) side.

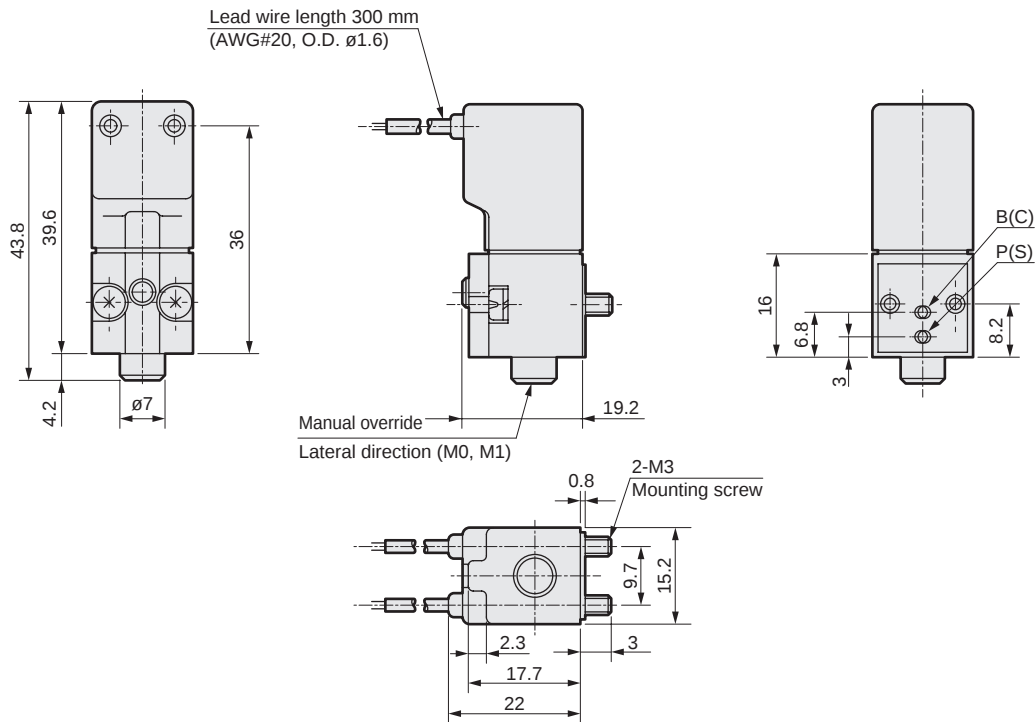
P512/P513 Series

Discrete valve 2, 3-port valve; pilot

Dimensions

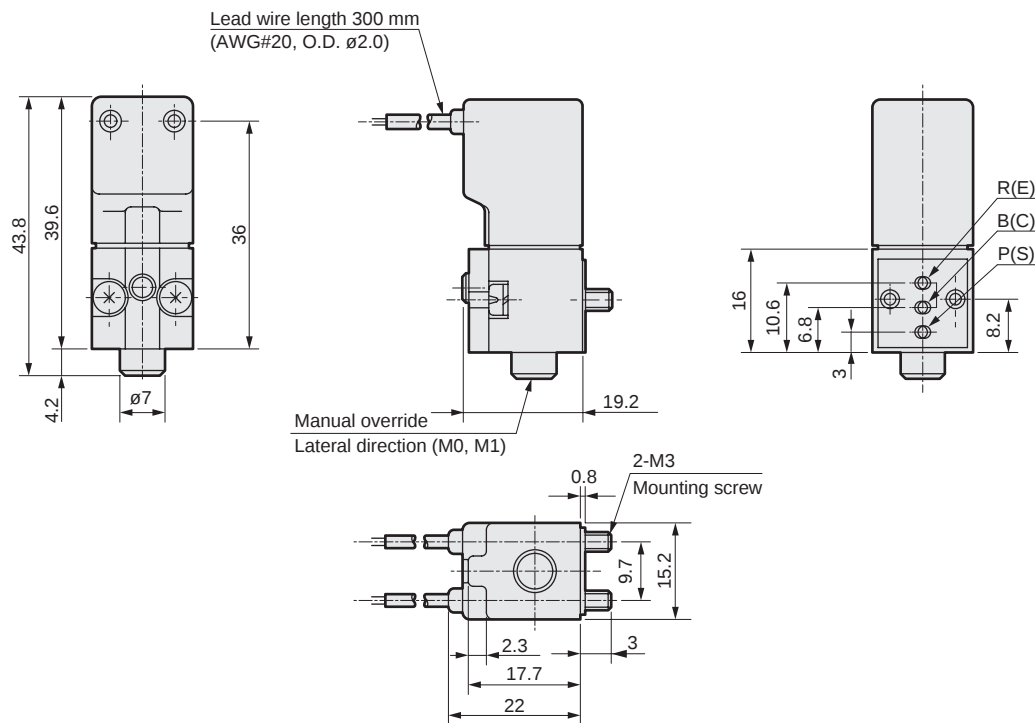
P512²/₆

● 2-port: grommet lead wire



P513²/₆

● 3-port: grommet lead wire



P512/P513 Series

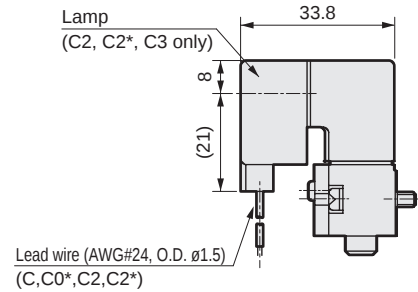
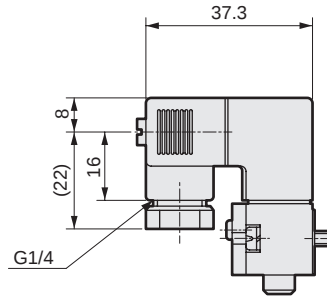
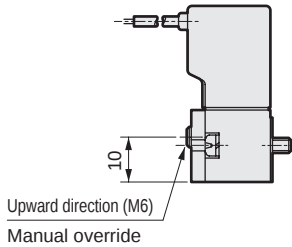
Discrete valve 2, 3-port valve; pilot

Dimensions

● Non-locking manual override upward direction: (M6)

● Compact terminal box: (B)

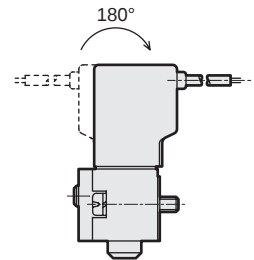
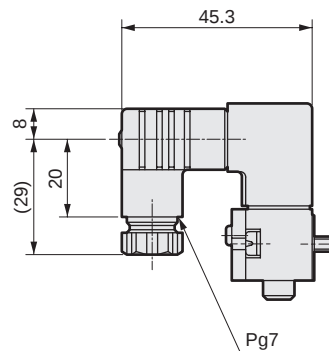
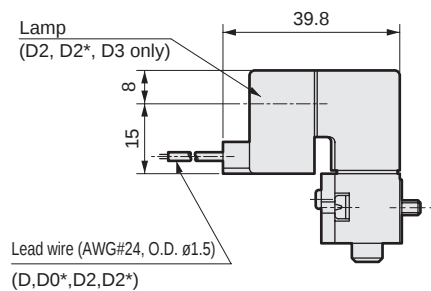
● C-connector:
(C/C0*/C1/C2/C2*/C3)



● D-connector:
(D/D0*/D1/D2/D2*/D3)

● Compact terminal box with lamp: (L)
With surge suppressor and indicator lamp: (LS)

● Coil direction 180° rotation: (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

