

Manifold Specifications



Manifold Specifications

| Model | | VV3Z1-01-□1 | VV4Z1-20-□1 |
|------------------------|-----------|---------------------------------|-------------|
| Manifold type | | Single base/B mount | |
| P(SUP)/R(EXH) | | Common SUP/Common EXH | |
| Valve stations | | 2 to 20 stations ⁽¹⁾ | |
| A port | Location | Valve | |
| Porting specifications | Direction | Top | |
| | Port size | 1(P), 3(R) port | M5 x 0.8 |
| | | 2(A) port | M5 x 0.8 |

- Note 1) If there are more than 10 stations, exhaust from both sides of manifold.
 Note 2) Not able to use VZ120 and VZ110 on the same manifold base.
 Note 3) In the case of VZ120, supply air to 3 (R) port and exhaust from 1(P) port.

Flow Characteristics

| Manifold | Port size | | Flow characteristics | | | | | |
|-------------|-----------------|-----------|------------------------------|------|------|------------------------------|-------|-------|
| | | | 1 → 2 (P → A) | | | 2 → 3 (A → R) | | |
| | 1(P), 3(R) Port | A, B Port | C [dm ³ /(s-bar)] | b | Cv | C [dm ³ /(s-bar)] | b | Cv |
| VV3Z1-01-□1 | M5 x 0.8 | M5 x 0.8 | 0.13 | 0.13 | 0.03 | 0.22 | 0.074 | 0.048 |
| VV4Z1-20-□1 | 1/8 | M5 x 0.8 | 0.13 | 0.1 | 0.03 | 0.22 | 0.15 | 0.052 |

How to Order Manifold

Instruct by specifying the valves and blanking plate assembly to be mounted on the manifold along with the manifold base model no.

(Example) VV3Z1-01-031.....1 pc. (Manifold base)

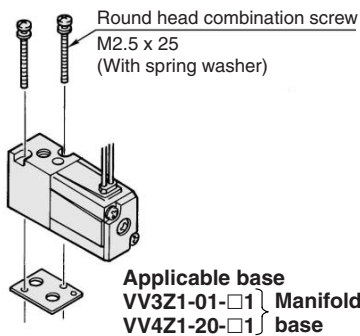
*VZ110-5LZ-M5.....2 pcs. (Valve)

*DXT170-25-1A.....1 pc. (Blanking plate assembly)

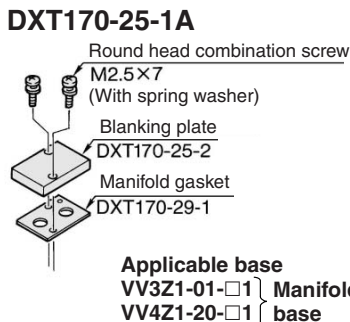
↳ The asterisk denotes the symbol for assembly. Prefix it to the part nos. of the solenoid valve, etc.

