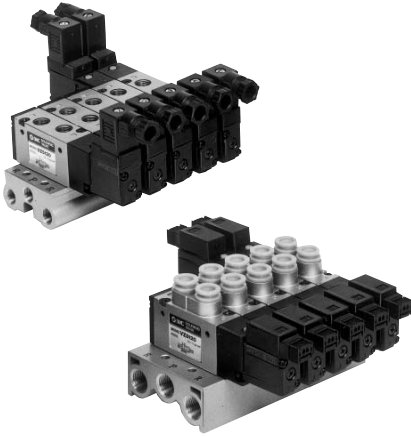


Series VZ5000/Body ported Manifold Specifications

Manifold Standard



Manifold Specifications

Model	Type 20	Type 21
Manifold type	Single base/B mount	
P(SUP)/R(EXH)	Common SUP/Common EXH	
Valve stations	2 to 15 stations	2 to 20 stations
4(A), 2(B) port location	Valve	
Port size	1(P), 3/5(R) port	Rc 1/8
	4(A), 2(B) port	Rc 1/4
	Rc 1/8, C6, C8	

Flow Characteristics

Manifold	Port size		Flow characteristics					
	1(P), 5/3(R) port	2(B), 4(A) port	1 → 4/2 (P → A/B)			4/2 → 5/3 (A/B → R)		
			C [dm ³ /(s·bar)]	b	Cv	C [dm ³ /(s·bar)]	b	Cv
VV5Z5-20-01	1/8	1/8	2.2	0.35	0.57	2.3	0.26	0.55
VV5Z5-20-C6	1/8	C6	1.4	0.32	0.37	2.0	0.25	0.49
VV5Z5-20-C8	1/8	C8	1.7	0.38	0.45	2.1	0.25	0.51
VV5Z5-21-01	1/4	1/8	2.1	0.36	0.55	2.3	0.26	0.54
VV5Z5-21-C6	1/4	C6	1.4	0.32	0.36	2.1	0.24	0.50
VV5Z5-21-C8	1/4	C8	1.8	0.37	0.50	2.1	0.20	0.50

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.

(Example) VV5Z5-20-031.....1 pc. (Manifold base)

*VZ5120-5G-01.....2 pcs. (Valve)

*DXT199-22-1A.....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	
4(A), 2(B) port location	Valve	
Port size	1(P), 3/5(R) port	Rc 1/4
	4(A), 2(B) port	Rc 1/8, C6, C8
Applicable flat ribbon cable connector	Socket: 26 pins MIL, with strain relief (Conforming to MIL-C-83503)	
Internal wiring	+COM (For -COM, please contact SMC separately.)	
Applicable solenoid valve	VZ5□23- $\frac{1}{3}$ MOZ□-VZ3□- $\frac{01}{C8}$	
Rated voltage	100 VAC 50/60 Hz, 110 VAC 50/60 Hz, 24 VDC, 12 VDC	

Note) Withstand voltage specification of wiring unit part is equivalent to JIS C 0704 class 1.

Flow Characteristics

Manifold	Port size		Flow characteristics					
	1(P), 5/3(R) port	2(B), 4(A) port	1 → 4/2 (P → A/B)			4/2 → 5/3 (A/B → R)		
			C [dm ³ /(s·bar)]	b	Cv	C [dm ³ /(s·bar)]	b	Cv
VV5Z5-21P-01	1/4	1/8	2.1	0.36	0.55	2.3	0.26	0.54
VV5Z5-21P-C6	1/4	C6	1.4	0.32	0.36	2.1	0.24	0.50
VV5Z5-21P-C8	1/4	C8	1.8	0.37	0.50	2.1	0.20	0.50

Note) Value at manifold base mounted, 2 position single operating

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) VV5Z5-21P-07.....1 pc. (Manifold base)

*VZ5123-5MOZ-C8.... 3 pcs. (Valve)

*VZ5223-5MOZ-C8.... 3 pcs. (Valve)