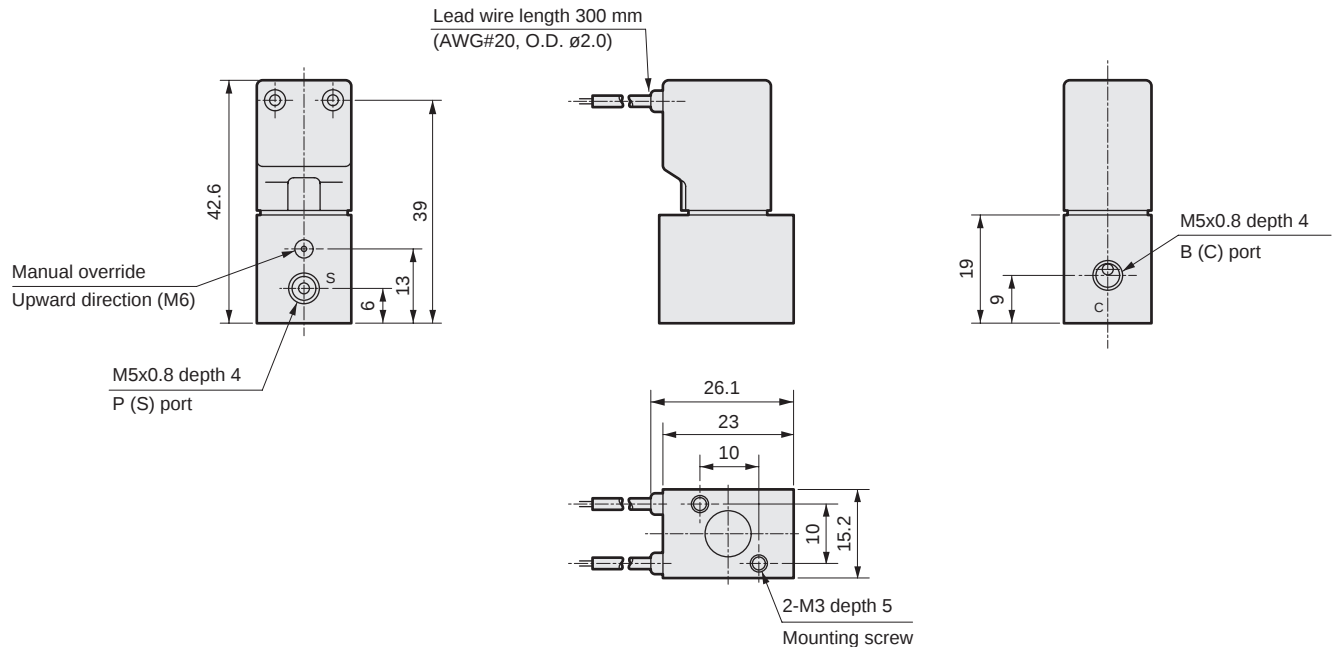
M512/M513 Series

Discrete valve 2, 3-port valve; direct mounting

Dimensions 

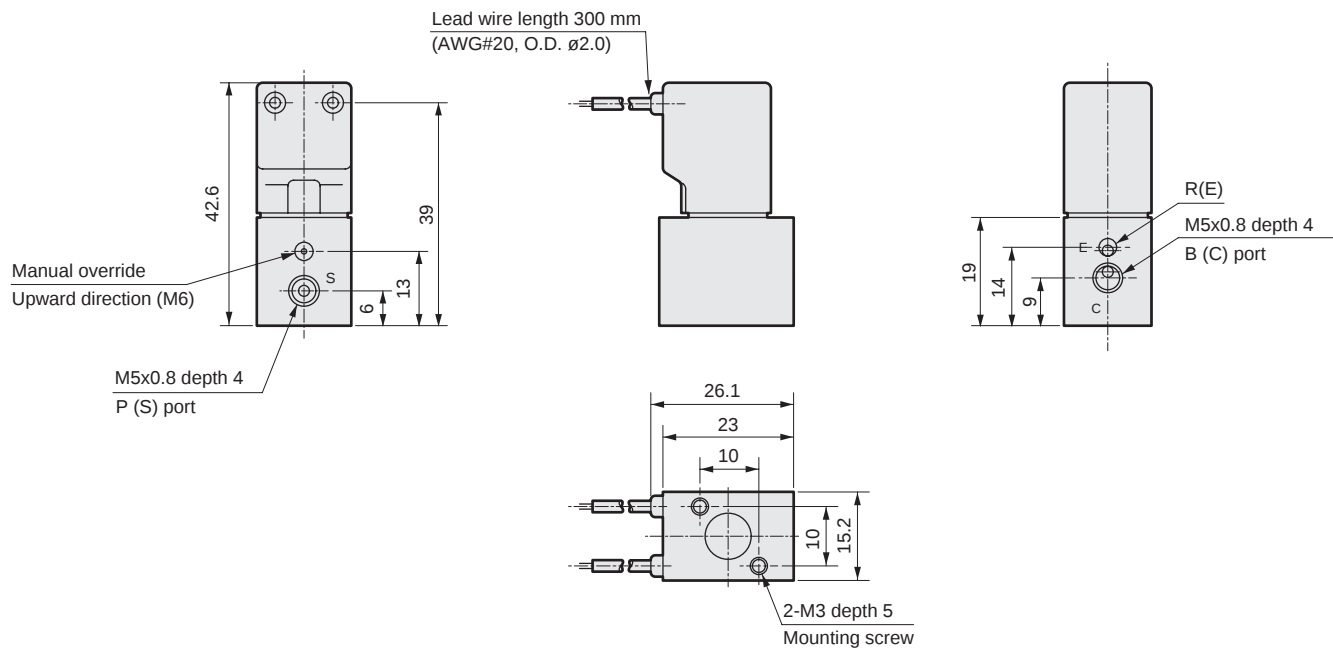
M512²₆

● 2-port: grommet lead wire



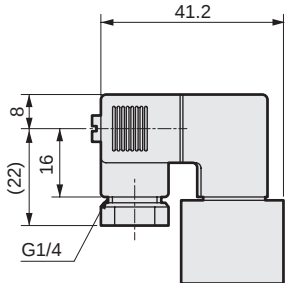
M513²₆

● 3-port valve: grommet lead wire

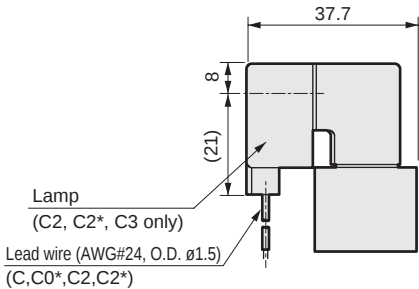


Dimensions

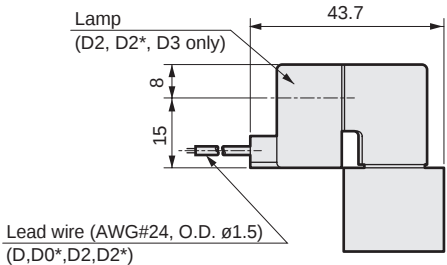
● Compact terminal box: (B)



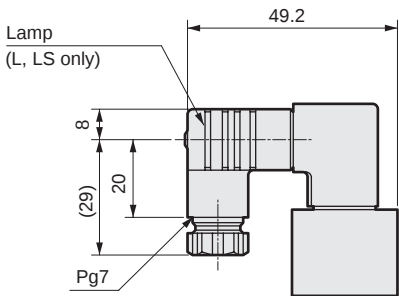
● C-connector:
(C/C0*/C1/C2/C2*/C3)



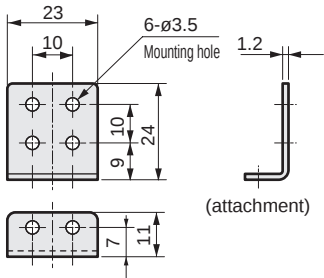
● D-connector:
(D/D0*/D1/D2/D2*/D3)



● Compact terminal box with lamp: (L)
With lamp and surge suppressor: (LS)



● L-bracket: (L) Material: Stainless steel
(Trivalent) chrome plating



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

B512/B513 Series

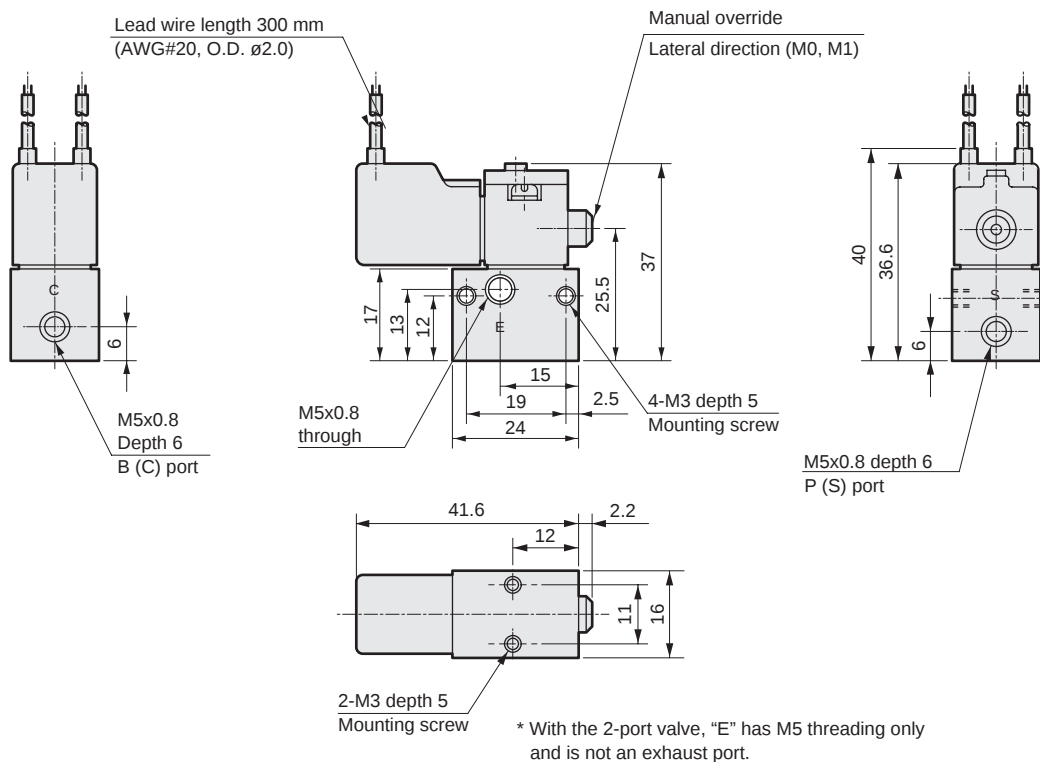
Discrete valve pilot operated 2, 3-port valve; sub-base

