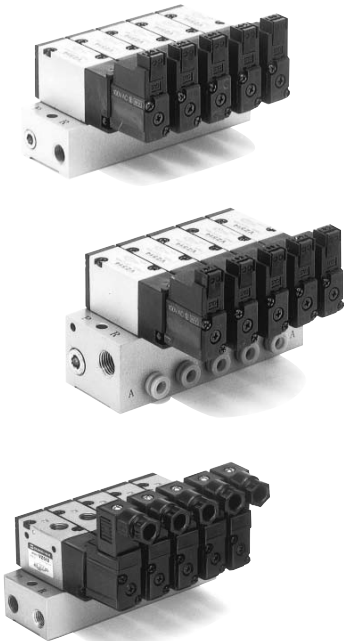


# Series VZ500

# Manifold Specifications



## Flow Characteristics

Manifold			Port size		Flow characteristics					
					1 → 2 (P → A)			2 → 3 (A → R)		
			1(P), 3(R) port	2(A) port	C [dm³/(s·bar)]	b	Cv	C [dm³/(s·bar)]	b	Cv
Body ported For internal pilot	VV3Z5-20-□1	VZ5□2	1/8	1/8	2.2	0.34	0.55	2.3	0.27	0.59
	VV3Z5-21-□1		1/4	1/8	2.2	.39	0.59	2.4	0.32	0.62
Base mounted For internal pilot	VV3Z5-40-□2	VZ5□4	1/8	1/8	2.1	0.35	0.59	2.3	0.27	0.54
	VV3Z5-41-□2		1/4	1/8	2.2	0.35	0.59	2.4	0.36	0.66
	VV3Z5-41-□1		1/4	1/8	2.0	0.27	0.47	2.2	0.32	0.56
			1/4	C6	1.6	0.32	0.39	2.2	0.27	0.54
			1/4	C8	2.1	0.24	0.51	2.3	0.31	0.59
Body ported For external pilot	VV3Z5-21R-□1	VZ5□2R	1/4	1/8	2.2	0.34	0.55	2.4	0.32	0.62
	VV3Z5-41R-□2		1/4	1/8	2.2	0.35	0.59	2.4	0.36	0.66
Base mounted For external pilot	VV3Z5-41R-□1	VZ5□4R	1/4	1/8	2.0	0.27	0.47	2.2	0.32	0.56
			1/4	C6	1.6	0.32	0.39	2.2	0.27	0.54
			1/4	C8	2.1	0.24	0.51	2.3	0.31	0.59
			1/4	C8	2.1	0.24	0.51	2.3	0.31	0.59

Note) Value at manifold base mounted

## 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.

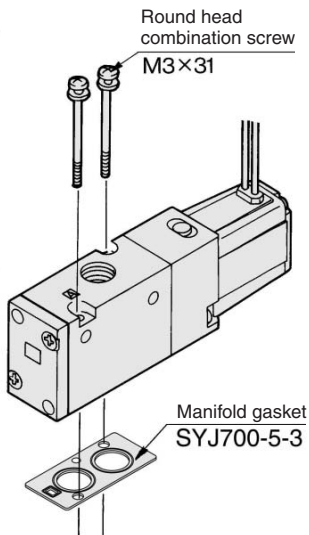
(Example)  
 VV3Z5-20-031.....1 pc. (Manifold base)      VV3Z8-41R-031-01.....1 pc. (Manifold base)  
 \*VZ512-5LZ-01.....2 pcs. (Valve)              \*VZ514R-5G.....2 pcs. (Valve)  
 \*DXT201-15-6A.....1 pc. (Blanking plate assembly) \*DXT201-15-4A.....1 pc. (Blanking plate assembly)

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

## Option

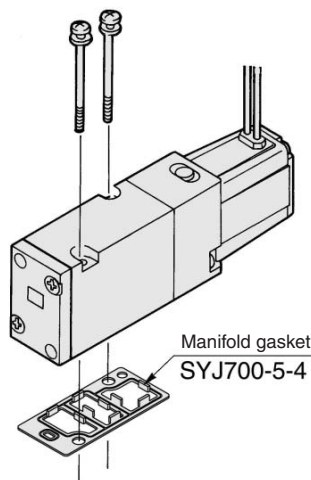
### Combinations of Solenoid Valve, Manifold Gasket and Manifold Base

