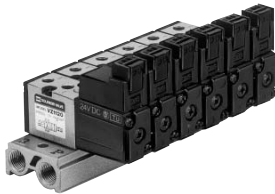


# Manifold Specifications

## Manifold Standard



### Manifold Specifications

Model	Type 20	
Manifold type	Single base/B mount	
P(SUP)/R(EXH)	Common SUP/Common EXH	
Valve stations	2 to 20 stations	
A, B port location	Valve	
Port size	1(P), 3(R) port	Rc 1/8
	4(A), 2(B) port	M5 x 0.8
Valve <sup>Note)</sup> effective area (mm <sup>2</sup> )	VZ1120	1 → 4: 0.48, 4 → 3: 0.85

Note) Value at manifold base mounted, single operating

### 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) VV4Z1-20-031.....1 pc. (Manifold base)

\*VZ1120-5G-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.

## Flat Ribbon Cable Manifold

- **One-touch wiring to consolidate connection of external wires.**

- **Clean appearance**

The flat cable provides wiring on a printed circuit board to the individual valves at the manifold base, enabling the consolidation of external wiring at a touch through a 26 pins MIL connector.



### Flat Ribbon Cable Manifold Specifications

Model	Type 21P	
Manifold type	Single base/B mount	
P(SUP), R(EXH)	Common SUP/Common EXH	
Valve stations	3 to 12 stations	
A, B port location	Valve	
Port size	1(P), 3(R) port	Rc 1/8
	4(A), 2(B) port	M5 x 0.8
Valve <sup>(1)</sup> effective area (mm <sup>2</sup> ) (Cv factor)	VZ1120	1 → 4: 0.48, 4 → 3: 0.85
Applicable flat ribbon cable connector	Socket: 26 pins MIL, with strain relief (Conforming to MIL-C-83503)	
Internal wiring	+ COM (For – COM specifications, specify them separately.)	
Applicable valve model	VZ1120- $\frac{1}{6}$ MOZ-M5	
Rated voltage	100 VAC 50/60 Hz, 110 VAC 50/60 Hz, 24 VDC, 12 VDC	

Note 1) Value at manifold base mounted, single operating  
Note 2) Withstand voltage specification of wiring unit part is equivalent to JIS C 0704 class 1.

### How to Order Manifold

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

(Example) VV4Z1-21P-07.....1 pc. (Manifold base)

\*VZ1120-5MOZ-M5...6 pcs. (Valve)

\*DXT170-25-3A.....1 pc. (Blanking plate assembly)

\*DXT170-127-4A.....6 pcs. (Connector assembly)

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

VK

VZ

VF

VFR

VP4

VZS

VFS

VS4

VQ7

EVS

VFN

# Series VZ1000

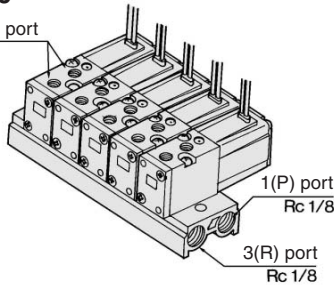
## Common SUP/Common EXH



Note) For more than 10 stations, supply air to both sides of P port and exhaust air from both sides of R port.

### Type 20

4(A), 2(B) port  
M5×0.8



### How to Order

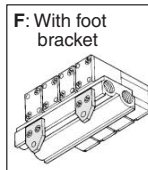
VV4Z1 - 20 - 05 1 - [ ] - [ ]

Stations	
02	2 stations
⋮	⋮
20	20 stations

P, R port  
thread type

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

Option



\* Bracket is not mounted.