Dimensions



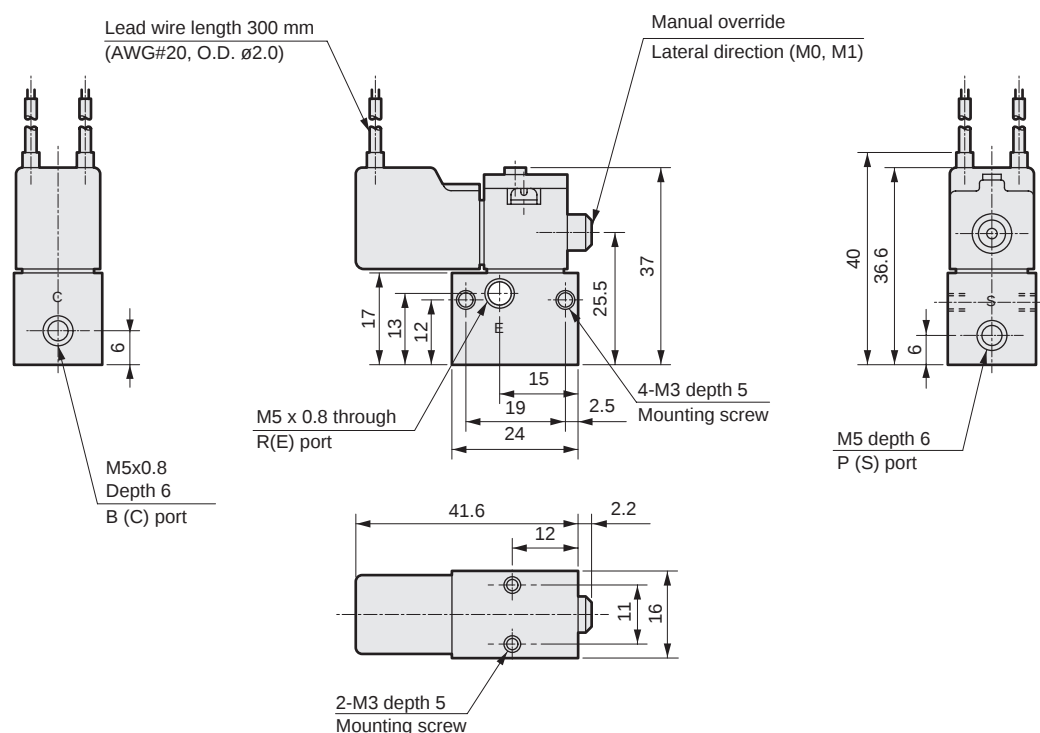
B512²/₆

● 2-port: grommet lead wire



B513²/₆

● 3-port valve: grommet lead wire

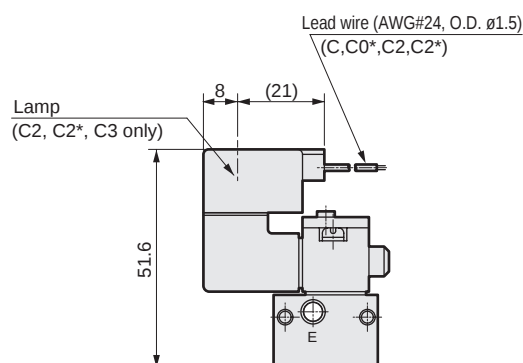
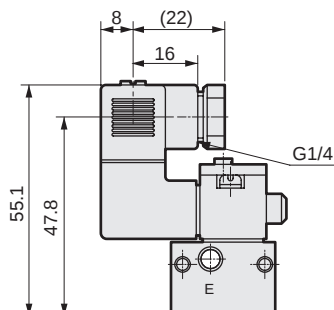
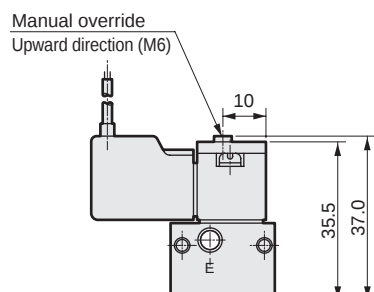


Dimensions

● Non-locking manual override upward direction: (M6)

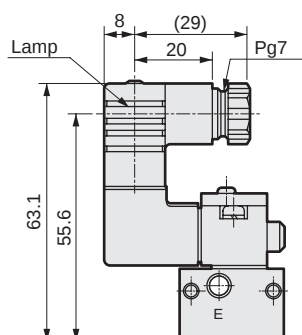
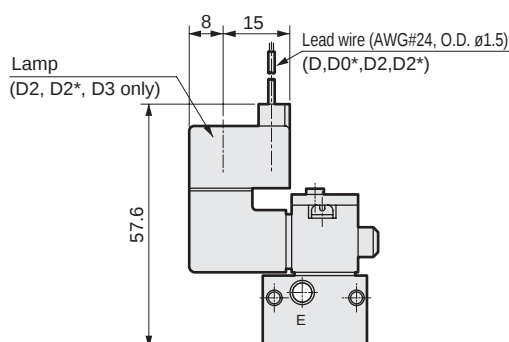
● Compact terminal box: (B)

● C-connector:
(C/C0*/C1/C2/C2*/C3)



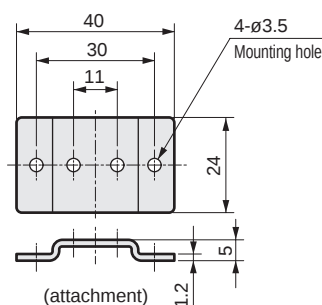
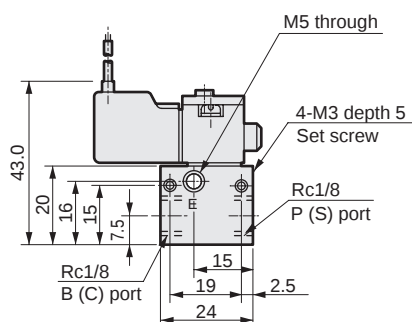
● D-connector:
(D/D0*/D1/D2/D2*/D3)

● Compact terminal box with lamp: (L)
With surge suppressor and indicator lamp: (LS)



● Port size Rc 1/8: (06)

● U type bracket: (U) Material: Stainless steel
(Trivalent) chrome plating



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

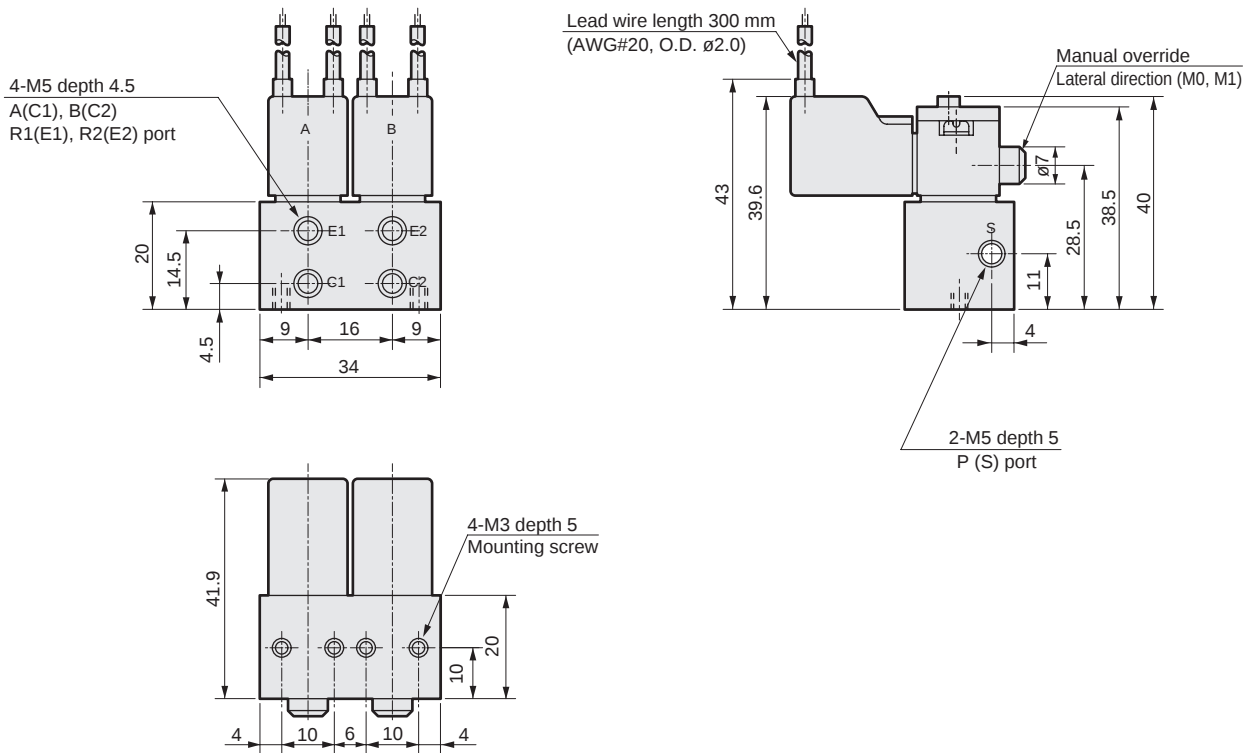
W2P513 Series

Discrete valve 5-port valve (two 3-port valves integrated); double

Dimensions

W2P513

● Grommet lead wire



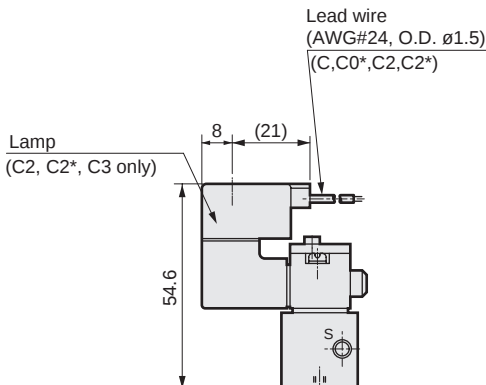
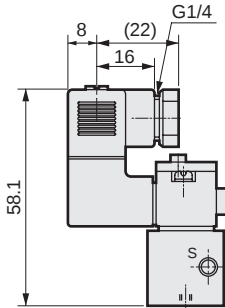
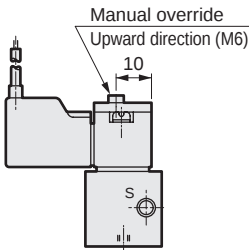
4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA/B4
MN3E
MN4E
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys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

Dimensions

● Non-locking manual override upward direction: (M6)

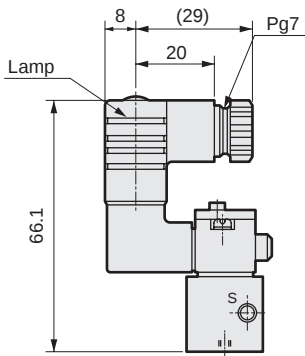
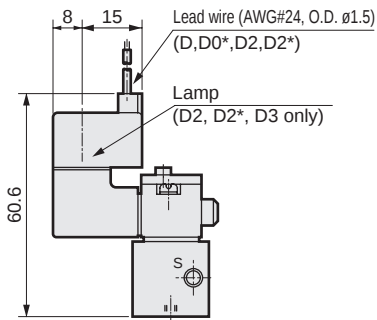
● Compact terminal box: (B)

● C-connector:
(C/C0*/C1/C2/C2*/C3)



● D-connector:
(D/D0*/D1/D2/D2*/D3)

● Compact terminal box with lamp: (L)
With surge suppressor and indicator lamp: (LS)



