### 5 Port Solenoid Valve Base Mounted Series VZ3000

#### **DIN Rail Manifold**





#### **Manifold Specifications**

Model		Type 45	Type 45F			
Manifold type		Stacking type non plug-in type	Stacking type plug-in type			
P(SUP), R(EXH)		Common SUP/Common EXH				
Valve stations		2 to 20	stations			
A, B port	Location	Base				
Porting specifications	Direction	Side				
	1(P), 3/5(R) port	t C8 (One-touch fitting for ø8)				
Port size	4(A), 2(B) port	C4 (One-touch fitting for ø4)				
	1(71), 2(B) port	C6 (One-toucl	n fitting for ø6)			
Connector		_	MIL-C-24308 Applicable for JIS-X-5101 D-sub connector			
Internal wiring		— COM Note)				

Note) It is available at +COM or -COM.

#### Flow Characteristics

		Port	size	Flow characteristics						
		1(P), 5/3(R)	(P), 5/3(R) 2(B), 4(A)		1 → 4/2 (P → A/B)			$4/2 \rightarrow 5/3 \text{ (A/B} \rightarrow \text{R)}$		
				C [dm3/(s-bar)]	b	Cv	C [dm³/(s·bar)]	b	Cv	
VVEZ0 45	V70□4□	C8	C4	0.59	0.28	0.15	0.83	0.34	0.22	
VV5Z3-45	VZ3□4□	C8	C6	0.76	0.23	0.18	0.86	0.29	0.22	
Nets/Velve at manifeld bear manifeld to a manifeld of a state of a										

Note) Value at manifold base mounted, 2 position 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.

fitting for ø6

Mixed \* In the case of mixed specifications (M). indicate separately

on the manifold

specification sheet.

port size

C4

C6

M \*

One-touch

One-touch

Mixed

fitting for ø4

fitting for ø6

M\*

(Example) VV5Z3-45FD-06-C6C·· 1 pc. (Manifold base)

\*VZ3143-5FZ-----2 pcs. (Valve) \*VZ3243-5FZ-----3 pcs. (Valve)

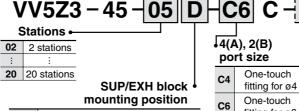
\*VZ3000-69-1A ......1 pc. (Blanking plate assembly)

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

#### **DIN Rail Manifold**

### **Common SUP/Common EXH**

Type 45 (Non plug-in type) How to Order



	• • • • • • • • • • • • • • • • • • • •
U	U side: 2 to 10 stations
D	D side: 2 to 10 stations
В	Both sides: 2 to 20 stations
M *	Special specifications

<sup>\*</sup> For special specifications, indicate separately by the manifold specification sheet.

#### Applicable solenoid valve



Applicable blanking plate assembly VZ3000-69-2A

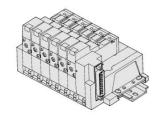
#### DIN rail length specified

Nil	Standard length							
3	For 3 stations	(Specify a longer						
:	:	rail than the						
20	For 20 stations	standard length.)						

#### Type 45F (Plug-in type)



## Connector 4(A), 2(B)



mounting direction U U side: 2 to 10 stations D D side: 2 to 10 stations

B Both sides: 11 to 20 stations Stations •

02	2 Stations
:	:
20	20 stations
	I

#### SUP/EXH block mounting position

Nil	For 2 to 10 stations: One side (Same as direction of connector mount) For 11 to 20 stations: Both sides
	For 11 to 20 stations: Both sides
В	For 2 to 10 stations: Both sides
M *	Special specifications

<sup>\*</sup> For special specifications, indicate separately by the manifold specification sheet.

#### Applicable solenoid valve

VZ3□43-□FZ□

Applicable blanking plate assembly

VZ3000-69-1A

**DIN** rail length specified

* In the case of	DIN rail length specified					
mixed	Nil	d length				
specifications (M), indicate separately	3	For 3 stations	(Specify a longe			
on the manifold	:	:	rail than the			
specification sheet.	20	For 20 stations	standard length.			