#### Body ported (VZ5□2)



Applicable base  
 VV3Z5-20-□1  
 VV3Z5-21-□1  
 VV3Z5-21R-□1 } Manifold base

#### Base mounted (VZ5□4)

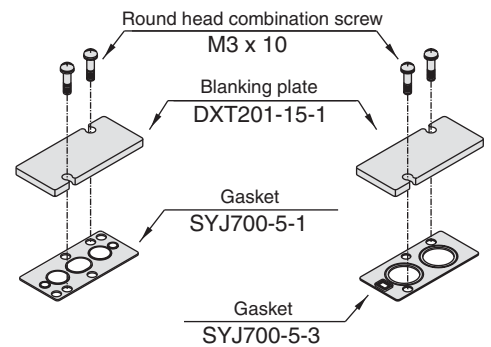


Applicable base  
 Sub-plate  
 VV3Z5-40-□2  
 VV3Z5-41-□2  
 VV3Z5-41-□1  
 VV3Z5-41R-□2  
 VV3Z5-41R-□1 } Manifold base

### Blanking Plate Assembly

Part no.:  
**DXT201-15-4A**  
 (In common for body ported type and base mounted type)

Part no.:  
**DXT201-15-6A**  
 (For shipping assembled manifold base for body ported type)



#### Applicable Blanking Plate Assembly

Manifold base	Blanking plate assembly part no.
VV3Z5-20	DXT201-15-6A
VV3Z5-21(R)	
VV3Z5-40	DXT201-15-4A
VV3Z5-41(R)	

Note) Only in the case of assembled with manifold base at the time of shipment.

\* For shipping blanking plate assembly alone, DXT201-15-4A (In common use for body ported type, base mounted type)

## ⚠ Caution

### Mounting Screw Tightening Torques

M3: 0.8 N·m  
 4-6-34

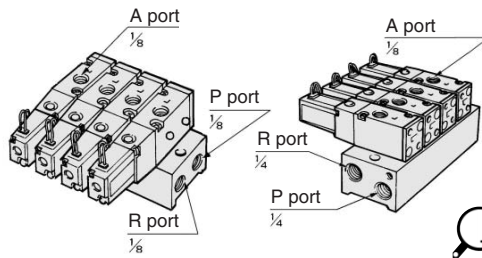
## ⚠ Warning

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/Base Mounted **Series VZ500**

## Manifold for Internal Pilot

### Type 20/21



#### How to Order

**VV3Z5-20-05 1-**   

Manifold	
20	Type 20
21	Type 21

Stations	
02	2 stations
⋮	⋮
20	20 stations

P/R port thread type	
Nil	Rc
00F	G
00N	NPT
00T	NPTF

#### Applicable solenoid valve

VZ512-□□□□-01□  
VZ512M-□□□□-01□  
VZ522-□□□□-01□  
VZ522M-□□□□-01□

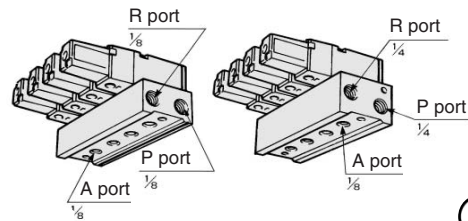
#### Applicable blanking plate assembly

DXT201-15-4A



Note) If there are more than 6 stations for type 20, or more than 9 stations for 21 type, supply air to both sides of P port and exhaust air from both sides of R port.

### Type 40/41 (Bottom ported)



#### How to Order

**VV3Z5-40-05 2-01**   

Manifold	
40	Type 40
41	Type 41

Stations	
02	2 stations
⋮	⋮
20	20 stations

P/R port thread type	
Nil	Rc
F	G
N	NPT
Z	NPTF

#### Applicable solenoid valve

VZ514-□□□□  
VZ514M-□□□□  
VZ524-□□□□  
VZ524M-□□□□

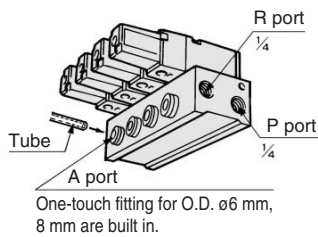
#### Applicable blanking plate assembly

DXT201-15-4A



Note) If there are more than 6 stations for type 40, or more than 9 stations for 41 type, supply air to both sides of P port and exhaust air from both sides of R port.