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

P5142 Series

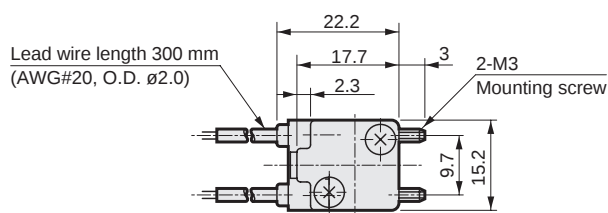
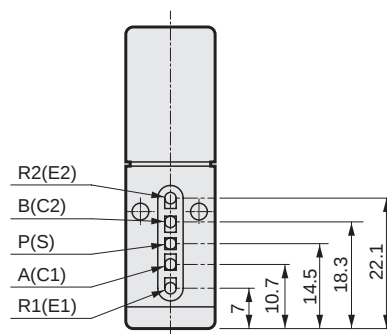
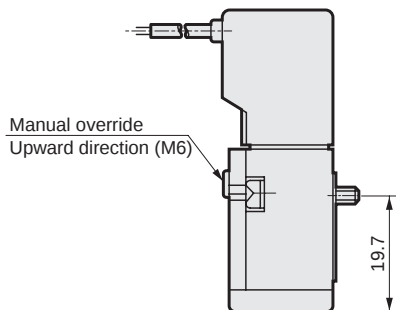
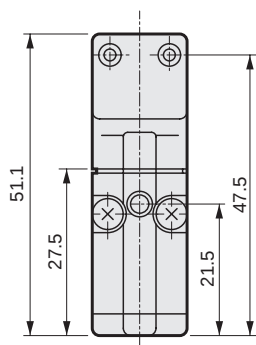
Discrete valve 5-port valve; pilot

Dimensions

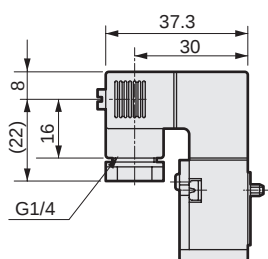


P5142

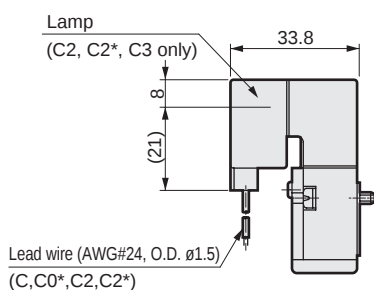
● Pilot: grommet lead wire



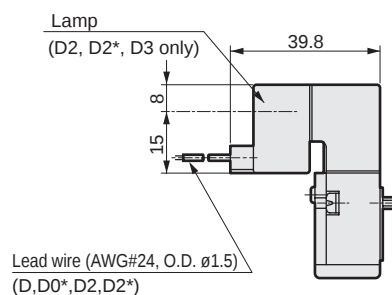
● Compact terminal box: (B)



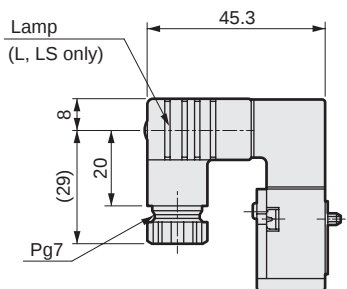
● C-connector:
(C/C0*/C1/C2/C2*/C3)



● D-connector:
(D/D0*/D1/D2/D2*/D3)



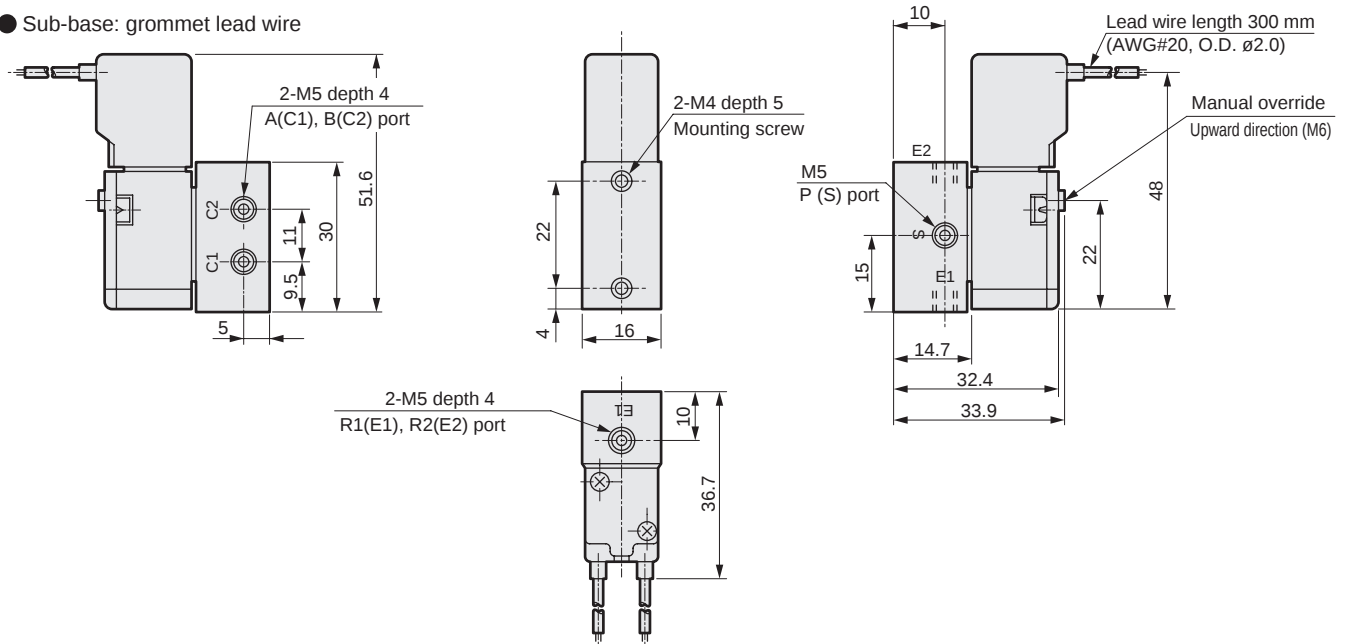
● Compact terminal box with lamp: (L)
With surge suppressor and indicator lamp: (LS)



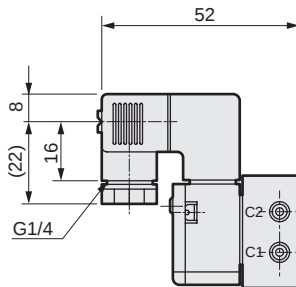
Dimensions

B5142

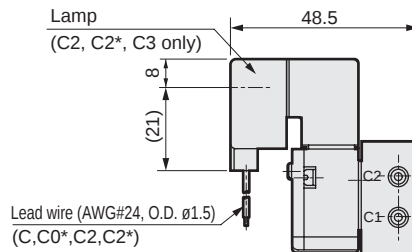
- Sub-base: grommet lead wire



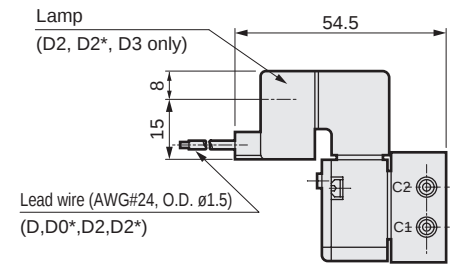
- Compact terminal box: (B)



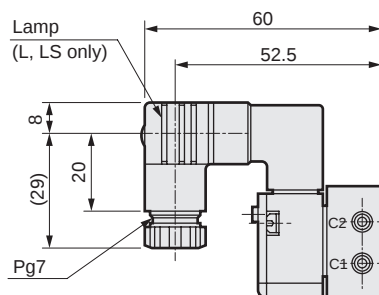
- C-connector: (C/C0*/C1/C2/C2*/C3)



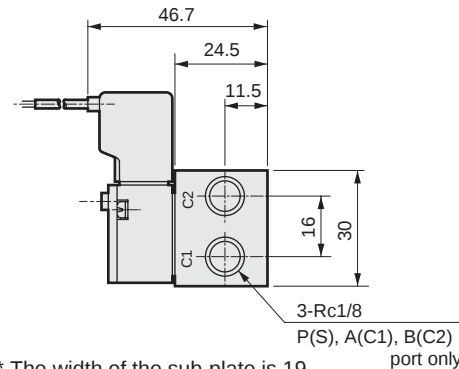
- D-connector: (D/D0*/D1/D2/D2*/D3)



- Compact terminal box with lamp: (L)
With surge suppressor and indicator lamp: (LS)

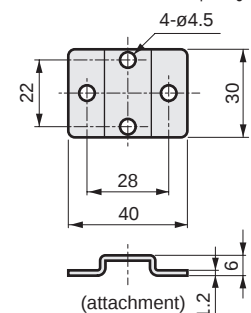


- Port size Rc1/8: (06)



* The width of the sub-plate is 19.

- U type bracket: (U) Material: Stainless steel (Trivalent) chrome plating



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

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



Individual wiring manifold
Pilot operated 2, 3, 5-port miniature pneumatic valve

B*P51* Series

● Cylinder bore size: ø6 to ø16

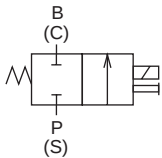


Refer to the Ending for details.

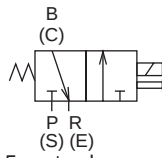


JIS symbol

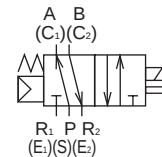
● 2-port valve



● 3-port valve



● 5-port valve
2-position single



Common specifications

Item	Description
Manifold method	Manifold integrated
Manifold	Common supply, common exhaust
Station No.	2 to 10 stations
Valve and operation	Pilot operated poppet valve
Working fluid	Compressed air/low vacuum
Max. working pressure MPa	Refer to Individual specifications listed below
Min. working pressure MPa	Refer to Individual specifications listed below
Proof pressure MPa	Refer to Individual specifications listed below
Ambient temperature °C	-10 to 50 (no freezing)
Fluid temperature °C	5 to 50
Lubrication	Not required
Degree of protection	Dust-proof
Vibration resistance m/s ²	50 or less
Shock resistance m/s ²	300 or less
Atmosphere	Cannot be used in corrosive gas environment.

Electrical specifications

Item	Description
Rated voltage V	AC 100, 200(50 / 60Hz)
	DC 12, 24
Voltage fluctuation range	±10%
Starting current	AC 100 V 0.056 / 0.044
	DC 12 V 0.150
Holding current	AC 100 V 0.028 / 0.022
	DC 12 V 0.150
Power consumption W	AC 100 V 1.8/1.4 (2.0/1.6)
	DC 12 V 1.8(2.0)
Thermal class	B (molded coil)
	Temperature rise °C 45

Reference: 100 VAC 50/60 Hz can be used with a rated voltage of 110 VAC 60 Hz and 200 VAC 50/60 Hz can be used with 220 VAC 60 Hz.