*DXT199-22-3A..... 1 pc. (Blanking plate assembly)

*DXT192-52-1-4A..... 3 pcs. (Connector assembly)

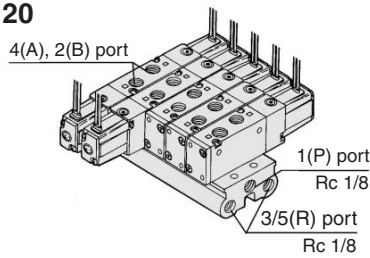
*DXT192-52-2-4A..... 3 pcs. (Connector assembly)

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

5 Port Solenoid Valve Body Ported Series VZ5000

Common SUP/Common EXH

Type 20



Note) For more than 6 stations, supply air to both sides of P port and exhaust air from both sides of R port.

How to Order

VV5Z5 - 20 - 05 1 -

Stations		P, R port thread type	
02	2 stations	Nil	Rc
⋮	⋮	00F	G
15	15 stations	00N	NPT
		00T	NPTF

Applicable solenoid valve

VZ5□2□□□□^G_D□□□□⁰¹_{C8}

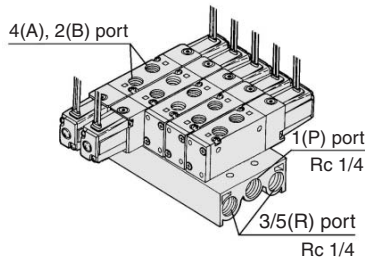
Applicable blanking plate assembly

DXT199-22-1A

Applicable individual EXH spacer assembly

DXT199-29-1A

Type 21



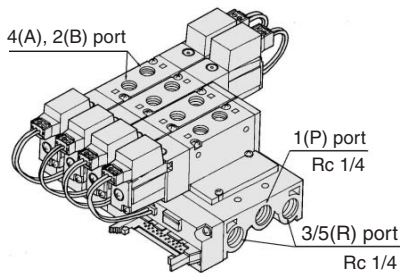
How to Order

VV5Z5 - 21 - 05 1 -

Stations		P, R port thread type	
02	2 stations	Nil	Rc
⋮	⋮	00F	G
20	20 stations	00N	NPT
		00T	NPTF

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

Flat Ribbon Cable Type 21P



How to Order

VV5Z5 - 21P - 05 -

Stations		P, R port thread type	
03	3 stations	Nil	Rc
⋮	⋮	00F	G
12	12 stations	00N	NPT
		00T	NPTF

Applicable solenoid valve

VZ5□23-¹₃□□□□□□⁰¹_{C8}

Applicable blanking plate assembly

DXT199-22-3A

Applicable connector assembly

DXT192-52-1-□A

(For 2 position single)

DXT192-52-1-□A

(For 2 position double, 3 position)

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

For "How to order applicable connector assemblies", refer to page 3-3-7.

Note) For more than 10 stations, supply air to both sides of 1(P) port and exhaust air from both sides of 3 and 5(R) port.