### Applicable solenoid valve

VZ1120-□<sup>G</sup><sub>L</sub>-□M5  
D

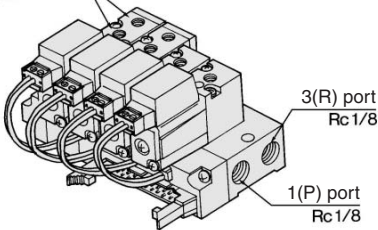
Applicable blanking plate assembly  
DXT170-25-1A

Individual EXH spacer assembly  
DXT170-48-1A

Individual SUP spacer assembly  
DXT170-44-1A

### Flat Ribbon Cable Type 21P

4(A), 2(B) port  
M5×0.8



### How to Order

VV4Z1 - 21P - 05 - [ ]

Stations	
03	3 stations
⋮	⋮
12	12 stations

P, R port  
thread type

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

### Applicable solenoid valve

VZ1120-<sup>1</sup>/<sub>8</sub>MOZ-M5

Applicable blanking plate assembly  
DXT170-25-3A

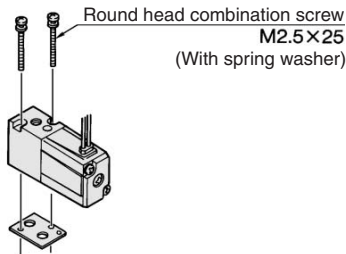
Applicable connector assembly  
DXT170-127-3A

\* 1: 100 VAC, 3: 110 VAC,  
4: DC

Refer to page 3-3-7  
regarding how to order  
applicable connector  
assemblies.

## Option/Standard Manifold, Flat Ribbon Cable Manifold

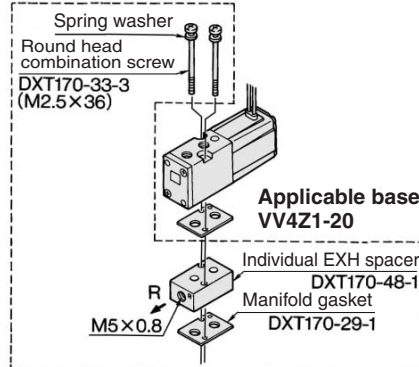
### Combinations of Solenoid Valve, Gasket and Manifold



Applicable base  
VV4Z1-20  
VV4Z1-21P

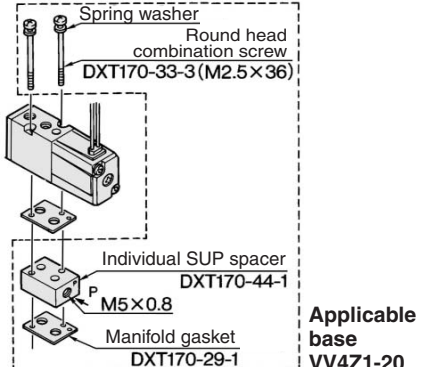
### Individual EXH Spacer Assembly

#### DXT170-48-1A



### Individual SUP Spacer Assembly

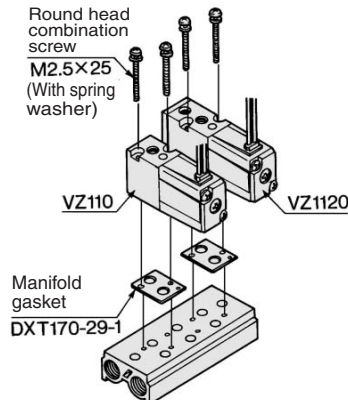
#### DXT170-44-1A



Note) Please contact SMC when using Individual EXH/SUP spacer assembly at 20P.

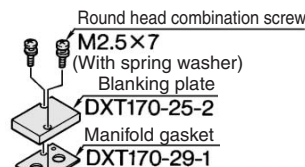
### Mixed Mounting of the VZ110, 3 Port Valve on the Series VZ1000 Manifold Base

- A VZ110, 3 port valve can be mounted as is on the Series VZ1000 manifold base.
- The mounting direction is the same as the VZ1120.