Individual specifications

Item	2-port valve		3-port valve		5-port valve
	P5122	P5126	P5132	P5136	P5142
Max. working pressure MPa	1.0	0.6	1.0	0.6	0.7
Min. working pressure MPa	0.1	0.1 (*2)	0.1	0.1 *2	0.15
Proof pressure MPa	1.5	1.5	1.5	1.5	1.05
Orifice mm	ø1.2	ø1.6	ø1.2	ø1.6	ø1.2
Response time (*1) ms	30 or less		30 or less		60 or less
Weight (n: station No.) g	57xn+1				83xn+5

*1: The response time is the value at 0.5 MPa supply pressure, with no lubrication, and with the power ON. It depends on the pressure and the lubricant quality.

*2: When specifying the pressure classification V (for low pressure, for low vacuum pressure), the units can be used with low pressure (0 to 0.29 MPa) or low vacuum (3.3 to 101.0 O kPa (abs) {25 to 760 Torr}).

[Mix manifold]

● How to list combination content

When selecting a combination manifold (write 8 from ©), list the code (refer to table on right) for required functions and the arrangement No. (numbering up to specified station No. with left side as 1) in the field for remarks below the normal model No. display as shown in the example.

Note: 2, 3-port valve and 5-port valve mix manifold is not available.

Code	Function
M2	2-port valve
M3	3-port valve
M4	5-port valve
MP	Masking plate

1	2	3	4	5
2-port valve	3-port valve	3-port valve	3-port valve	Masking Plate
(M2)	(M3)	(M3)	(M3)	(MP)

Example

The model No. when using a combination manifold of 5 stations with an arrangement such as that in the arrangement shown at left with an orifice of ø1.2 and a voltage of 200 VAC is **B5P5182-M6E-M5-AC200V**

M2 M3 M4 MP
- **1 3 0 1**

(M2= 1, M3=2 to 4, MP=5)
Enter the quantity to be used after the model No. Even when none are to be used, enter 0.

Flow characteristics

Model No.	Solenoid position	C[dm ³ /(s·bar)]	b
P5122	2-port	0.11	0.15
P5126		0.15	0.18

Model No.	Solenoid position	P→B		B→R	
		C[dm ³ /(s·bar)]	b	C[dm ³ /(s·bar)]	b
P5132	3-port	0.11	0.15	0.15	0.34
P5136		0.15	0.18	0.15	0.29

Model No.	Solenoid position	P→A/B		A/B→R1/R2	
		C[dm ³ /(s·bar)]	b	C[dm ³ /(s·bar)]	b
P5142	5-port	0.09	0.23	0.13	0.18

*1: Effective cross-sectional area S and sonic conductance C are converted as $S \approx 5.0 \times C$.

CE marking specifications

** - Voltage - **ST**

• Standard voltage of 24 VDC or less is CE marking-compatible even if the model No. is not indicated with "ST".

Copper and PTFE free specifications

● Copper- and PTFE-based materials are not used in the flow path.

** - Voltage - **P6**

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
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

B*P51* Series

Individual wiring manifold; 2, 3, 5-port valve

How to order manifold



Indicate the valve function based quantity display position for when using a mix manifold. Refer to page 1654.

K Voltage

A Model No.

B*P	B*P	B*P
512	513	514

Code	Description			
B Station No.				
2	2 stations			
to	to			
10	10 stations			

C Solenoid valve				
2	2-port valve			
3	3-port valve			
4	5-port valve			
8	Mix manifold *2 (when there are multiple solenoid positions)			

D Orifice				
2	ø1.2			
6	ø1.6			

E Manual override				
M0	Lateral non-locking(Standard) *4			
M1	Lateral locking(Optional) *4			
M4	Dust cover equipped non-locking			
M6	Upward non-locking(Standard)			
N	Without manual override(Optional)			

F Electrical connections				
Refer to the next page for electrical connections.				

G Pressure classification				
Blank	Standard			
V	For low pressure/low vacuum *6			

H Port size				
M5	M5 (Standard)			
06	Rc1/8 (optional)			

I Other options				
Blank	No			
S	Surge suppressor included *7,8			
X	Continuous energization (made to order)			

J Bracket				
Blank	No			
L	L-bracket included			

K Voltage				
AC100V	Standard	100 VAC	50/60 Hz	
AC200V	Standard	200 VAC	50/60 Hz	
DC24V	Standard	24 VDC		
DC12V	Standard	12 VDC		
AC110V	Option	110 VAC	50/60 Hz	
AC220V	Option	220 VAC	50/60 Hz	

* Other made-to-order products				
AC24V				
AC48V				
DC6V				
DC48V				

! Precautions for model No. selection

- *1: Contact CKD when using the units with a common air supply and individual exhaust. Orifice mixtures are available as made to order.
- *2: Mix manifold of 2, 3-port valve and 5-port valve is not available.
- *3: Use orifice 2 when only using 5-port valves. Use the orifice selected with the 3-port valve when using a mixture of 2 and 3-port valves.
- *4: M0 (lateral direction non-locking) and M1 (lateral direction locking) are not available with pressure classification V (for low pressure, for low vacuum pressure).
- *6: When pressure classification V (for low pressure/for low vacuum pressure) has been specified, the orifice will be "6". Draw in the vacuum from port P (S). When using at low pressure, supply from port P(S).
- *7: The unit is a suppression connector for 24 VDC or less.
- *8: The surge suppressor can only be selected when the grommet lead wire or compact terminal box "B" has been selected for the electrical connections.

F Electrical connections

Note: Refer to page 1637 for the circuit diagram with a surge suppressor/lamp.

G Pressure classification

H Port size

I Other options

J Bracket

[Example of model No.]

B5P5142-M6E-M5-AC200V

5-port valve manifold
Common air supply/common exhaust

- B Station No. : 5 stations
- C Solenoid valve : 5-port valve
- D Orifice : ø1.2
- E Manual override : Upward non-locking
- F Electrical connections : Grommet lead wire
- H Port size : M5
- I Other options : None
- J Bracket : None
- K Voltage : 200 VAC

(Electrical connection list)

		A Model No.		
Code	Description	B*P 512	B*P 513	B*P 514
F Electrical connections				
E	Grommet lead wire(300 mm)	●	●	●
B	Compact terminal box	●	●	●
C-connector (lead wire lateral direction)				
C	Std Lead wire length(300 mm)	●	●	●
C00	Lead wire length(500 mm)	●	●	●
C01	Lead wire length(1000 mm)	●	●	●
C02	Lead wire length(2000 mm)	●	●	●
C03	Lead wire length(3000 mm)	●	●	●
C1	Without lead wire	●	●	●
C2	Lead wire length(300 mm) with surge suppressor and indicator lamp	●	●	●
C20	Lead wire length(500 mm) with surge suppressor and indicator lamp	●	●	●
C21	Lead wire length(1000 mm) with surge suppressor and indicator lamp	●	●	●
C22	Lead wire length(2000 mm) with surge suppressor and indicator lamp	●	●	●
C23	Lead wire length(3000 mm) with surge suppressor and indicator lamp	●	●	●
C3	Without lead wire with surge suppressor and indicator lamp	●	●	●
D-connector (lead wire upward direction)				
D	Lead wire length(300 mm)	●	●	●
D00	Lead wire length(500 mm)	●	●	●
D01	Lead wire length(1000 mm)	●	●	●
D02	Lead wire length(2000 mm)	●	●	●
D03	Lead wire length(3000 mm)	●	●	●
D1	Without lead wire	●	●	●
D2	Lead wire length(300 mm) with surge suppressor and indicator lamp	●	●	●
D20	Lead wire length(500 mm) with surge suppressor and indicator lamp	●	●	●
D21	Lead wire length(1000 mm) with surge suppressor and indicator lamp	●	●	●
D22	Lead wire length(2000 mm) with surge suppressor and indicator lamp	●	●	●
D23	Lead wire length(3000 mm) with surge suppressor and indicator lamp	●	●	●
D3	Without lead wire with surge suppressor and indicator lamp	●	●	●
Compact terminal box				
L	Without lead wire With indicator lamp	●	●	●
LS	Without lead wire with surge suppressor and indicator lamp	●	●	●

*5: With DC voltage, L is equipped with a surge suppressor

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

B*P51²₃ Series

Individual wiring manifold; 2, 3-port valve

Dimensions

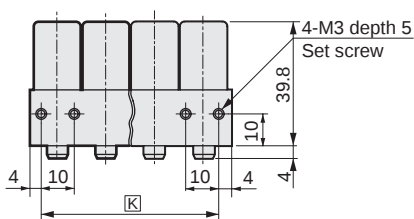
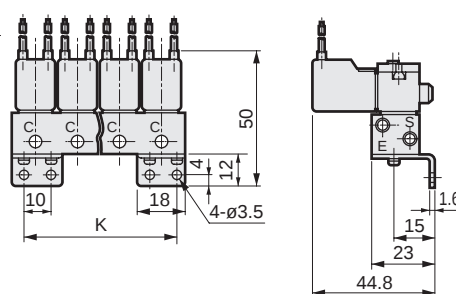
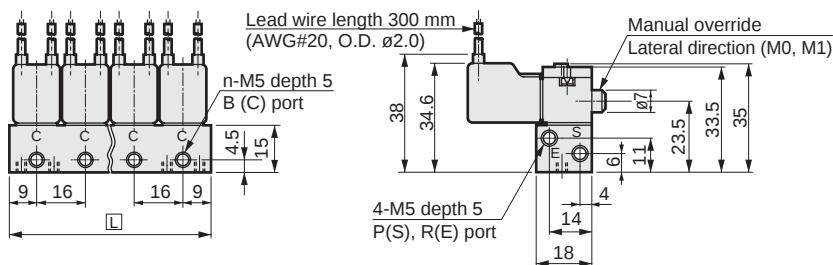


B*P51²₃

● Grommet lead wire

● L-bracket: (L)

Material: Stainless steel
(Trivalent) chrome plating



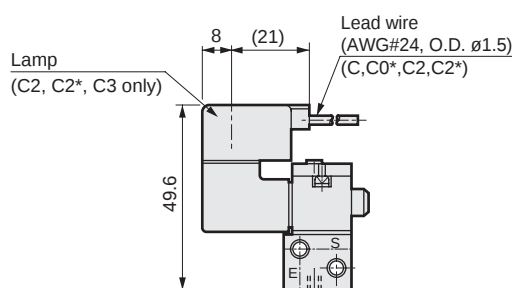
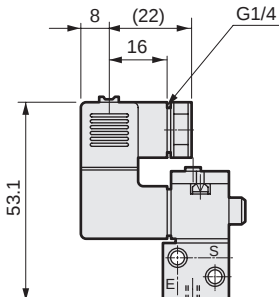
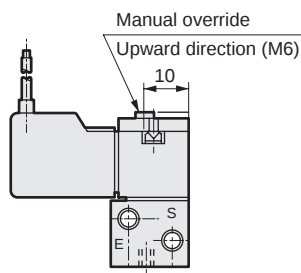
* L bracket will be attached.
However, in the case of 2 stations,
the installation of the bracket can
only be on either the left or right.