**VK** 

**VF** 

**VFR** 

VP4

**VZS** 

**VFS** 

VS4

VQ7

**EVS** 

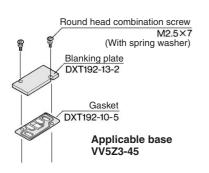
VFN

#### 5 Port Solenoid Valve Base Mounted Series VZ3000

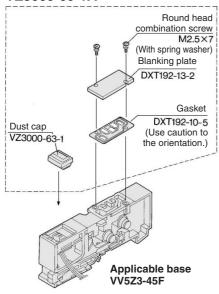
#### **Option/DIN Rail Manifold**

#### **Blanking Plate Assembly**

#### VZ3000-69-2A



#### VZ3000-69-1A



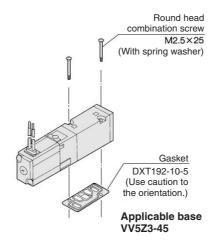
#### **⚠** Caution

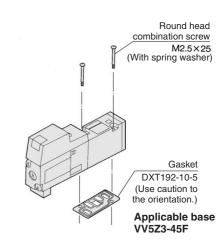
**Mounting Screw Tightening Torques** 

M2.5: 0.32 N·m

(For stacking type manifold)

#### Combination of Solenoid Valve, Gasket and Manifold Base





#### **SUP Block Disk**

By installing a SUP block disk in the pressure supply passage of a manifold valve, it is possible to supply two or more different high and low pressures to one

VZ3000-79-1A



#### **EXH Block Disk**

By installing an EXH block disk in the exhaust passage of a manifold valve, it is possible to divide the valve's exhaust so that it does not affect another valve.

VZ3000-79-1A



#### Applicable Plug Assembly (D-sub connector cable assembly)

Cable length	Assembly part no.	Component parts
1.5 m	VVZS3000-21A-1	Diver MIL standard
3 m	VVZS3000-21A-2	Plug MIL standard Number of terminals: 25
5 m	VVZS3000-21A-3	Cable: 25 cores x 0.3 mm <sup>2</sup>
8 m	VVZS3000-21A-4	Odbic. 20 00163 x 0.0 111111



For details, refer to page 3-3-8.

**SMC** 

**VK** 

٧Z

**VF** 

**VFR** 

VP4

**VZS** 

**VFS** 

VS4

VQ7

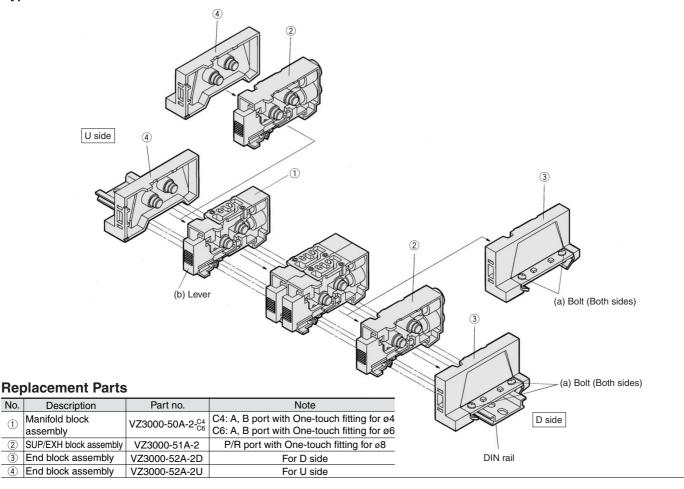
**EVS** 

VFN

### Series VZ3000

#### **Exploded View/DIN Rail Manifold**

#### Type 45 Manifold



#### **How to Increase Manifold Base**

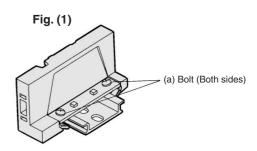
(1) Loosen (both) bolts (a), which are securing the manifold onto the DIN rail, 1 to 2 turns.

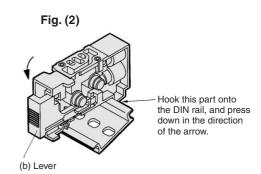
(To remove the manifold base from the DIN rail, loosen the bolts 4 to 5 turns.)

- (2) Press lever (b) to disconnect the manifold block assembly at the location in which you wish to place an additional manifold block assembly. (However, there are no levers between ① and ④ or between ② and ④. They can be disconnected by merely pulling them apart.)
- (3) Mount additional manifold block assembly on the DIN rail as shown in the Fig. (2).
- (4) Press the block assemblies and tighten the bolts (a) to fix them to the DIN rail.

