

3 Port Solenoid Valve

Rubber Seal, Body Ported/Base Mounted

Series VZ300

How to Order

Body ported VZ3 1 2 **Body option** 5 L **Rated voltage** **Electrical entry** **Light/Surge voltage suppressor** **Manual override** **Port size** **Option**

Base mounted VZ3 1 4 **Body option** 5 L **Rated voltage** **Electrical entry** **Light/Surge voltage suppressor** **Manual override** **Port size** **Option**

Type of actuation

1 Normally closed (A) 2 Normally open (A)

Body option

Nil: Individual pilot exhaust type M: Common exhaust for the pilot and main valve R: External pilot type (Note)

Rated voltage

1	100 VAC, 50/60 Hz
2	200 VAC, 50/60 Hz
3*	110 VAC, 50/60 Hz
4*	220 VAC, 50/60 Hz
5	24 VDC
6*	12 VDC
9*	Other

* Option

Port size

M5: M5 x 0.8

Option

F: With foot bracket

Note) • Bracket is not mounted. • Except external pilot.

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

Port size

Nil: Without sub-plate 01: With sub-plate 1/8

Manual override

Nil: Non-locking push type B: Locking type B (Slotted) C: Locking type C (Manual)

Light/Surge voltage suppressor

Nil	None
Z*	With light/surge voltage suppressor
S	With surge voltage suppressor

* Not available for "GZ", "HZ" and "DOZ"

Electrical entry

Grommet	L plug connector	M plug connector	DIN terminal
G: Lead wire length 300 mm	L: With lead wire (Length 300 mm)	M: With lead wire (Length 300 mm)	D: With connector
H: Lead wire length 600 mm	LN: Without lead wire	LO: Without connector	DO: Without connector
	MN: Without lead wire	MO: Without connector	

* "LN", "MN" type: With 2 sockets.

V100

SY

SYJ

VK

VZ

VT

VP

VG

VP

S070

VQ

VKF

VQZ

VZ

VS

VFN

Series VZ300

**Low power consumption:
1.8 W DC**

**Applicable for vacuum use
–100 kPa**

VZ300R: External pilot type

**Exhausting equipment for
pilot valve not required.**

VZ300M: Central exhaust type

It is not necessary to take exhaust measures for the pilot valve for environmental protection.

**Possible to use as either a
selector or divider valve**

VZ300R: External pilot type

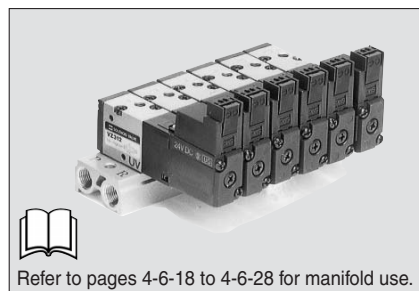
Can be used for universal porting.



Body ported



Base mounted



Refer to pages 4-6-18 to 4-6-28 for manifold use.

Specifications

Fluid	Air	
Operating pressure range (MPa)	Internal pilot	0.15 to 0.7
Ambient and fluid temperature (°C)	–10 to 50 (No freezing. Refer to page 4-18-4.)	
Response time (ms) (at the pressure of 0.5 MPa) ⁽¹⁾	20 or less	
Max. operating frequency (Hz)	10	
Flow characteristics	Refer to the table below.	
Manual override ⁽²⁾	Non-locking push type Locking slotted type, Locking lever type	
Pilot exhaust method	Individual pilot exhaust type, Common exhaust (pilot and main valve) type	
Lubrication	Not required	
Mounting orientation	Unrestricted	
Shock/Vibration resistance (m/s ²) ⁽³⁾	300/50	
Enclosure	Dustproof	



Note 1) Based on dynamic performance test, JIS B 8374-1981. (Coil temperature: 20°C, at rated voltage, without surge suppressor)

Note 2) When operating the locking type manually, apply torque of 0.2 N·m or less.