### Blanking Plate Assembly

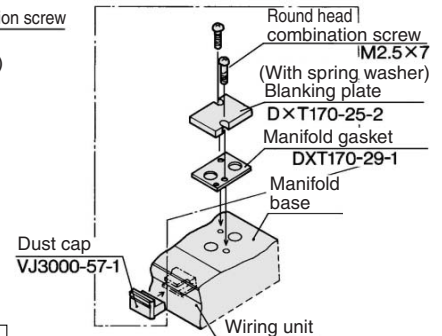
#### DXT170-25-1A



Applicable base  
VV4Z1-20

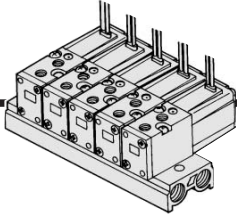
**Caution**  
Mounting Screw  
Tightening Torques  
M2.5: 0.45 N·m

#### DXT170-25-3A



Applicable base  
VV4Z1-21P

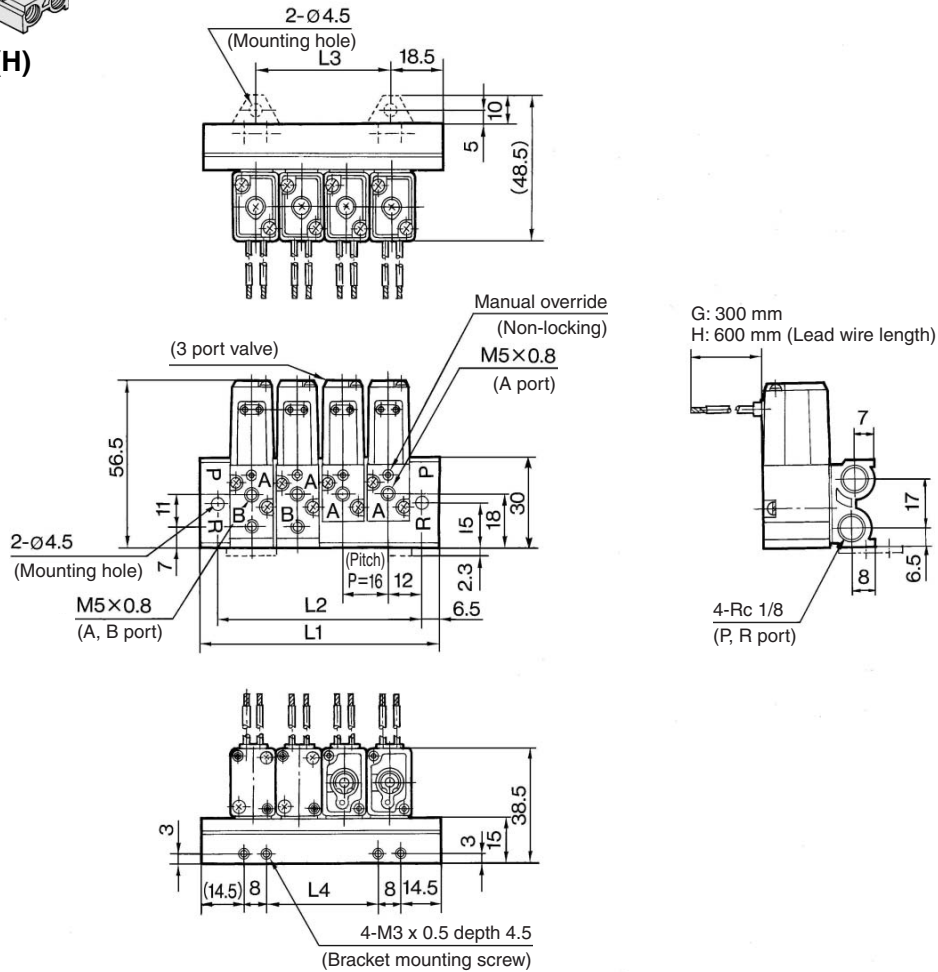
# 4 Port Solenoid Valve Body Ported Series VZ1000