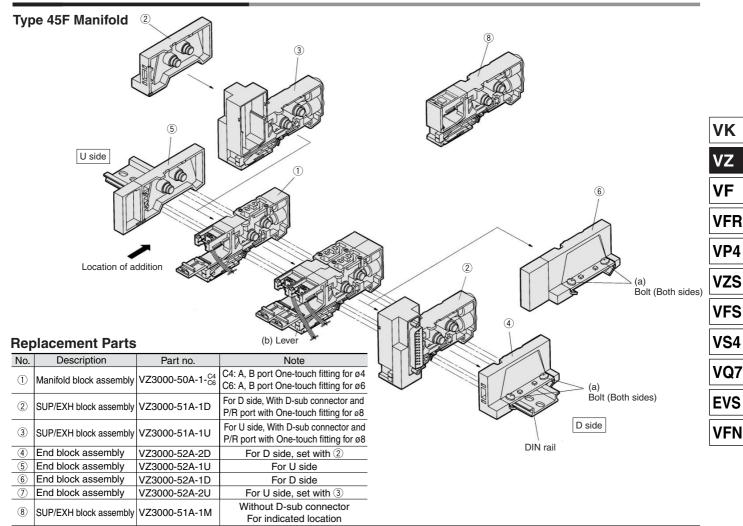
Note) When there are 10 or fewer manifold block assemblies, and more are added to make a total of 11 or more, a supply/exhaust block assembly must also be added.

Station expansion is possible at any position.





#### **Exploded View/DIN Rail Manifold**

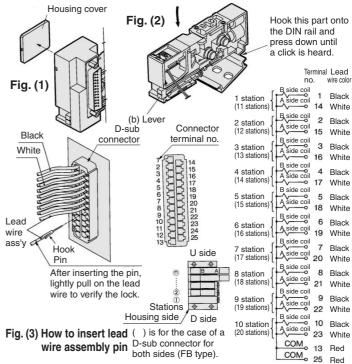


#### **How to Increase Manifold Base**

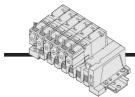
To add a manifold block assembly, add it to the U side so that the terminal number of the D-sub connector and the valve link position will be in accordance with the circuit diagram.

- (1) Loosen (both) bolts (a), which are securing the manifold onto the DIN rail, 1 to 2 turns.
  - (To remove the manifold base from the DIN rail, loosen the bolts 4 to 5 turns.)
- (2) Using a flat screwdriver, press lever (b) to disengage the link of the manifold block assembly on the U side or the D side from the SUP/EXH block assembly or from the end block assembly. (However, there are no levers between ⑤ and ①. They can be disconnected by merely pulling them apart.)
- (3) Remove the housing cover from the D-sub connector portion of he SUP/EXH block assembly. (Refer to Fig. (1).)
- (4) Following the procedure shown in Fig. (2), mount the manifold block assembly to be added onto the DIN rail. As shown in Fig. (3), insert the pin of the lead wire assembly into the D-sub connector, and attach the round crimped terminal to the screw that connects the wires.
- (5) Press the block assemblies and tighten the bolts (a) to fix them to the DIN rail.

Note) When there are 10 or fewer manifold block assemblies, and more are added to make a total of 11 or more, a supply/exhaust block assembly must also be added.

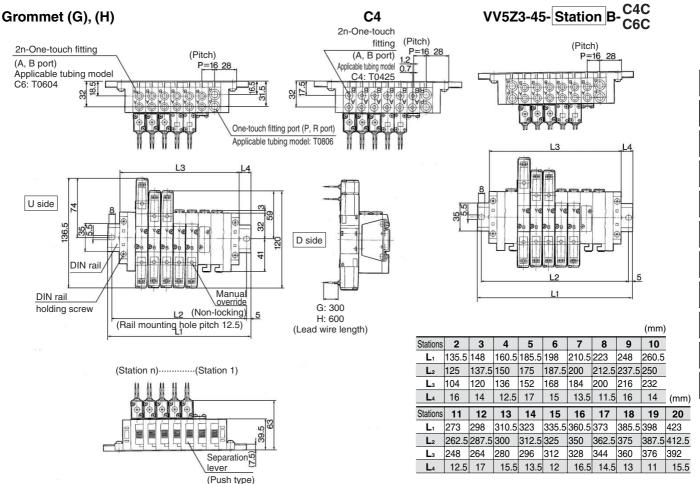


### 5 Port Solenoid Valve Base Mounted Series VZ3000



#### Type 45 DIN Rail Manifold (Non Plug-in): Side Ported





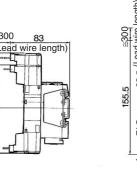
(mm)