Note 3) Impact resistance: No malfunction occurred when it is tested with a drop tester in the axial direction and at the right angles to the main valve and armature in both energized and de-energized states every once for each condition. (Values at the initial period)

Vibration resistance: No malfunction occurred in a one-sweep test between 45 and 1000 Hz. Test was performed at both energized and de-energized states in the axial direction and at the right angles to the main valve and armature. (Values at the initial period)

Solenoid Specifications

* Option

Electrical entry	Grommet (G)/(H), L plug connector (L), M plug connector (M), DIN terminal (D)	
Coil rated voltage (V)	AC50/60 Hz	100, 200, 24*, 48*, 110*, 220*
	DC	24, 6*, 12*, 48*
Allowable voltage fluctuation (%)	–15 to +10% of rated voltage	
Power consumption (W) [Current mA] Note	DC	1.8 (With indicator light 2.1) [24 VDC: 75 (With indicator light 87.5)]
Apparent power (VA) [Current mA] Note	Inrush	4.5/50 Hz, 4.2/60 Hz [100 VAC: 45/50 Hz, 42/60 Hz 200 VAC: 22.5/50 Hz, 21/60 Hz]
	Holding	3.5/50 Hz, 3/60 Hz [100 VAC: 35/50 Hz, 30/60 Hz 200 VAC: 17.5/50 Hz, 15/60 Hz]
Surge voltage suppressor	DC: Diode, AC: ZNR	
Indicator light	DC: LED (Red), AC: Neon bulb	



Note) At rated voltage

Flow Characteristics/Weight

Model		Type of actuation	Port size	Flow characteristics						Weight (g) Note)
				1 → 2 (P → A)			2 → 3 (A → R)			
				C [dm³/(s·bar)]	b	Cv	C [dm³/(s·bar)]	b	Cv	
Body ported	VZ312	N.C.	M5	0.53	0.45	0.14	0.47	0.39	0.12	75
	VZ322	N.O.		0.66	0.45	0.18	0.66	0.45	0.18	
Base mounted (With sub-plate)	VZ314	N.C.	1/8	1.2	0.41	0.32	1.1	0.46	0.32	105 (Without sub-plate: 75)
	VZ324	N.O.		1.3	0.37	0.33	1.2	0.48	0.34	



Note) Weight stands for grommet type.

Option

Description	Part no.	Note
Foot bracket	DXT170-34-1B	With screw (For VZ3□2)



Made to Order Specifications
(For details, refer to page 4-6-46.)

3 Port Solenoid Valve Rubber Seal, Body Ported/Base Mounted **Series VZ300**

External Pilot

VZ300R

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.

Specifications

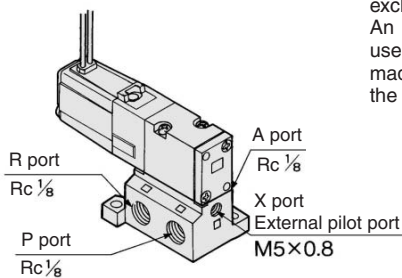
Applicable model	Base mounted (VZ314R/324R)	
Operating pressure range (MPa)	Main pressure	-100 kPa to 0.7
	External pilot pressure	0.15 to 0.7



Note 1) For manifold base, refer to page 4-6-18.

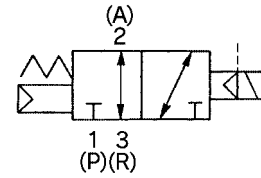
Note 2) In the case of the body ported type, the pilot type (VZ3□2R) is used exclusively on a manifold.

An external pilot style that can be used individually is available as a made-to-order. For details, refer to the page 4-6-46.