Option

Combinations of Solenoid Valve, Gasket and Manifold

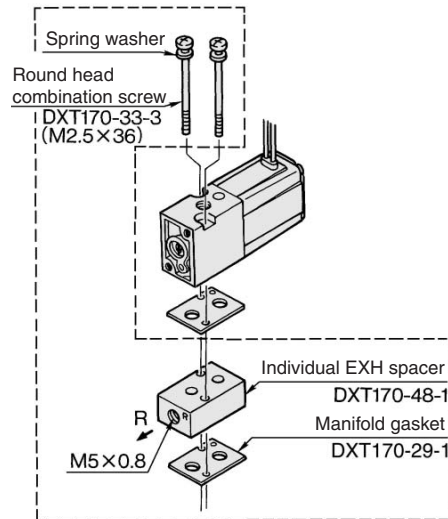


Blanking Plate Assembly



Individual EXH Spacer Assembly

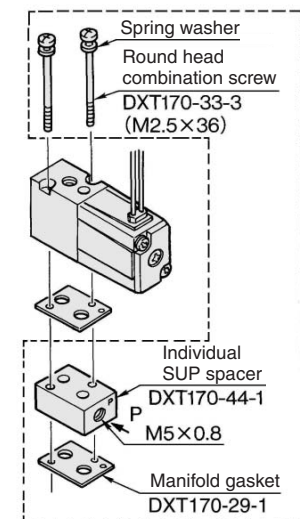
DXT170-48-1A



Applicable base
VV3Z1-01-□1 } Manifold
VV4Z1-20-□1 } base

Individual SUP Spacer Assembly

DXT170-44-1A



Applicable base
VV3Z1-01-□1 } Manifold
VV4Z1-20-□1 } base

Caution Mounting Screw Tightening Torques

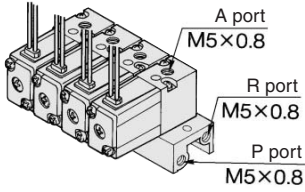
M2.5: 0.45 N·m

Warning

When mounting a solenoid valve on the manifold base or sub-plate, etc., the mounting direction is determined. If mounted in the wrong direction, the equipment to be wired might result in malfunction. Refer to dimensions of this catalog and use caution to the mounting direction.

3 Port Solenoid Valve Rubber Seal, Body Ported **Series VZ100**

Type 01

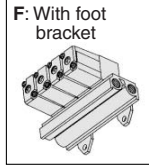


How to Order

VV3Z1 - 01 - 05 1 -

| Stations | |
|----------|-------------|
| 02 | 2 stations |
| ⋮ | ⋮ |
| 20 | 20 stations |

Option



* Bracket is not mounted.

Applicable solenoid valve
VZ110-□□□-M5
VZ120-□□□-M5
Applicable blanking plate assembly
DXT170-25-1A
Individual EXH spacer assembly
DXT170-48-1A
Individual SUP spacer assembly
DXT170-44-1A



Note) • If there are more than 10 stations, exhaust from both sides of manifold.
• It is not able to use VZ110 and VZ120 on the same manifold base.

V100

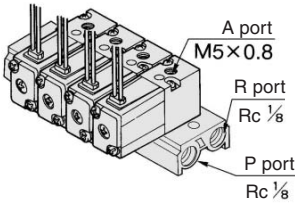
SY

SYJ

VK

VZ

Type 20



How to Order

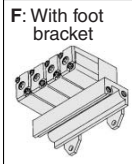
VV4Z1 - 20 - 05 1 - -

| Stations | |
|----------|-------------|
| 02 | 2 stations |
| ⋮ | ⋮ |
| 20 | 20 stations |

Thread type

| | |
|-----|------|
| Nil | Rc |
| 00F | G |
| 00N | NPT |
| 00T | NPTF |

Option



* Bracket is not mounted.

Applicable solenoid valve
VZ110-□□□-M5
VZ120-□□□-M5
Applicable blanking plate assembly
DXT170-25-1A
Individual EXH Spacer assembly
DXT170-48-1A
Individual SUP Spacer assembly
DXT170-44-1A



Note) • If there are more than 10 stations, supply air to SUP port on both sides of the manifold and exhaust from EXH port on both sides of the manifold.
• It is not able to use VZ110 and VZ120 on the same manifold base.