## Type 20 Manifold

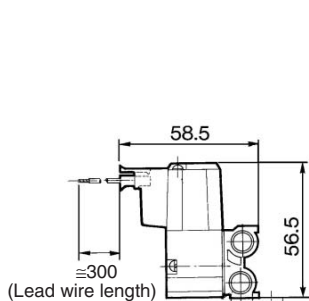
VV4Z1-20-Station 1-□

Grommet (G), (H)

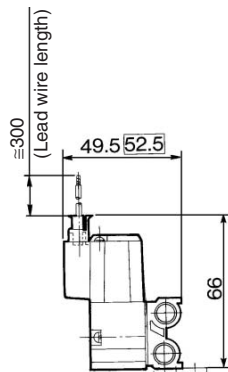


Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	53	69	85	101	117	133	149	165	181	197	213	229	245	261	277	293	309	325	341
L2	40	56	72	88	104	120	136	152	168	184	200	216	232	248	264	280	296	312	328
L3	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304
L4	8	24	40	56	72	88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

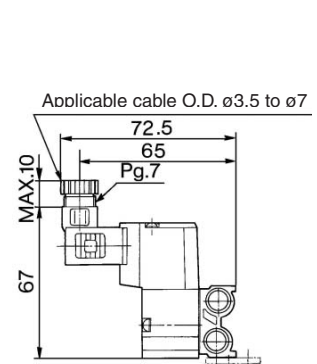
L plug connector (L)



M plug connector (M)



DIN terminal (D)



□: With light/surge voltage suppressor

VK

VZ

VF

VFR

VP4

VZS

VFS

VS4

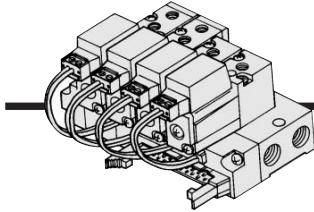
VQ7

EVS

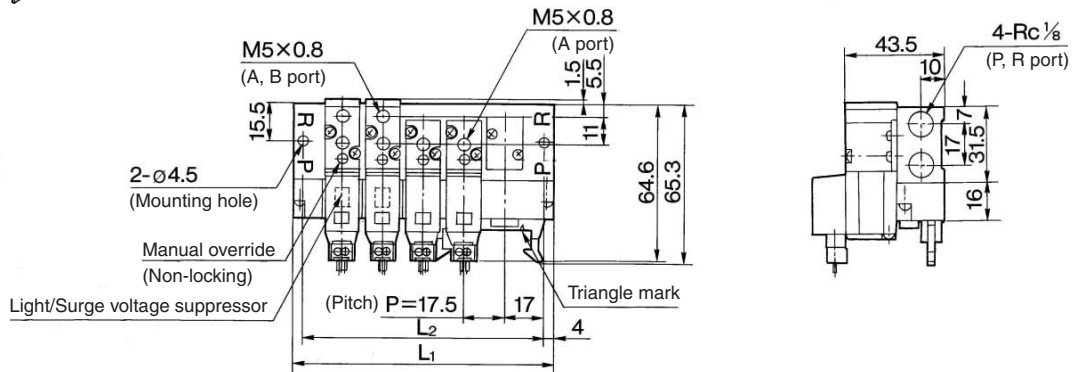
VFN

# Series VZ1000

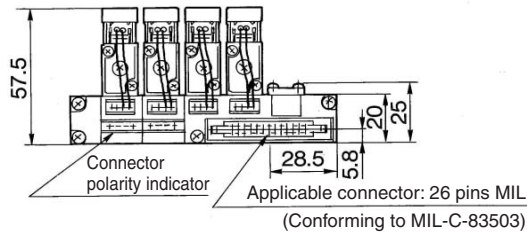
## Type 21P Flat Ribbon Cable Manifold



VV4Z1-21P-Station



Station n..... Station 1



(mm)

Stations	3	4	5	6	7	8	9	10	11	12
L <sub>1</sub>	77	94.5	112	129.5	147	164.5	182	199.5	217	234.5
L <sub>2</sub>	69	86.5	104	121.5	139	156.5	174	191.5	209	226.5