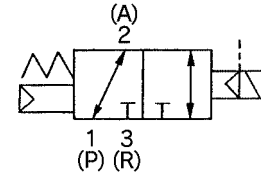


JIS Symbol

VZ31□R

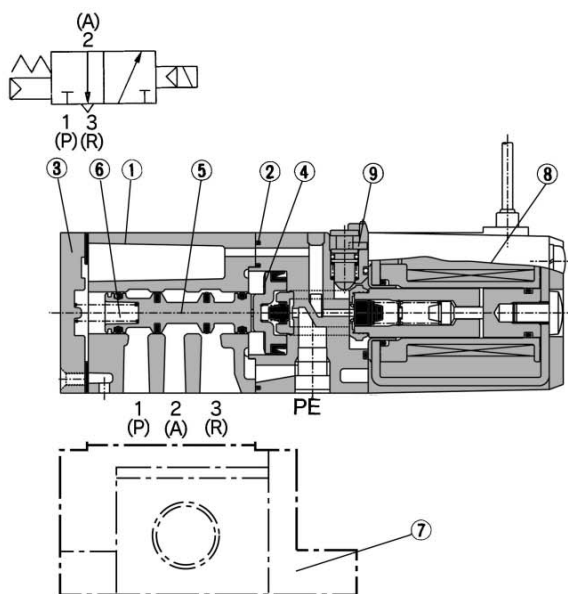


VZ32□R

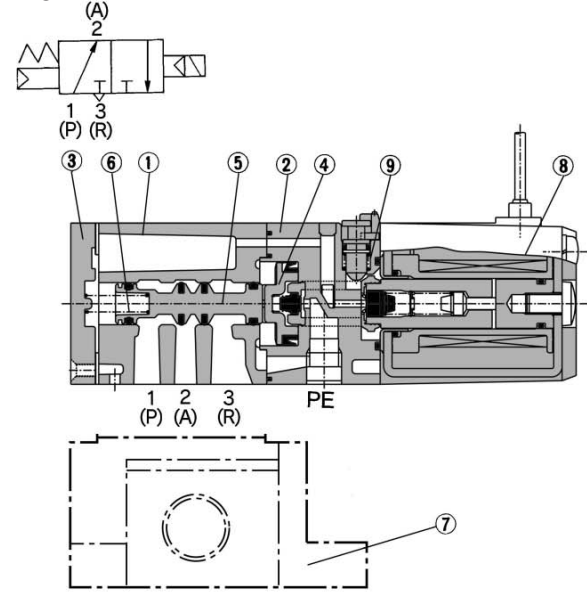


Construction

N.C.



N.O.



Component Parts

No.	Description	Material	Note
①	Body	Aluminum die-casted	Platinum silver
②	Piston plate	Resin	Black
③	End cover	Aluminum die-casted	Black
④	Piston	Resin	—
⑤	Spool valve assembly	—	—
⑥	Spool spring	Stainless steel	—

Replacement Parts

No.	Description	Material	Part no.	Note
⑦	Sub-plate	Aluminum die-casted	DXT200-13-1□P	
⑧	Solenoid assembly	Epoxy/Stainless steel	DXT170-C-□□□	
⑨	O-ring	NBR	13 x 11 x 1	Common with VZ100

Sub-plate part no.: DXT200-13-1□P

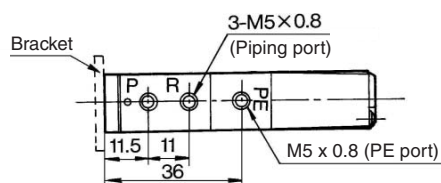
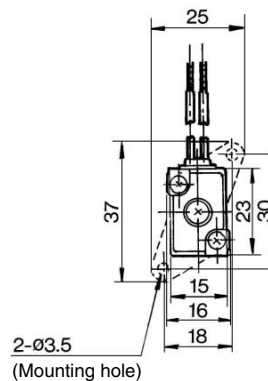
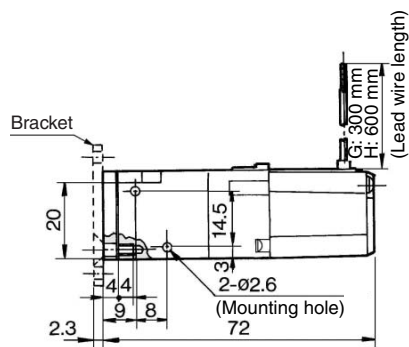
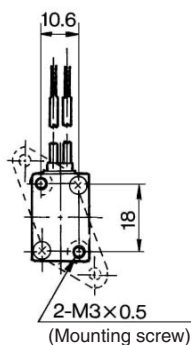
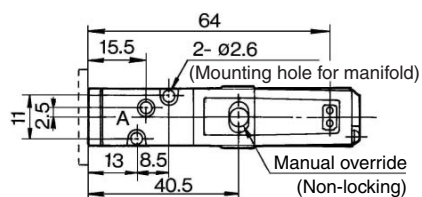
Thread type	
Nil	Rc
F	G
N	NPT
T	NPTF