VK

VZ

VF

VFR

VP4

VZS

VFS

VS4

VQ7

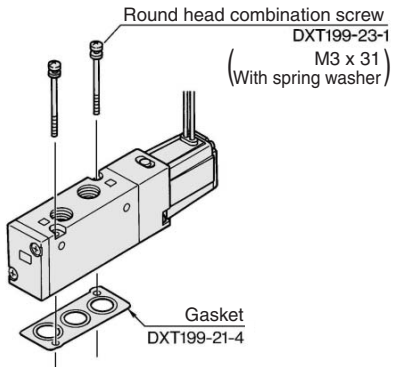
EVS

VFN

Series VZ5000

Option

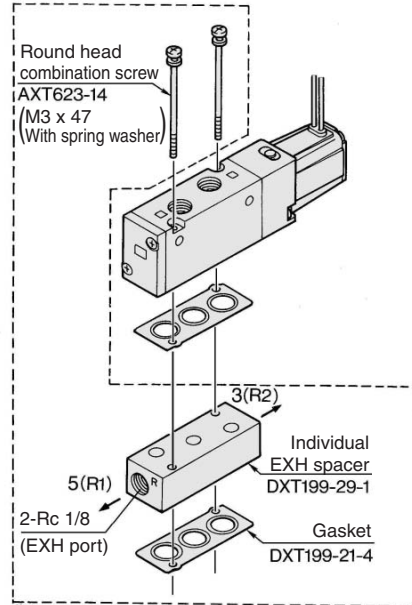
Combinations of Solenoid Valve, Manifold Gasket and Manifold Base



Applicable base
VV5Z5-20
VV5Z5-21
VV5Z5-21P

Individual EXH Spacer Assembly

DXT199-29-1A



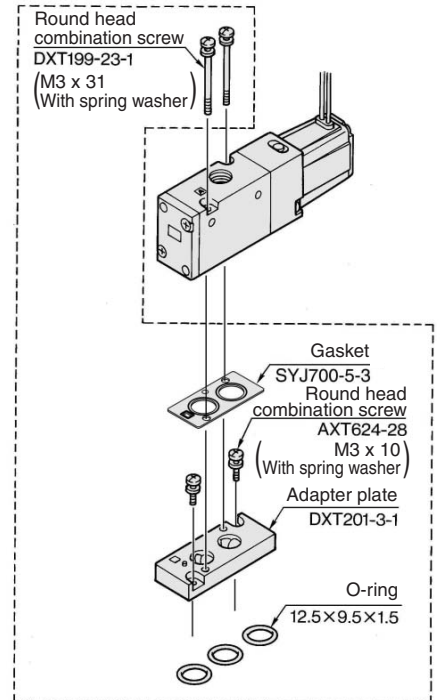
Applicable base
VV5Z5-20
VV5Z5-21

Note) Please contact SMC when using an individual EXH spacer assembly, an individual or an adapter plate assembly on VV5Z5-21P.

Installation of the VZ500 Valve on the VZ5000 Manifold

- Use of an adaptor plate makes it possible to mount Series VZ500 on the manifold base of Series VZ5000.
- The mounting direction is shown in the diagram below. Mount the solenoid so that it will be on the same side as the single solenoid of the Series VZ5000.