### Type 41 (Side ported)



#### How to Order

**VV3Z5-41-05 1-C6**   

Stations	
02	2 stations
⋮	⋮
20	20 stations

A port side	
01	1/8
C6	One-touch fitting for ø6
C8	One-touch fitting for ø8
B7	One-touch fitting for ø1/4
B9	One-touch fitting for ø5/16

P/R port thread type	
Nil	Rc
F	G
N	NPT
T	NPTF

#### Applicable solenoid valve

VZ514-□□□□  
VZ514M-□□□□  
VZ524-□□□□  
VZ524M-□□□□

#### Applicable blanking plate assembly

DXT201-15-4A

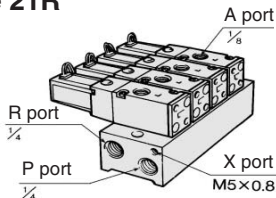


Note) For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

## Manifold for External Pilot

Pilot valve pressure is supplied separately from the main valve pressure through the use of a separate supply port. It can be used in the vacuum (up to -100 kPa) or low pressure line with 0.15 MPa or less.

### Type 21R



#### How to Order

**VV3Z5-21R-05 1-**   

Stations	
02	2 stations
⋮	⋮
20	20 stations

P/R port thread type	
Nil	Rc
00F	G
00N	NPT
00T	NPTF

#### Applicable solenoid valve

VZ512R-□□□□-M5  
VZ522R-□□□□-M5

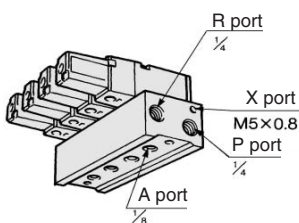
#### Applicable blanking plate assembly

DXT201-15-4A



Note) For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

### Type 41R (Bottom ported)



#### How to Order

**VV3Z5-41R-05 2-01**   

Stations	