Series VZ300

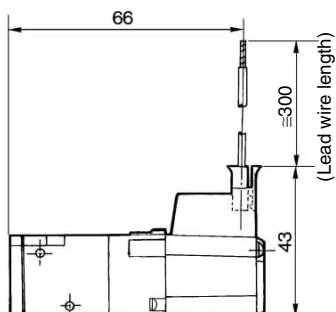


Body Ported

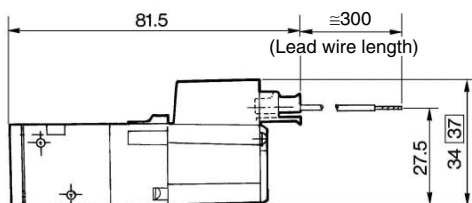
Grommet (G), (H)
VZ3□2-□^G□-M5(-F)



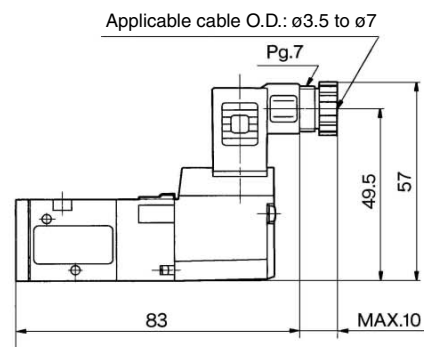
L plug connector (L)
VZ3□2-□L□□-M5



M plug connector (M)
VZ3□2-□M□□-M5

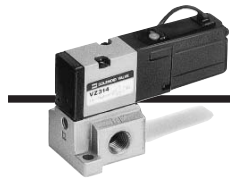


DIN terminal (D)
VZ3□2-□D□□-M5



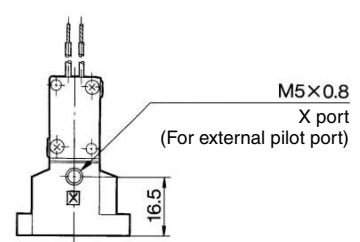
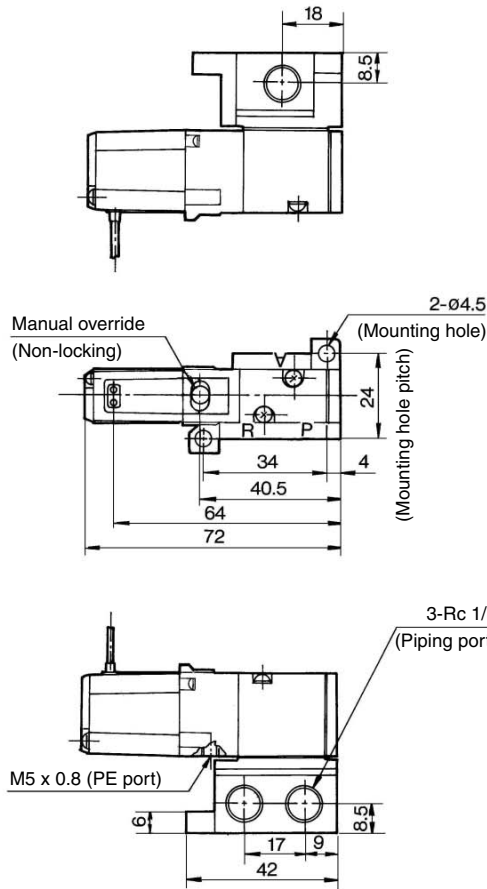
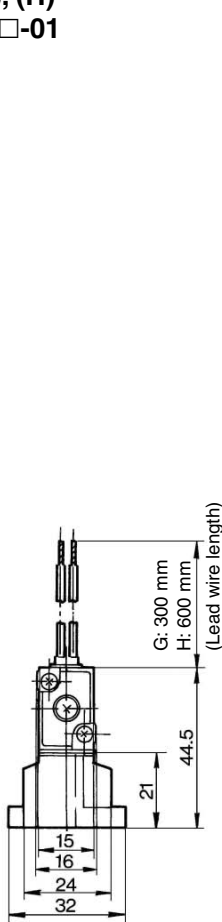
□: With light/surge voltage suppressor