Station No.	2	3	4	5	6	7	8	9	10
K	26	42	58	74	90	106	122	138	154
L	34	50	66	82	98	114	130	146	162

● Non-locking manual override upward direction

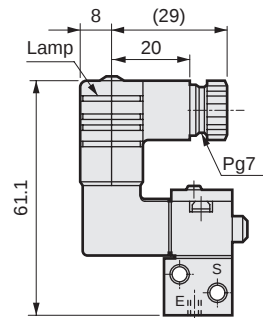
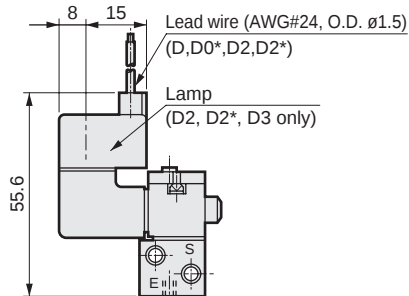
● Compact terminal box: (B)

● C-connector: (C/C0*/C1/C2/C2*/C3)

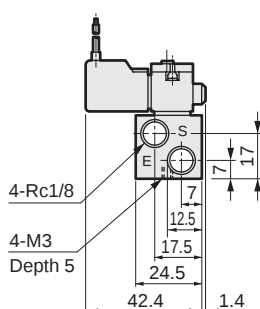
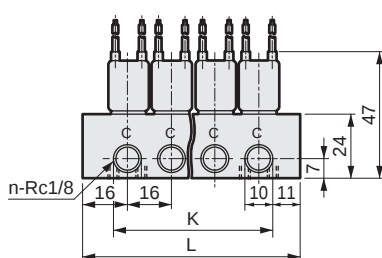


● D-connector: (D/D0*/D1/D2/D2*/D3)

● Compact terminal box with lamp: (L)
With surge suppressor and indicator lamp: (LS)



● Port size Rc1/8: (06)



Station No.	2	3	4	5	6	7	8	9	10
K	26	42	58	74	90	106	122	138	154
L	48	64	80	96	112	128	144	160	176

Dimensions



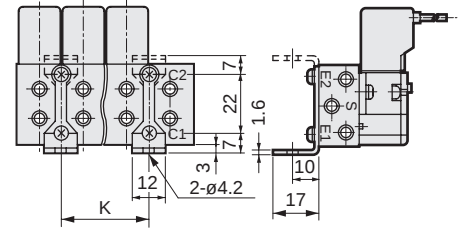
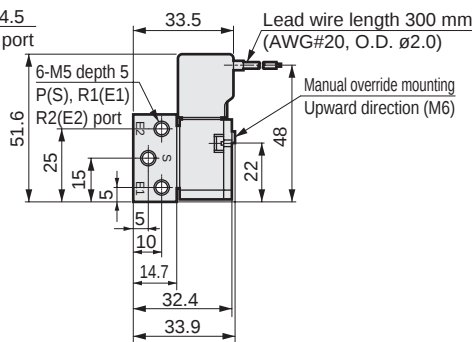
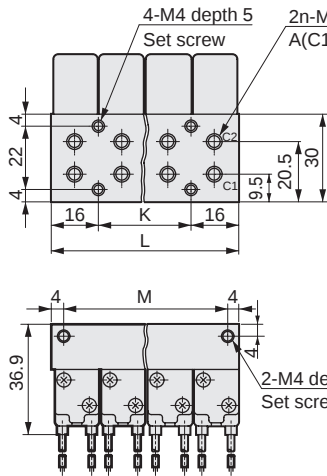
B*P514

● Grommet lead wire

* With B*P518 (mix manifold), 2-port valves and 3-port valves will be mounted on the manifold base of B*P514.

● L-bracket: (L)

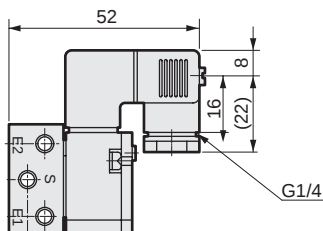
Material: Stainless steel
(Trivalent)
chrome plating



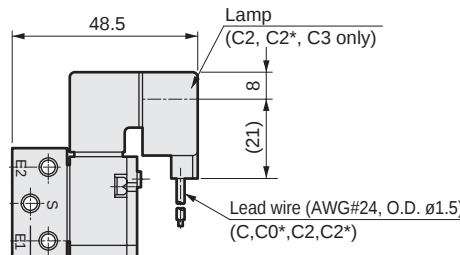
* L bracket will be attached.

Station No.	2	3	4	5	6	7	8	9	10
K	0	16	32	48	64	80	96	112	128
L	32	48	64	80	96	112	128	144	160
M	24	40	56	72	88	104	120	136	152

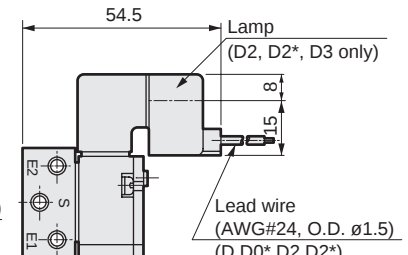
● Compact terminal box: (B)



● C-connector: (C/C0*/C1/C2/C2*/C3)

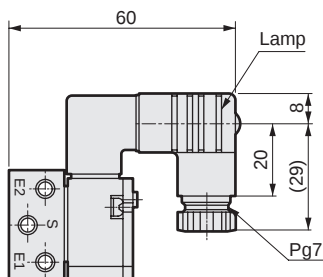


● D-connector: (D/D0*/D1/D2/D2*/D3)

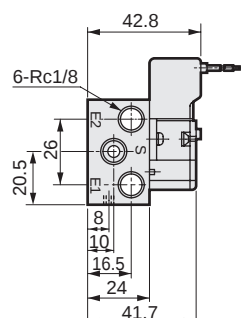
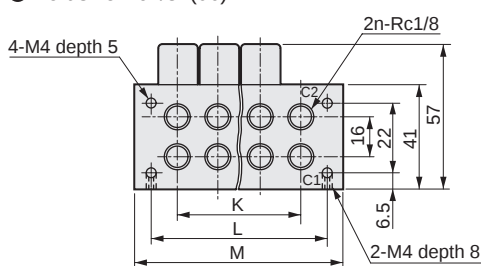


● Compact terminal box with lamp: (L)

With surge suppressor and indicator lamp: (LS)



● Port size Rc1/8: (06)



Station No.	2	3	4	5	6	7	8	9	10
K	16	32	48	68	80	96	112	128	144
L	36	52	68	84	100	116	132	148	164
M	48	64	80	96	112	128	144	160	176

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



Block manifold
Pilot operated 2, 3, 5-port valve miniature pneumatic valve

N*P51* Series

● Cylinder bore size: $\varnothing 6$ to $\varnothing 16$

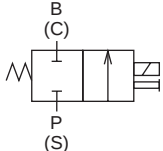


Refer to the Ending for details.

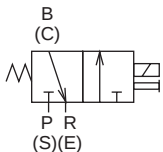


JIS symbol

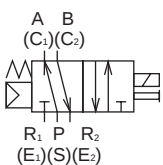
● 2-port valve



● 3-port valve



● 5-port valve
2-position single



Common specifications

Item	Description
Manifold method	Manifold block system (DIN rail mount)
Manifold	Common supply/common exhaust
Station No.	2 to 25 stations
Valve and operation	Pilot operated poppet valve
Working fluid	Compressed air/low vacuum
Max. working pressure MPa	Refer to Individual specifications listed below
Min. working pressure MPa	Refer to Individual specifications listed below
Proof pressure MPa	1.5 (≈ 220 psi, 15 bar) (*1)
Ambient temperature $^{\circ}\text{C}$	-10 (14 $^{\circ}\text{F}$) to 40 (104 $^{\circ}\text{F}$) (no freezing)
Fluid temperature $^{\circ}\text{C}$	5 (41 $^{\circ}\text{F}$) to 40 (104 $^{\circ}\text{F}$)
Lubrication	Not required
Degree of protection	Dust-proof
Vibration resistance m/s^2	50 or less
Shock resistance m/s^2	300 or less
Atmosphere	Cannot be used in corrosive gas environment.

*1: P5142 will be 1.05 MPa.

Electrical specifications

Item	Description
Rated voltage	AC 100, 200 (50/60 Hz) V DC 12, 24
Voltage fluctuation range	$\pm 10\%$
Starting current	AC 100 V 0.056 / 0.044 200 V 0.034 / 0.026 A DC 12 V 0.150 24 V 0.075
Holding current	AC 100 V 0.028 / 0.022 200 V 0.017 / 0.013 A DC 12 V 0.150 24 V 0.075
Power consumption	AC 100 V 1.8 / 1.4 200 V (2.0/1.6) W 2.1 / 1.6 (2.3/1.8) () : With indicator lamp DC 12 V 1.8(2.0) 24 V 1.8(2.0)
Thermal class	B (molded coil)
Temperature rise $^{\circ}\text{C}$	45 (113 $^{\circ}\text{F}$)

Reference: 100 VAC 50/60 Hz can be used with a rated voltage of 110 VAC 60 Hz and 200 VAC 50/60 Hz can be used with 220 VAC 60 Hz.