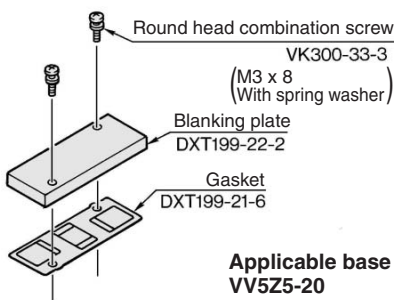
Adapter plate assembly DXT201-3-1A



Applicable base
VV5Z5-20
VV5Z5-21

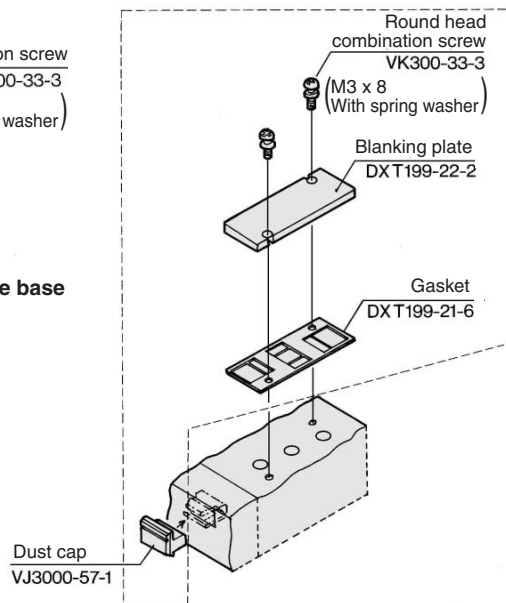
Blanking Plate Assembly

DXT199-22-1A



Applicable base
VV5Z5-20
VV5Z5-21

DXT199-22-3A



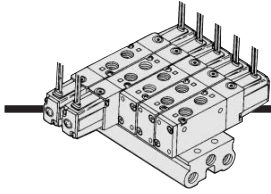
Applicable base
VV5Z5-21P

Caution

Mounting Screw Tightening Torques

M3: 0.8 N·m

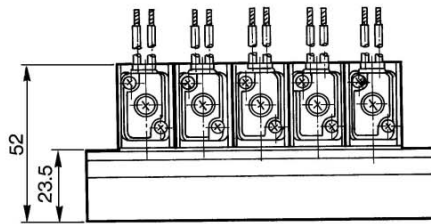
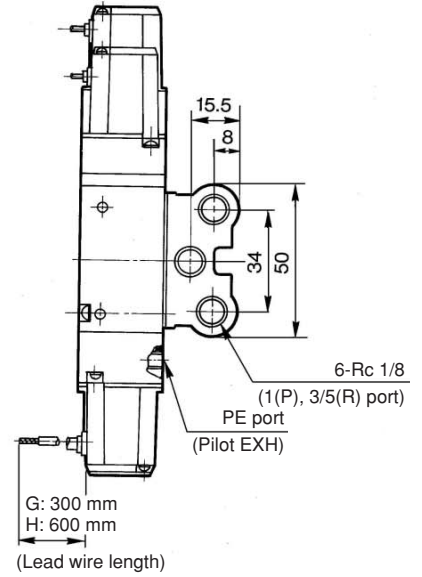
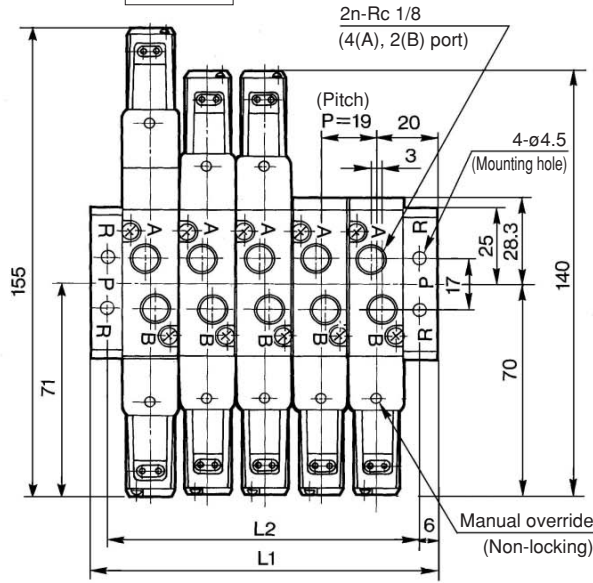
5 Port Solenoid Valve Body Ported Series VZ5000



Type 20 Manifold

VV5Z5-20-Station 1

Grommet (G), (H)

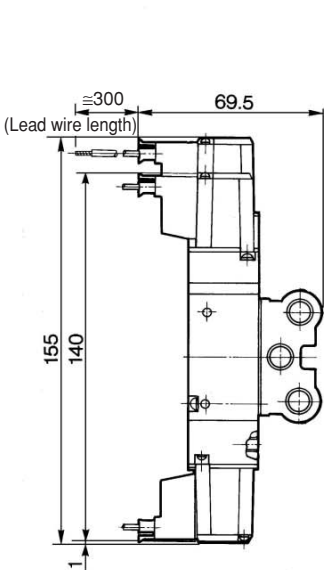


- VK
- VZ
- VF
- VFR
- VP4
- VZS
- VFS
- VS4
- VQ7
- EVS
- VFN

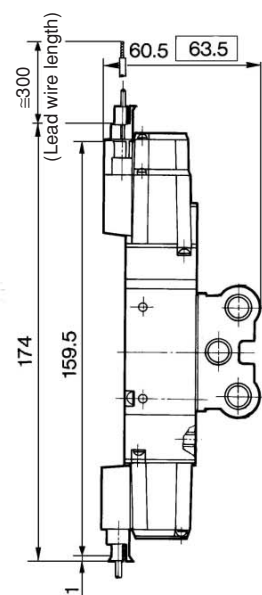
Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L ₁	59	78	97	116	135	154	173	192	211	230	249	268	287	306
L ₂	47	66	85	104	123	142	161	180	199	218	237	256	275	294