3 Port Solenoid Valve Rubber Seal, Body Ported/Base Mounted **Series VZ300**

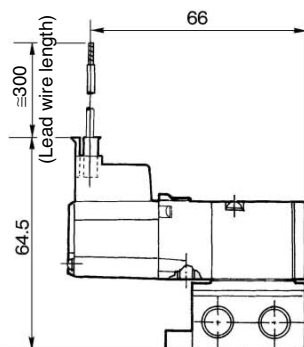


Base Mounted (With sub-plate)

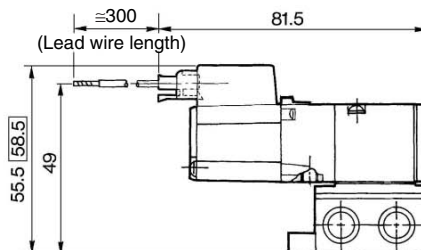
Grommet (G), (H)
VZ3□4-□^G□□-01



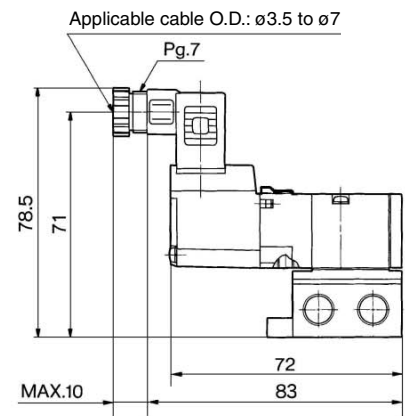
L plug connector (L)
VZ3□4-□L□□-01



M plug connector (M)
VZ3□4-□M□□-01



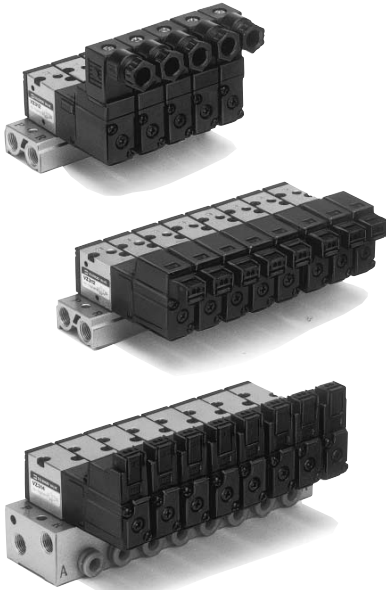
DIN terminal (D)
VZ3□4-□D□□-01



□: With light/surge voltage suppressor

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

Manifold Specifications



Manifold Specifications

Model	For internal pilot	20-□1	40-□2	40-□1
	For external pilot	21R-□1	40R-□2	40R-□1
Manifold type		Single base/B mount		
P(SUP)/R(EXH)		Common SUP/Common EXH		
Valve stations		2 to 20 stations		
A port porting specifications	Location	Valve	Base	
	Direction	Top	Bottom	Side
Port size	1(P), 3(R) port	Rc 1/8	Rc 1/8	Rc 1/8
	2(A) port	M5 x 0.8	M5 x 0.8 1/8	M5 x 0.8, Rc 1/8, C4 (One-touch fitting for ø4), C6 (One-touch fitting for ø6)
	X port ^{Note)}	M5 x 0.8	M5 x 0.8	M5 x 0.8