Performance/characteristics by model

1 MPa $\approx$ 145.0 psi, 1 MPa = 10 bar

Item	2-port valve		3-port valve		5-port valve
	P5122	P5126	P5132	P5136	P5142
Max. working pressure MPa	1.0	0.6	1.0	0.6	0.7 (≈ 100 psi, 7 bar)
Min. working pressure MPa	0.1	0.1 (*2)	0.1	0.1 *2	0.15 (≈ 22 psi, 1.5 bar)
Orifice mm	$\varnothing 1.2$	$\varnothing 1.6$	$\varnothing 1.2$	$\varnothing 1.6$	$\varnothing 1.2$
Response time *1 ms	30 or less		30 or less		60 or less

*1 : The response time is the value at 0.5 MPa supply pressure, with no lubrication, and with the power ON. It depends on the pressure and the lubricant quality.

*2 : When specifying the pressure classification V (for low pressure, for low vacuum pressure), the units can be used with low pressure (0 to 0.29 MPa) or low vacuum (3.3 to 101.00 kPa (abs) {25 to 760 Torr}).

Weight

Valve block (g)	N513*-UH4(SH4)	N5142-UH4(SH4)
	17	21
Supply block (g)	P □ UH6	P □ SH6
	25	34
Exhaust block (g)	R □ UH6	R □ SH6
	25	34
DIN rail (g)	13+3x(n+m)	
n: number of valve blocks, m: number of other blocks		

Flow characteristics

Model No.	Solenoid position	C[dm ³ /(s·bar)]	b
P5122	2-port	0.11	0.15
P5126		0.15	0.18

Model No.	Solenoid position	P→B		B→R	
		C[dm ³ /(s·bar)]	b	C[dm ³ /(s·bar)]	b
P5132	3-port	0.11	0.15	0.15	0.34
P5136		0.15	0.18	0.15	0.29

Model No.	Solenoid position	P→A/B		A/B→R1/R2	
		C[dm ³ /(s·bar)]	b	C[dm ³ /(s·bar)]	b
P5142	5-port	0.09	0.23	0.13	0.18

*1: Effective cross-sectional area S and sonic conductance C are converted as $S \approx 5.0 \times C$.

CE marking specifications

** - Voltage - **ST**

- Standard voltage of 24 VDC or less is CE marking-compatible even if the model No. is not indicated with "ST".

Copper and PTFE free specifications

- Copper- and PTFE-based materials are not used in the flow path.

** - Voltage - **P6**

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
HMV HSV
2QV 3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

N*P51* Series

Block manifold; 2, 3, 5-port valve

How to order block manifold

N 7 P51 3 2 - M6 B - - AC100V

Note Be sure to fill in the "Manifold specifications sheet" (page 1670).

A Model No.

B Station No.

C Solenoid valve
*2

D Orifice
*3

E Manual override

F Electrical connections

Note Refer to page 1637 for the circuit diagram with a surge suppressor/lamp.

G Pressure classification

H Coil direction

I Other options

J Voltage

A Model No.

2-port N*P 512	3-port N*P 513	5-port N*P 514
----------------------	----------------------	----------------------

Code	Description			
B Station No.				
2	2 stations			
to	to	●	●	●
25	25 stations	*1		

C Solenoid valve				
2	2-port valve	●		
3	3-port valve		●	
4	5-port valve			●
8	Mix manifold (when there are multiple solenoid positions)	●	●	●

D Orifice				
2	ø1.2	●	●	●
6	ø1.6	●	●	

E Manual override				
M0	Lateral non-locking (standard)	*4	●	●
M1	Lateral locking (option)	*4	●	●
M4	Dust cover equipped non-locking		●	
M6	Upward non-locking (standard)		●	●
N	No manual override (option)		●	●

F Electrical connections				
Refer to the next page for electrical connections.				

G Pressure classification				
Blank	Standard		●	●
V	For low pressure and low vacuum	*6	●	●

H Coil direction				
Blank	Standard direction		●	●
R	180° rotation direction	*7	●	●

I Other options				
Blank	None		●	●
S	Surge suppressor attached	*8	●	●
X	Continuous energization (custom order)			●

J Voltage				
Standard	AC100V	100 VAC 50/60 Hz	●	●
	AC200V	200 VAC 50/60 Hz	●	●
	DC24V	24 VDC	●	●
	DC12V	12 VDC	●	●
Option	AC110V	110 VAC 50/60 Hz	●	●
	AC220V	220 VAC 50/60 Hz	●	●

* Other custom order products				
AC24V		●	●	●
AC48V		●	●	●
DC6V		●	●	●
DC48V		●	●	●

⚠ Precautions for model No. selection

- *1 : The max. station No. is 25.
- *2 : Use orifice 2 when only using 5-port valves. Use the orifice selected with the 3-port valve when using a mixture of 2, 3-port valves.
- *3 : Orifice mixtures of 2, 3-port valves are available as a custom order product.
- *4 : M0 (lateral direction non-locking) and M1 (lateral direction locking) are not available with pressure classification V (for low pressure, for low vacuum).
- *6 : When pressure classification V (for low pressure/for low vacuum pressure) has been specified, the orifice will be "6". Draw in the vacuum from P(S) port. Pressure classification V (for low pressure, low vacuum pressure) is not available with 5-port valves. When using at low pressure, supply from the P(S) port.
- *7 : In cases when coil direction R (180° rotation direction) has been specified, electrical connections will be standardly supported with only E. Consult with CKD for other electrical connections.
- *8 : The surge suppressor can only be selected when the grommet lead wire or compact terminal box "B" has been selected for the electrical connections.

[Example of model No.]

N7P5132-M0B-S-AC100V

Miniature pneumatic valve block manifold

- B** Station No. : 7 stations
- C** Solenoid valve : 3-port valve
- D** Orifice : ø1.2
- E** Manual override : Lateral non-locking
- F** Electrical connections : Compact terminal box
- G** Pressure classification : Standard
- H** Coil direction : Standard direction
- I** Other options : Surge suppressor attached
- J** Voltage : 100 VAC

[Electrical connection list]

		A Model No.		
		2-port N*P 512	3-port N*P 513	5-port N*P 514
Code	Description			
F Electrical connections				
E	Standard Grommet lead wire (300 mm)	●	●	●
B	Standard Compact terminal box	●	●	●
C-connector (lead wire lateral direction)				
C	Std. Lead wire length (300 mm)	●	●	●
C00	Lead wire length (500 mm)	●	●	●
C01	Lead wire length (1000 mm)	●	●	●
C02	Lead wire length (2000 mm)	●	●	●
C03	Lead wire length (3000 mm)	●	●	●
C1	Option Without lead wire	●	●	●
C2	Option Lead wire length (300 mm) with surge suppressor and indicator lamp	●	●	●
C20	Option Lead wire length (500 mm) with surge suppressor and indicator lamp	●	●	●
C21	Option Lead wire length (1000 mm) with surge suppressor and indicator lamp	●	●	●
C22	Option Lead wire length (2000 mm) with surge suppressor and indicator lamp	●	●	●
C23	Option Lead wire length (3000 mm) with surge suppressor and indicator lamp	●	●	●
C3	Option Without lead wire with surge suppressor and indicator lamp	●	●	●
D-connector (lead wire upward direction)				
D	Std. Lead wire length (300 mm)	●	●	●
D00	Lead wire length (500 mm)	●	●	●
D01	Lead wire length (1000 mm)	●	●	●
D02	Lead wire length (2000 mm)	●	●	●
D03	Lead wire length (3000 mm)	●	●	●
D1	Option Without lead wire	●	●	●
D2	Option Lead wire length (300 mm) with surge suppressor and indicator lamp	●	●	●
D20	Option Lead wire length (500 mm) with surge suppressor and indicator lamp	●	●	●
D21	Option Lead wire length (1000 mm) with surge suppressor and indicator lamp	●	●	●
D22	Option Lead wire length (2000 mm) with surge suppressor and indicator lamp	●	●	●
D23	Option Lead wire length (3000 mm) with surge suppressor and indicator lamp	●	●	●
D3	Option Without lead wire with surge suppressor and indicator lamp	●	●	●
Compact terminal box				
L	Option Without lead wire with indicator lamp	●	●	●
LS	Option Without lead wire with surge suppressor and indicator lamp	●	●	●

*5 : The DC voltage model of L is equipped with a surge suppressor.

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

N*P51* Series

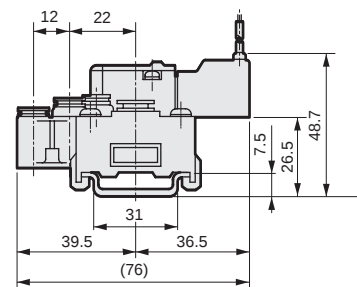
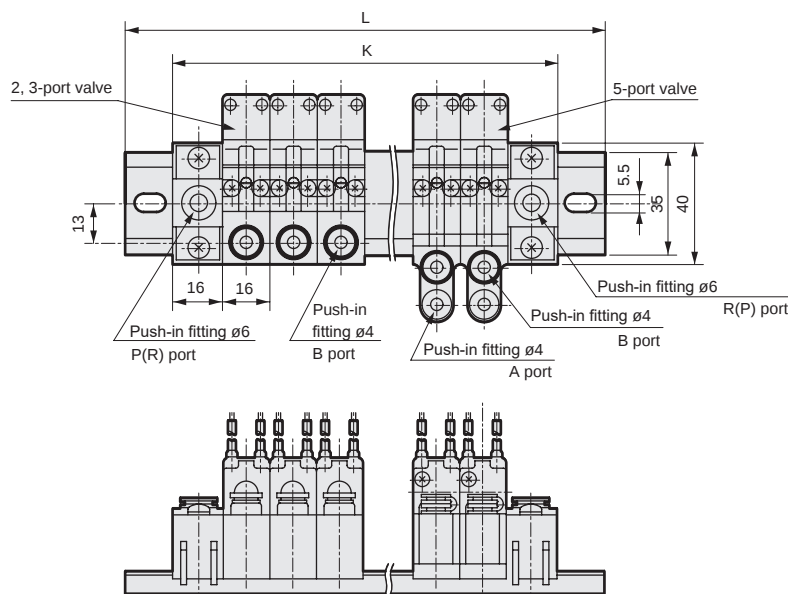
Block manifold 2, 3, 5-port valve; upward piping