(mm)

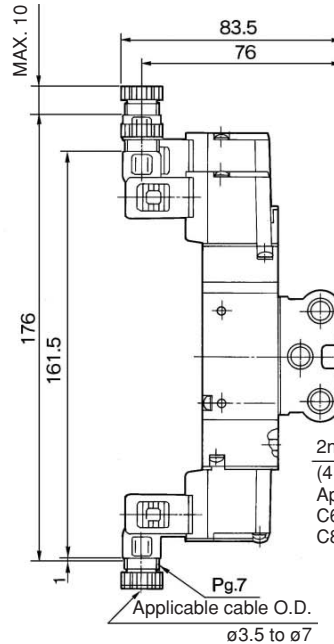
L plug connector (L)



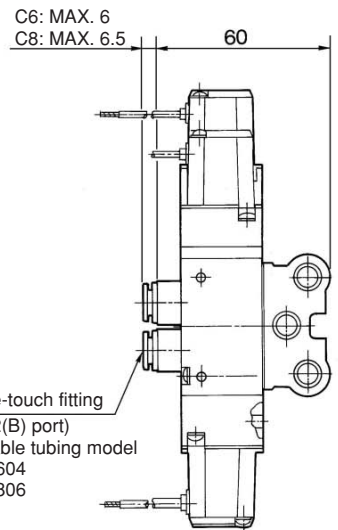
M plug connector (M)



DIN terminal (D)

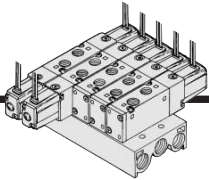


Built-in One-touch fittings



: With light/surge voltage suppressor

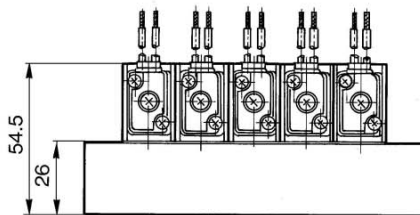
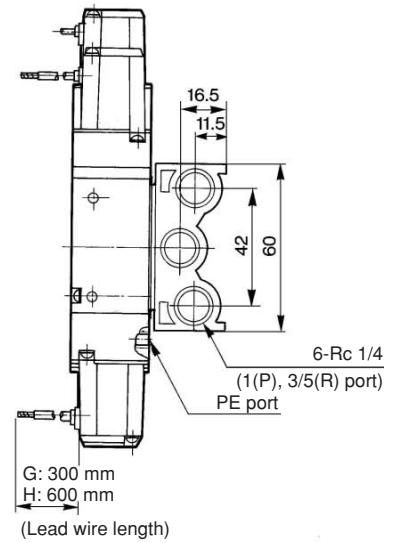
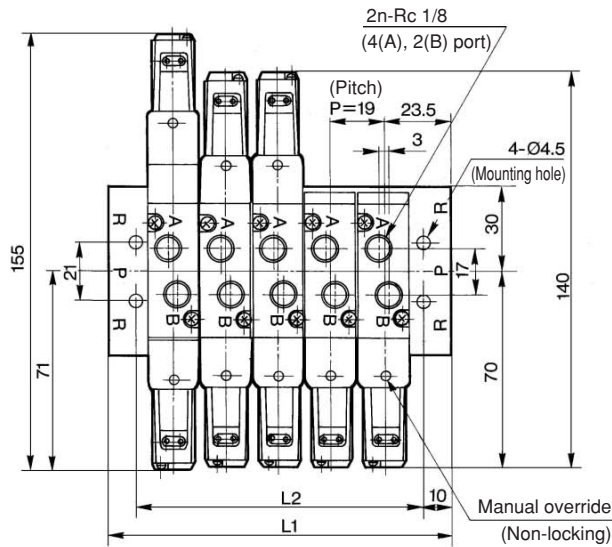
Series VZ5000