Note) Only for external pilot

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	VV3Z3-20-□1	VZ3□2	1/8	M5 x 0.8	0.47	0.43	0.13	0.74	0.32	0.19
			1/8	M5 x 0.8	0.71	0.52	0.21	0.81	0.28	0.20
Base mounted For internal pilot	VV3Z3-40-□1	VZ3□4	1/8	M5 x 0.8	0.98	0.36	0.25	0.92	0.24	0.22
			1/8	M5 x 0.8	0.71	0.49	0.2	0.80	0.23	0.19
			1/8	1/8	1.00	0.37	0.26	0.96	0.25	0.24
			1/8	C4	0.68	0.35	0.17	1.00	0.25	0.24
			1/8	C6	1.00	0.27	0.25	1.00	0.30	0.26
			1/8	M5 x 0.8	0.47	0.43	0.13	0.74	0.32	0.19
Body ported For external pilot	VV3Z3-21R-□1	VZ3□2R	1/8	M5 x 0.8	0.47	0.43	0.13	0.74	0.32	0.19
			1/8	M5 x 0.8	0.71	0.52	0.21	0.81	0.28	0.20
			1/8	1/8	0.98	0.36	0.25	0.92	0.24	0.22
			1/8	M5 x 0.8	0.71	0.49	0.2	0.80	0.23	0.19
			1/8	1/8	1.00	0.37	0.26	0.96	0.25	0.24
			1/8	C4	0.68	0.35	0.17	1.00	0.25	0.24
Base mounted For external pilot	VV3Z3-40R-□1	VZ3□4R	1/8	C6	1.00	0.27	0.25	1.00	0.30	0.26
			1/8	M5 x 0.8	0.71	0.52	0.21	0.81	0.28	0.20
			1/8	1/8	0.98	0.36	0.25	0.92	0.24	0.22
			1/8	M5 x 0.8	0.71	0.49	0.2	0.80	0.23	0.19
			1/8	1/8	1.00	0.37	0.26	0.96	0.25	0.24
			1/8	C4	0.68	0.35	0.17	1.00	0.25	0.24

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)

VV3Z3-20-031.....1 pc. (Manifold base)

*VZ312-5LZ-M5...2 pcs. (Valve)

*DXT200-8-6A.....1 pc. (Blanking plate assembly)

VV3Z3-40R-031-C6.....1 pc. (Manifold base)

*VZ314R-5G.....2 pcs. (Valve)

*DXT200-8-3A.....1 pc. (Blanking plate assembly)

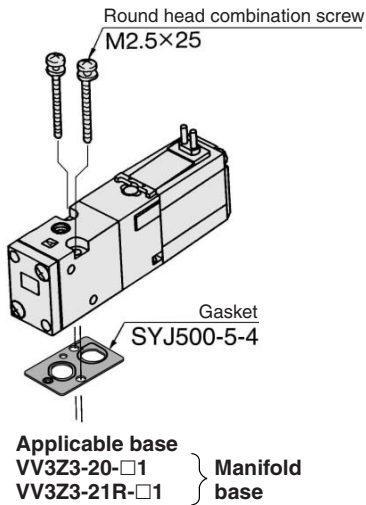
→ The asterisk denotes the symbol for assembly. Prefix it to the part nos. of the solenoid valve, etc.