Dimensions



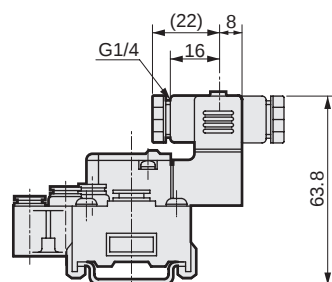
N*P51

- Push-in fitting upward piping: grommet lead wire

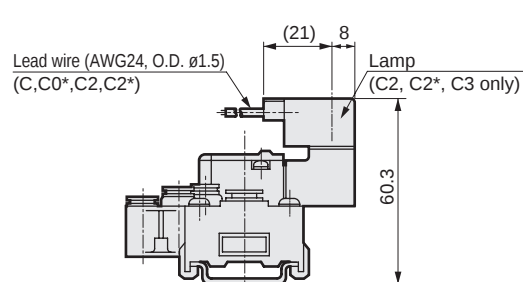


Station No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
K	48	64	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320	336	352	368	384	400	416	432
L	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320	336	352	368	384	400	416	432	448	464

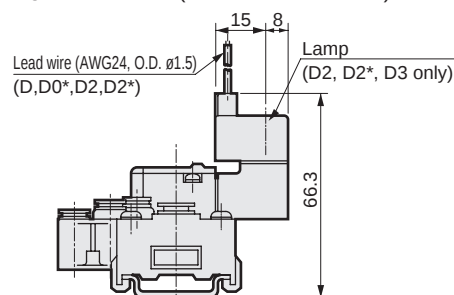
- Compact terminal box: (B)



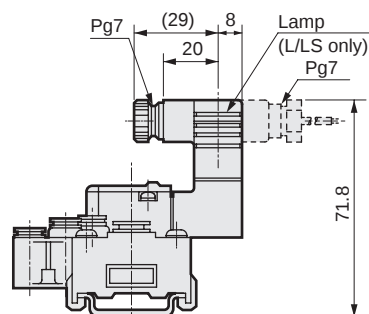
- C-connector: (C/C0*/C1/C2/C2*/C3)



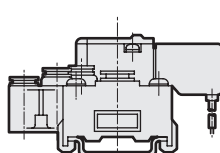
- D-connector: (D/D0*/D1/D2/D2*/D3)



- Compact terminal box with lamp: (L)
With surge suppressor and indicator lamp: (LS)



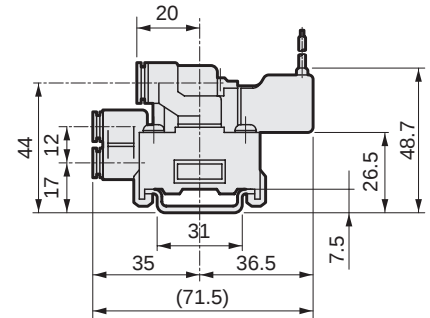
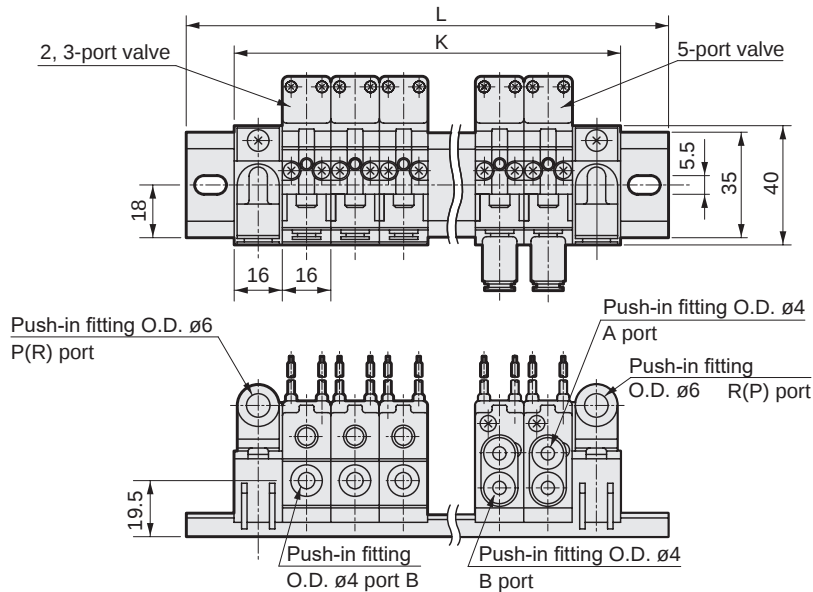
- Coil 180° rotation: (R)



Dimensions

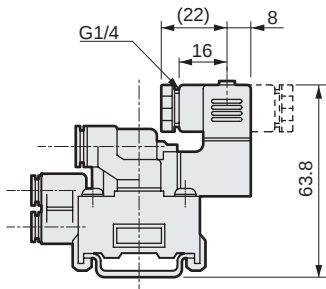
N*P51

- Push-in fitting lateral piping: grommet lead wire

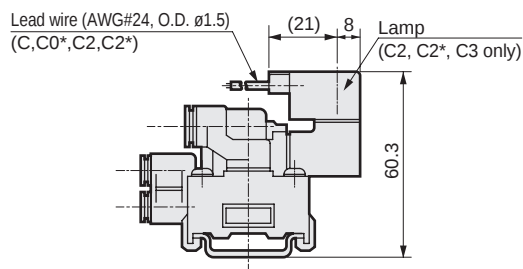


Station No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
K	48	64	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320	336	352	368	384	400	416	432
L	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320	336	352	368	384	400	416	432	448	464

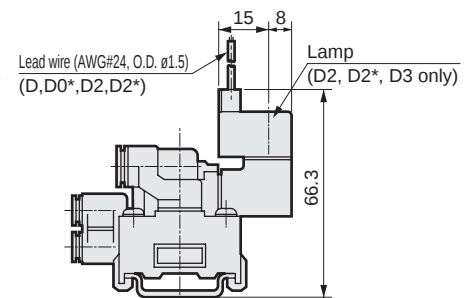
- Compact terminal box: (B)



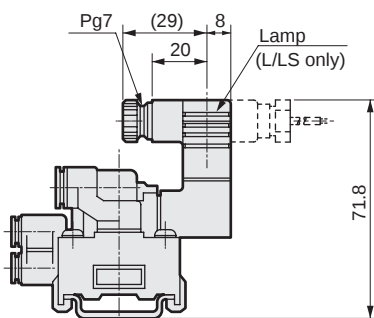
- C-connector: (C/C0*/C1/C2/C2*/C3)



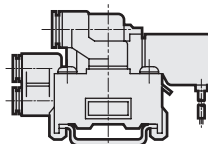
- D-connector: (D/D0*/D1/D2/D2*/D3)



- Compact terminal box with lamp: (L)
With surge suppressor and indicator lamp: (LS)



- Coil 180° rotation: (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

Block components

A Supply block (PL) (PR)

B Exhaust block (RL) (RR)

C Discrete sub-block for 2, 3-port valve (M3)

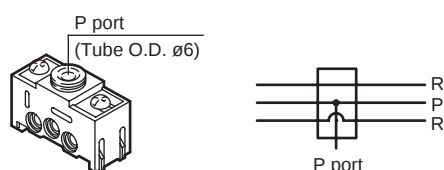
D Discrete sub-block for 5-port valve (**M4**)

E Discrete solenoid valve for manifold (N51)

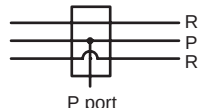
The model No. display details of **C**, **D**, etc. other than **K** are the same as “How to order block manifolds” on page 1662.

F Intermediate supply block (PM)

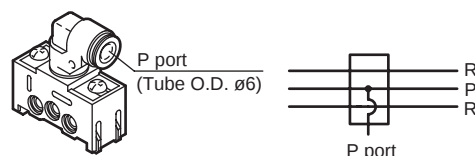
● N5132-PMUH6



Upward piping



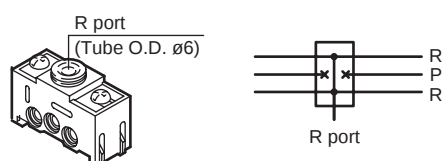
● N5132-PMSH6



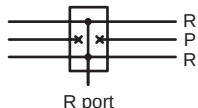
Side piping

G Intermediate exhaust block (RM)

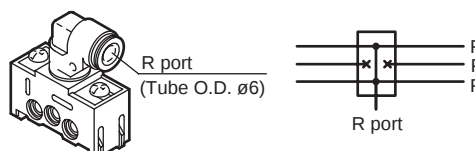
● N5132-RMUH6



Upward piping



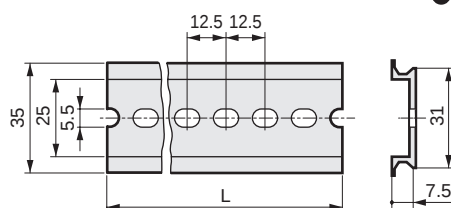
● N5132-RMSH6



Side piping

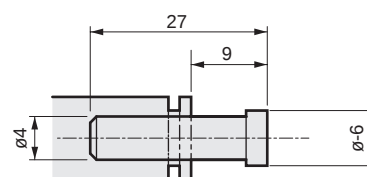
H Related products

● Mounting rail BAA

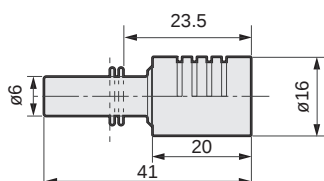


Model No.	L
BAA 500	500
BAA1000	1000

● Plug GWP4-B



● Silencer: SLW-H6



● Soft nylon tube

How to order



Soft nylon tube

A Compatible tube O.D. size	
04	ø4
06	ø6

* The O.D. tolerance is within ± 0.1 mm.

● Urethane tube

How to order



Urethane tube

A Compatible tube O.D. size	
04	ø4
06	ø6

* The O.D. tolerance is $+0.1$ mm or less.

● New urethane tube

How to order



New urethane tube

A Compatible tube O.D. size	
04	ø4
06	ø6

* The O.D. tolerance is $+0.1$ mm or less.

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