VT

VP

VG

VP

S070

VQ

VKF

VQZ

VZ

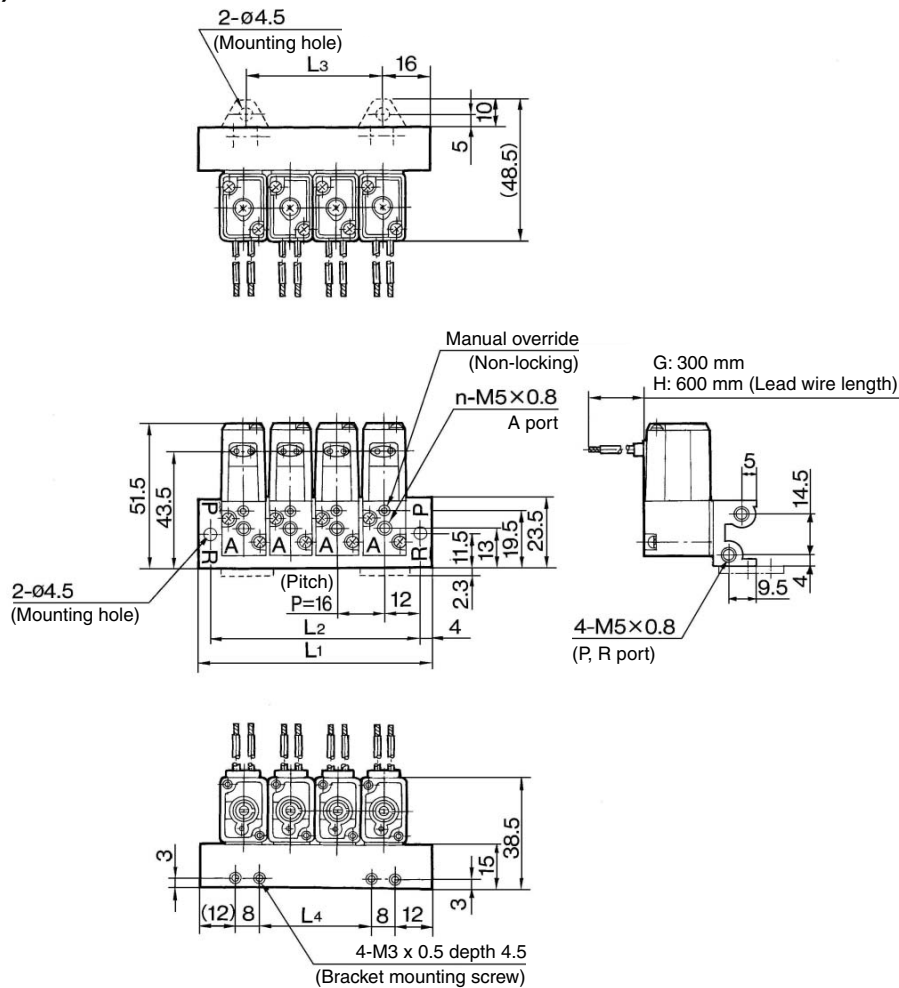
VS

VFN

Series VZ100

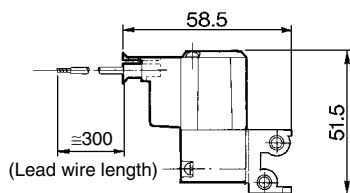
Type 01 Manifold: Top Ported

VV3Z-01- Stations 1(-F)
Grommet (G), (H)

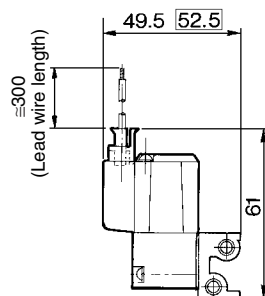


| Stations n | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|------------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| L1 | 48 | 64 | 80 | 96 | 112 | 128 | 144 | 160 | 176 | 192 | 208 | 224 | 241 | 256 | 272 | 288 | 304 | 320 | 336 |
| L2 | 40 | 56 | 72 | 88 | 104 | 120 | 136 | 152 | 168 | 184 | 200 | 216 | 232 | 248 | 264 | 280 | 296 | 312 | 328 |
| L3 | 16 | 32 | 48 | 64 | 80 | 96 | 112 | 128 | 144 | 160 | 176 | 192 | 208 | 224 | 240 | 256 | 272 | 288 | 304 |
| L4 | 8 | 24 | 40 | 56 | 72 | 88 | 104 | 120 | 136 | 152 | 168 | 184 | 200 | 216 | 232 | 248 | 264 | 280 | 296 |