Type 21 Manifold

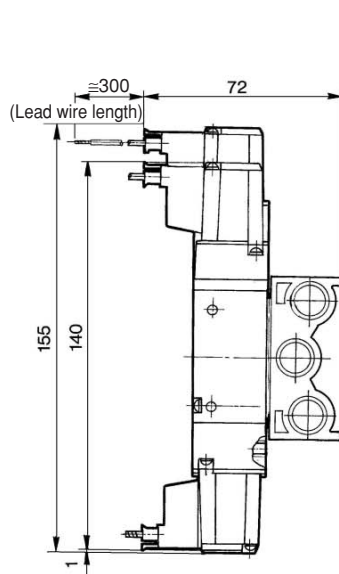
VV5Z5-21-Station 1

Grommet (G), (H)

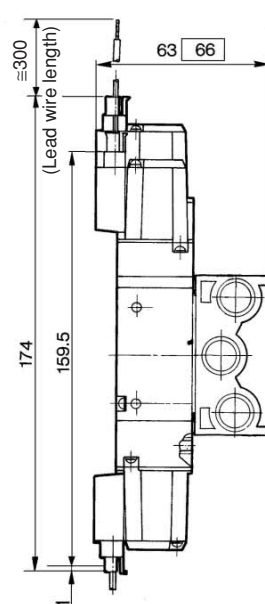


Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L ₁	66	85	104	123	142	161	180	199	218	237	256	275	294	313	332	351	370	389	408
L ₂	46	65	84	103	122	141	160	179	198	217	236	255	274	293	312	331	350	369	388

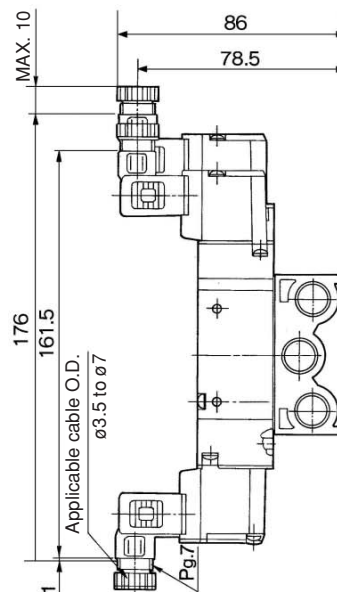
L plug connector (L)



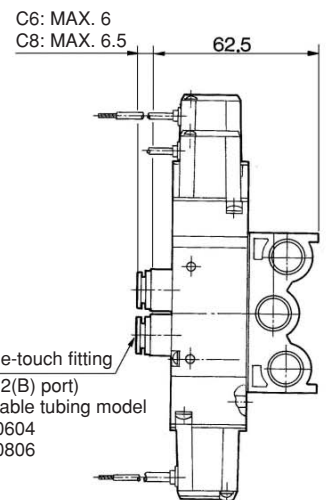
M plug connector (M)



DIN terminal (D)