02	2 stations
⋮	⋮
20	20 stations

P/R port thread type	
Nil	Rc
F	G
N	NPT
T	NPTF

#### Applicable solenoid valve

VZ514R-□□□□  
VZ524R-□□□□

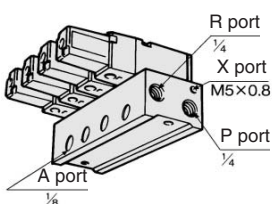
#### Applicable blanking plate assembly

DXT201-15-4A



Note) For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

### Type 41R (Side ported)



#### How to Order

**VV3Z5-41R-05 1-01**   

Stations	
02	2 stations
⋮	⋮
20	20 stations

P/R port thread type	
Nil	Rc
F	G
N	NPT
T	NPTF

#### Applicable solenoid valve

VZ514R-□□□□  
VZ524R-□□□□

#### Applicable blanking plate assembly

DXT201-15-4A

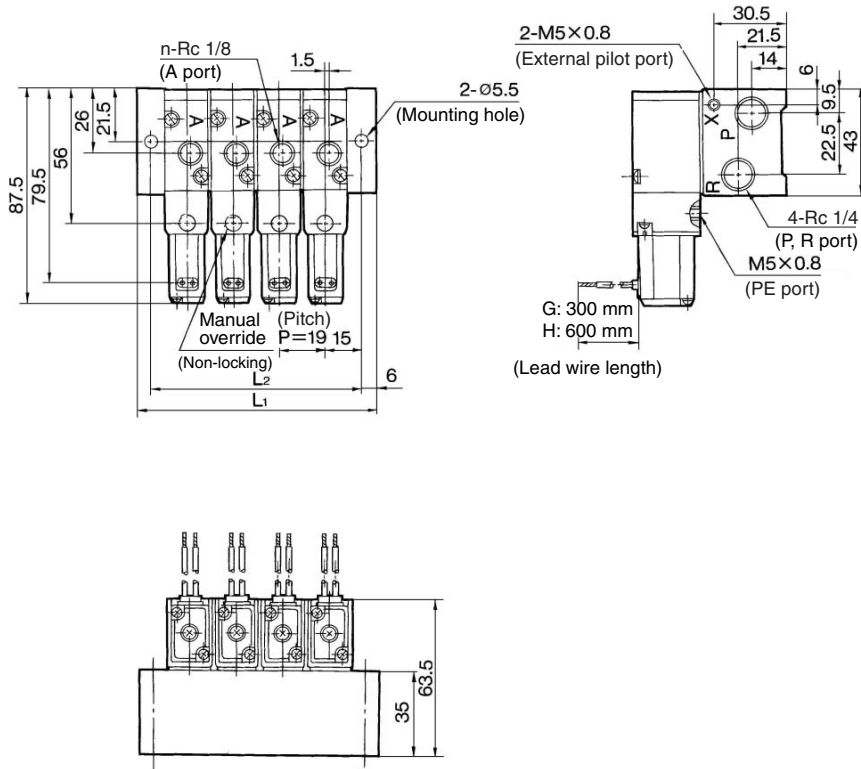


Note) For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

# Series VZ500

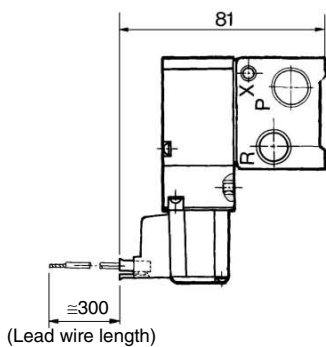
For Internal Pilot  
Type 21R Manifold: Top Ported

VV3Z5-21R- Stations 1  
Grommet (G), (H)

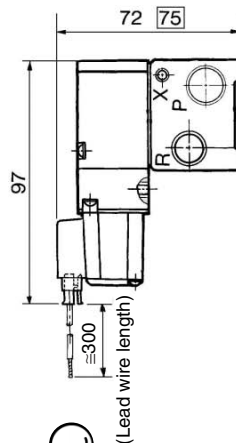


Stations n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L <sub>1</sub>	61	80	99	118	137	156	175	194	213	232	251	270	289	308	327	346	365	384	403
L <sub>2</sub>	49	68	87	106	125	144	163	182	201	220	239	258	277	296	315	334	353	372	391

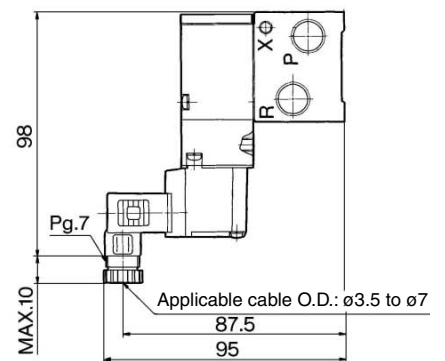
## L plug connector (L)