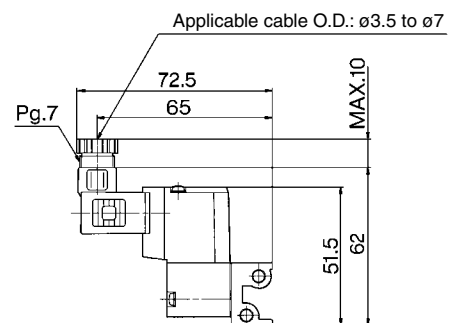
L plug connector (L)



M plug connector (M)



DIN terminal (D)

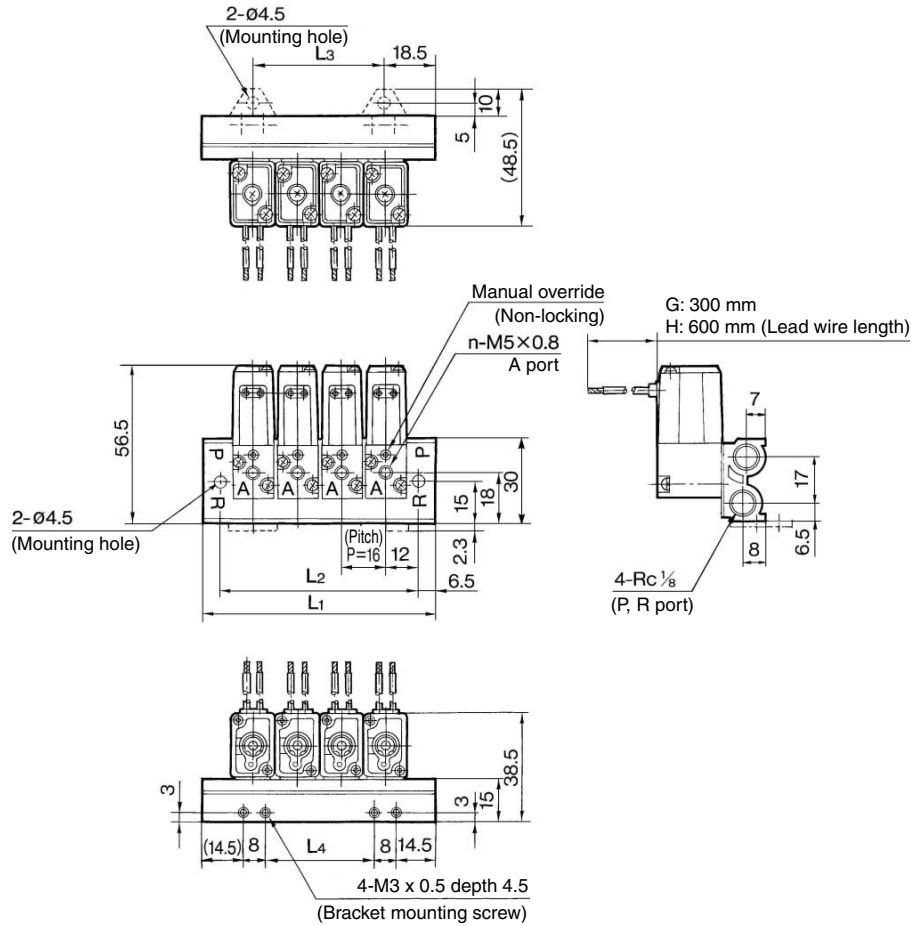


: With light/surge voltage suppressor

3 Port Solenoid Valve Rubber Seal, Body Ported **Series VZ100**

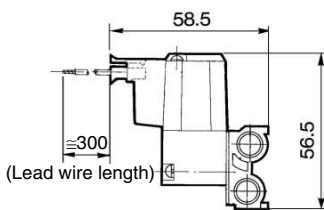
Type 20 Manifold: Top Ported

VV4Z1-20-Stations 1(-F)
Grommet (G), (H)