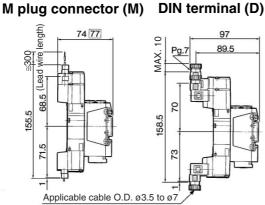
VV5Z3-45-Station U-C4C

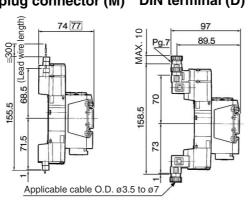
#### Stations 8 10 3 5 6 9 110.5 135.5 148 160.5 185.5 198 210.5 223 248 200 L2 100 125 137.5 150 175 187.5 212.5 237.5 104 120 136 152 184 200 216 17 13.5 11.5 16 12.5 15 11.5 16

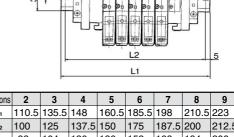
### ≅300 ≅300 83 (Lead wire length) 59 136.5

L plug connector (L)









(Pitch)

الأمو	□: With light/surge voltage suppressor

Stations	2	3	4	5	6	7	8	9	10
L <sub>1</sub>	110.5	135.5	148	160.5	185.5	198	210.5	223	248
L <sub>2</sub>	100	125	137.5	150	175	187.5	200	212.5	237.5
L <sub>3</sub>	88	104	120	136	152	168	184	200	216
L <sub>4</sub>	11.5	16	14	12.5	17	15	13.5	11.5	16

(mm)

**VK** 

**VZ** 

**VF** 

**VFR** 

VP4

**VZS** 

**VFS** 

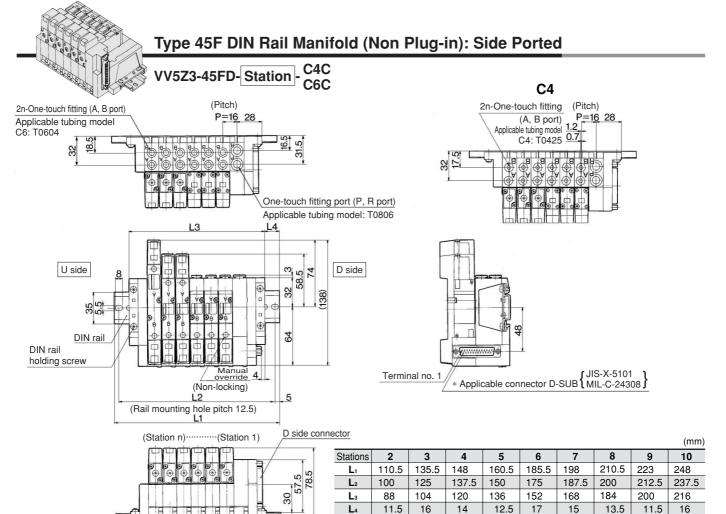
VS4

VQ7

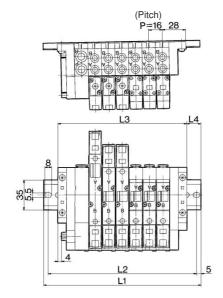
**EVS** 

VFN

### Series VZ3000



### VV5Z3-45FU-Station - C4C C6C



Separation lever (Push type)

									(111111)
Stations	2	3	4	5	6	7	8	9	10
L <sub>1</sub>	110.5	135.5	148	160.5	185.5	198	210.5	223	248
L <sub>2</sub>	100	125	137.5	150	175	187.5	200	212.5	237.5
L₃	88	104	120	136	152	168	184	200	216
L <sub>4</sub>	11.5	16	14	12.5	17	15	13.5	11.5	16

# VV5Z3-45F<sub>D</sub>-Station B-C4C (2 to 10 stations)

VV5Z3-45FB-Station - C4C (11 to 20 stations)