## M plug connector (M)



## DIN terminal (D)

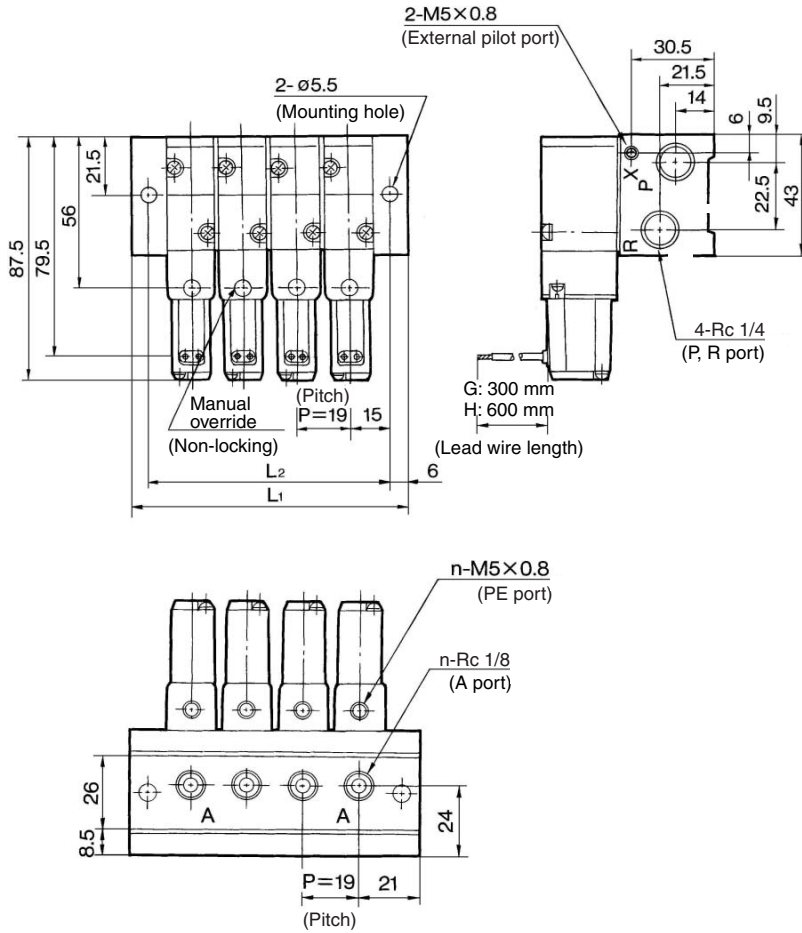


□: With light/surge voltage suppressor

# 3 Port Solenoid Valve Rubber Seal, Body Ported/Base Mounted **Series VZ500**

**For Internal Pilot  
Type 41R Manifold: Bottom Ported**

**VV3Z5-41R- Stations 2-01  
Grommet (G), (H)**

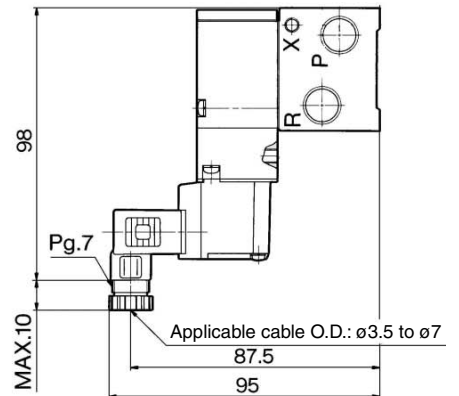
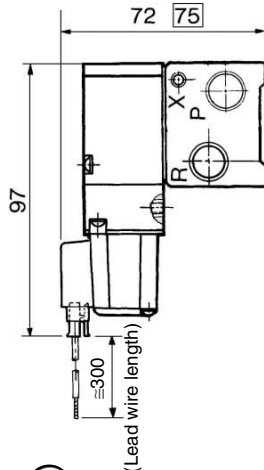
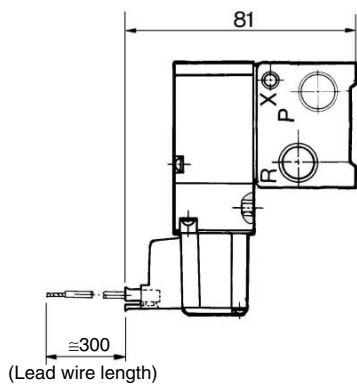


Stations n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L <sub>1</sub>	61	80	99	118	137	156	175	194	213	232	251	270	289	308	327	346	365	384	403
L <sub>2</sub>	49	68	87	106	125	144	163	182	201	220	239	258	277	296	315	334	353	372	391