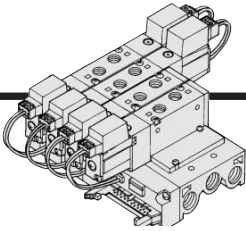


Built-in One-touch fittings



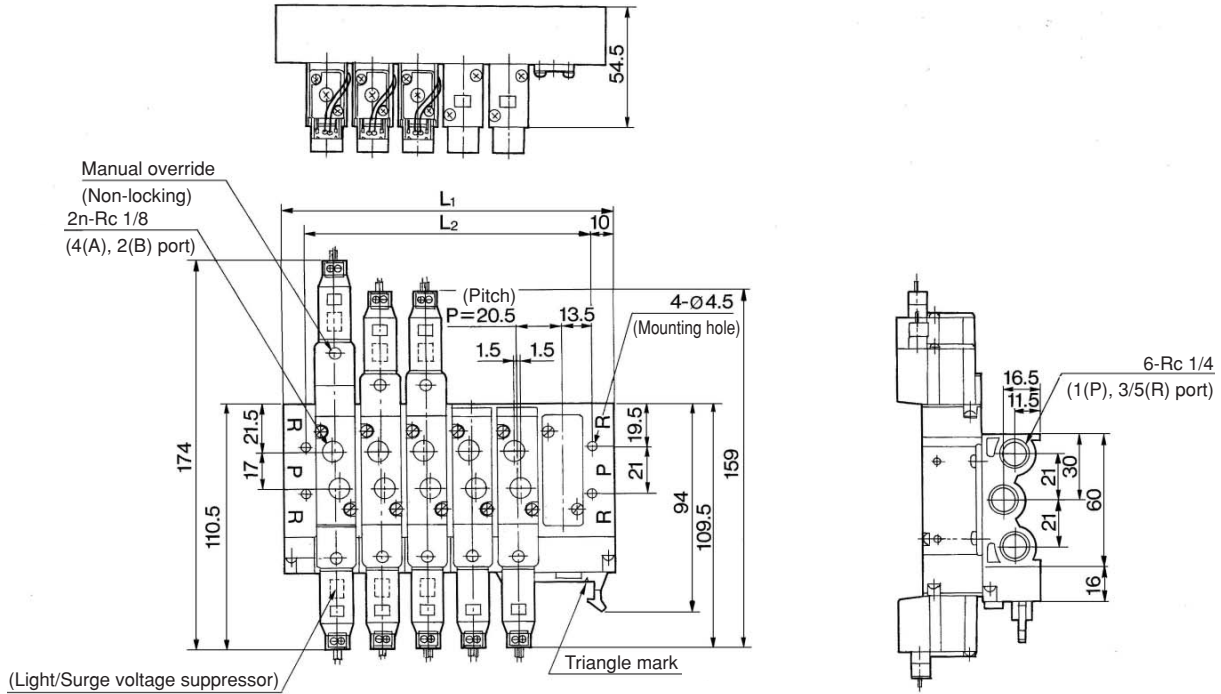
□: With light/surge voltage suppressor

5 Port Solenoid Valve Body Ported Series VZ5000

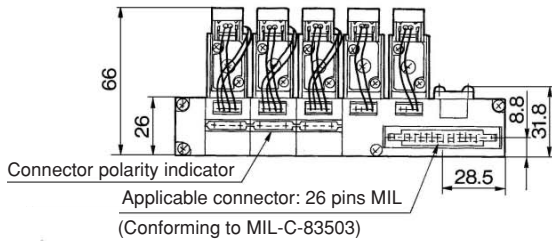


Type 21P Manifold

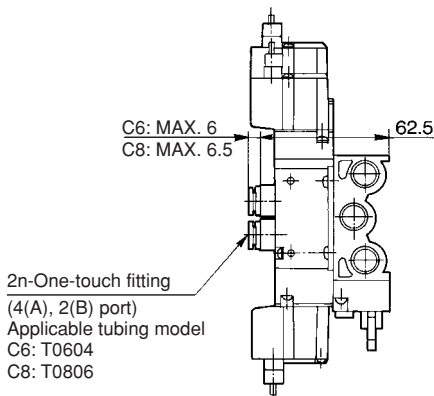
VV5Z5-21P-Station



(Station n).....(Station 1)



Built-in One-touch fittings



Stations	3	4	5	6	7	8	9	10	11	12
L ₁	88	108.5	129	149.5	170	190.5	211	231.5	252	272.5
L ₂	68	109	109	129.5	150	170.5	191	211.5	232	252.5

(mm)

VK

VZ

VF

VFR

VP4

VZS

VFS

VS4

VQ7

EVS

VFN