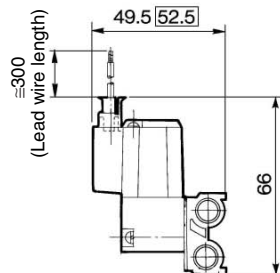


| Stations n | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|------------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| L1 | 53 | 69 | 85 | 101 | 117 | 133 | 149 | 165 | 181 | 197 | 213 | 229 | 245 | 261 | 277 | 293 | 309 | 325 | 341 |
| L2 | 40 | 56 | 72 | 88 | 104 | 120 | 136 | 152 | 168 | 184 | 200 | 216 | 232 | 248 | 264 | 280 | 296 | 312 | 328 |
| L3 | 16 | 32 | 48 | 64 | 80 | 96 | 112 | 128 | 144 | 160 | 176 | 192 | 208 | 224 | 240 | 256 | 272 | 288 | 304 |
| L4 | 8 | 24 | 40 | 56 | 72 | 88 | 104 | 120 | 136 | 152 | 168 | 184 | 200 | 216 | 232 | 248 | 264 | 280 | 296 |

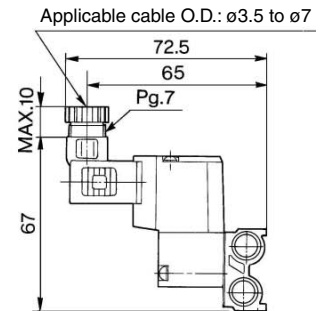
L plug connector (L)



M plug connector (M)



DIN terminal (D)



☐: With light/surge voltage suppressor

- V100
- SY
- SYJ
- VK
- VZ**
- VT
- VP
- VG
- VP
- S070
- VQ
- VKF
- VQZ
- VZ
- VS
- VFN

Series VZ

Made to Order Specifications:

1. Solenoid Valve: Opposite Mounting of Solenoid Assembly

Applicable solenoid valve series

VZ100/300/500

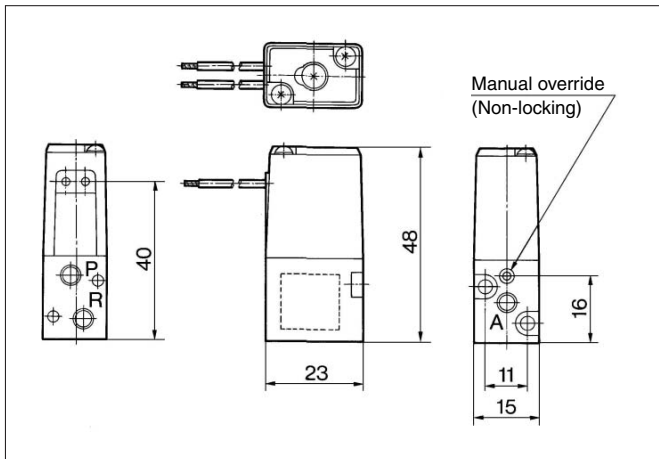
Model no.

VZ1 0 - (-) - X1

VZ₅³ - (-) - X1

• Entry is the same as standard products.

Dimensions: VZ110-□G-M5-X1



2. Solenoid Valve: External Pilot Specifications

● Applicable for individual use of body ported external pilot type

Applicable solenoid valve series

VZ300/500

Model no.

VZ₅³ 2R - (-) - X20

• Entry is the same as standard products.

Specifications

| | | |
|--------------------------------|--------------------------------|-----------------|
| Operating pressure range (MPa) | Main pressure | -100 kPa to 0.7 |
| | External pilot pressure | 0.15 to 0.7 |
| Pilot exhaust method | Pilot valve individual exhaust | |

Dimensions

VZ300: 8 mm longer in total length

VZ500: 8 mm longer in total length

Dimensions: VZ312R-□G-M5-X20