**L plug connector (L)**

**M plug connector (M)**

**DIN terminal (D)**



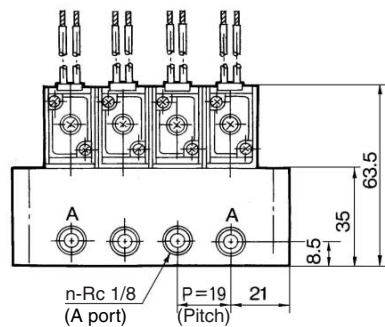
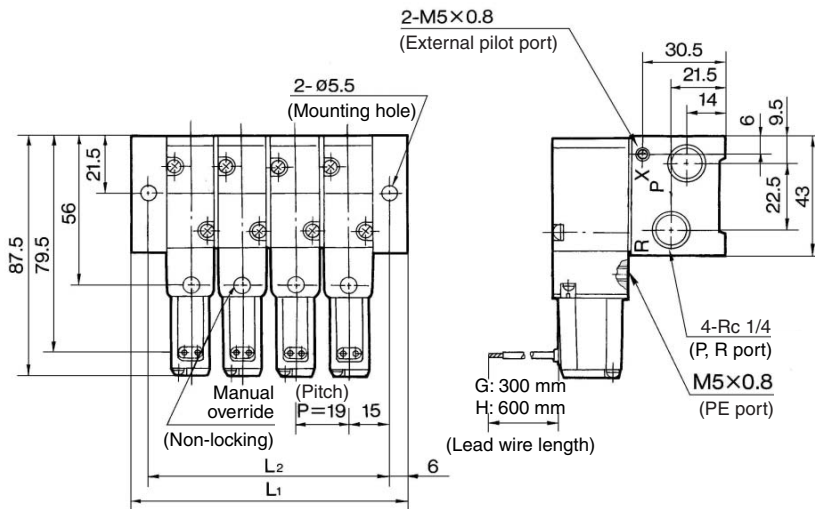
□: With light/surge voltage suppressor

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

# Series VZ500

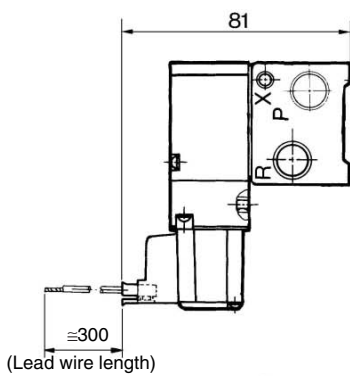
For Internal Pilot  
Type 41R Manifold: Side Ported

VV3Z5-41R- Stations 1-01  
Grommet (G), (H)

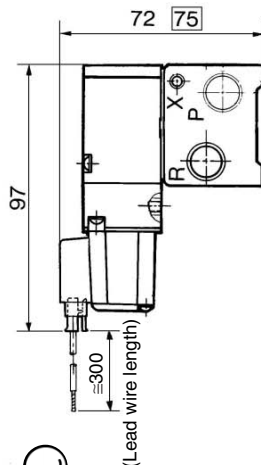


Stations n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L <sub>1</sub>	61	80	99	118	137	156	175	194	213	232	251	270	289	308	327	346	365	384	403
L <sub>2</sub>	49	68	87	106	125	144	163	182	201	220	239	258	277	296	315	334	353	372	391

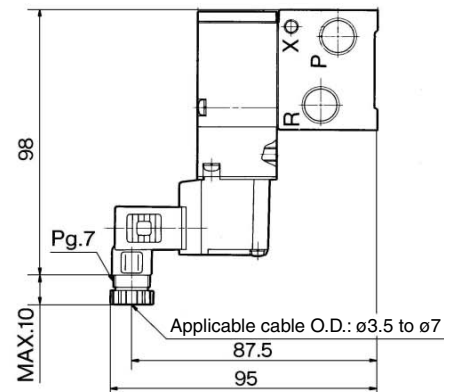
## L plug connector (L)



## M plug connector (M)



## DIN terminal (D)

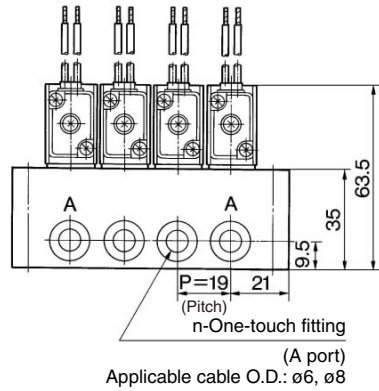
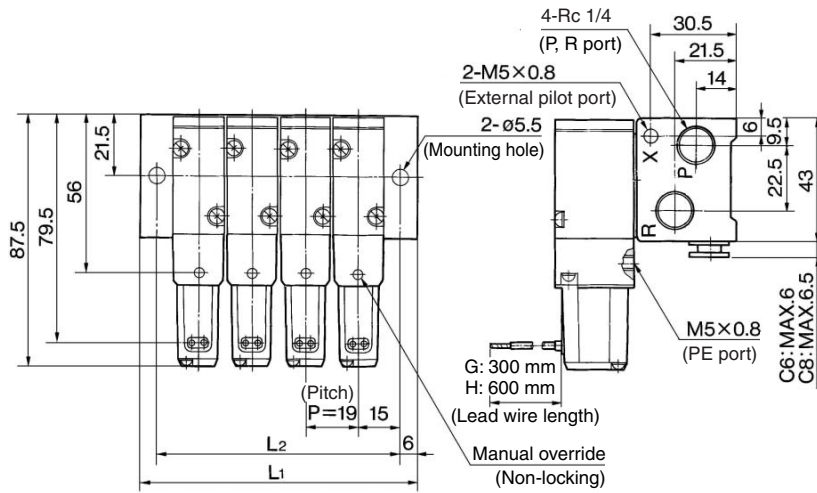


□: With light/surge voltage suppressor

# 3 Port Solenoid Valve Rubber Seal, Body Ported/Base Mounted **Series VZ500**

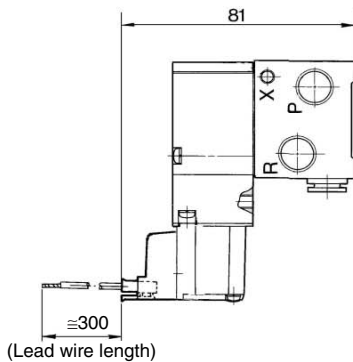
**For Internal Pilot  
Type 41R Manifold: Side Ported**

**VV3Z5-41R- Stations 1-C6/C8  
Grommet (G), (H)**

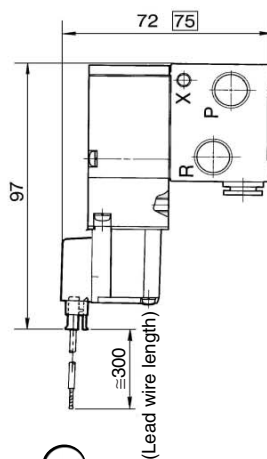


Stations n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L <sub>1</sub>	61	80	99	118	137	156	175	194	213	232	251	270	289	308	327	346	365	384	403
L <sub>2</sub>	49	68	87	106	125	144	163	182	201	220	239	258	277	296	315	334	353	372	391

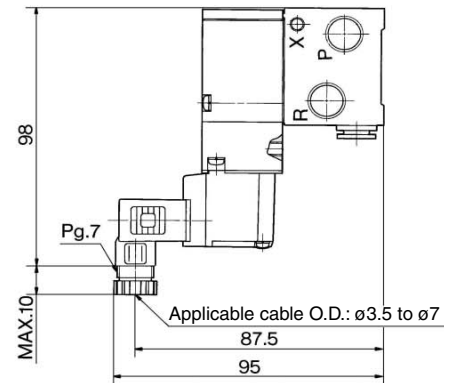
### L plug connector (L)



### 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

VZ<sub>5</sub><sup>3</sup>   -    (-  ) - X1

• Entry is the same as standard products.

## 2. Solenoid Valve: External Pilot Specifications

● Applicable for individual use of body ported external pilot type

### Applicable solenoid valve series

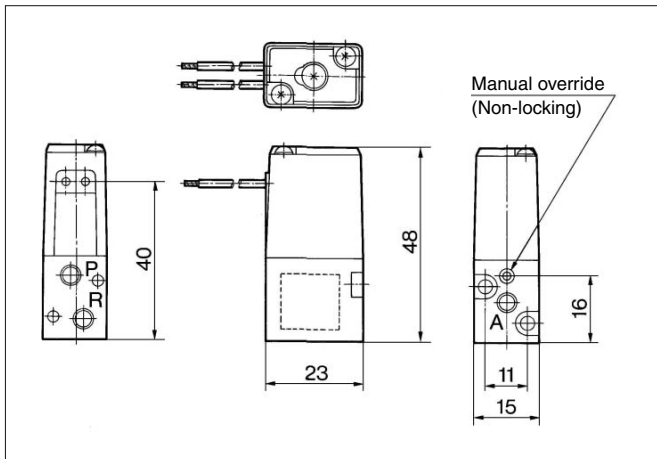
VZ300/500

### Model no.

VZ<sub>5</sub><sup>3</sup>  2R -     (-  ) - X20

• Entry is the same as standard products.

### Dimensions: VZ110-□G-M5-X1



### 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