3 Port Solenoid Valve Rubber Seal, Body Ported/Base Mounted **Series VZ300**

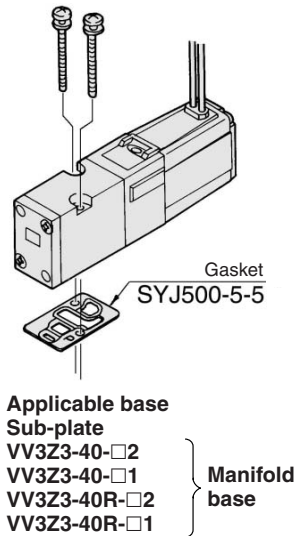
Option

Combinations of Solenoid Valve, Manifold Gasket and Manifold

Body ported (VZ3□2)

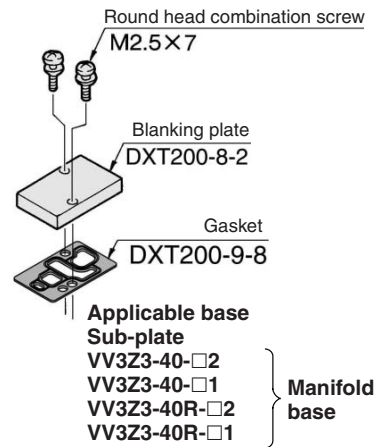


Base mounted (VZ3□4)

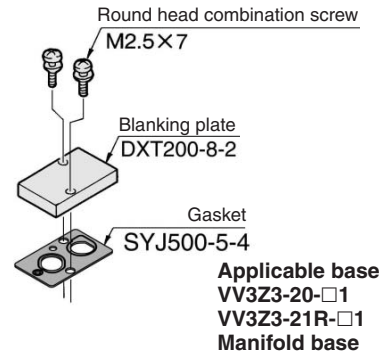


Blanking Plate Assembly

Part no.: DXT-200-8-3A



Part no.: DXT200-8-6A



⚠ 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.

V100

SY

SYJ

VK

VZ

VT

VP

VG

VP

S070

VQ

VKF

VQZ

VZ

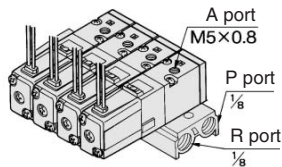
VS

VFN

Series VZ300

Manifold for Internal Pilot

20-□1



How to Order

VV3Z3-20-05 1-□-□

Stations	
02	2 stations
⋮	⋮
20	20 stations

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

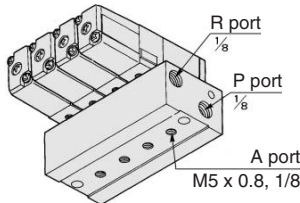
Option	
F	Foot bracket
* Bracket is not mounted.	

Applicable solenoid valve
 VZ312-□□□□-M5
 VZ312M-□□□□-M5
 VZ322-□□□□-M5
 VZ322M-□□□□-M5
Applicable blanking plate assembly
 DXT200-8-6A



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

40-□2



How to Order

VV3Z3-40-05 2-M5-□

Stations	
02	2 stations
⋮	⋮
20	20 stations

A port side	
M5	M5 x 0.8
01	1/8

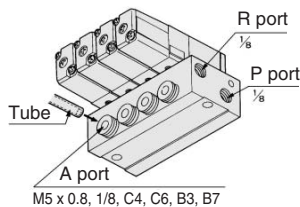
P/R port Thread type	
Nil	Rc
F	G
N	NPT
Z	NPTF

Applicable solenoid valve
 VZ314-□□□□
 VZ314M-□□□□
 VZ324-□□□□
 VZ324M-□□□□
Applicable blanking plate assembly
 DXT200-8-3A



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

40-□1



How to Order

VV3Z3-40-05 1-C6-□

Stations	
02	2 stations
⋮	⋮
20	20 stations

A port side	
M5	M5 x 0.8
01	1/8
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
B3	One-touch fitting for ø5/32"
B7	One-touch fitting for ø1/4

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

Applicable solenoid valve
 VZ314-□□□□
 VZ314M-□□□□
 VZ324-□□□□
 VZ324M-□□□□
Applicable blanking plate assembly
 DXT200-8-3A

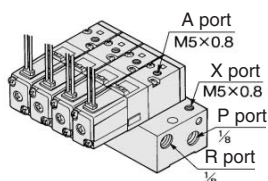


Note) For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

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.

21R-□1



How to Order

VV3Z3-21R-05 1-□-□

Stations	
02	2 stations
⋮	⋮
20	20 stations

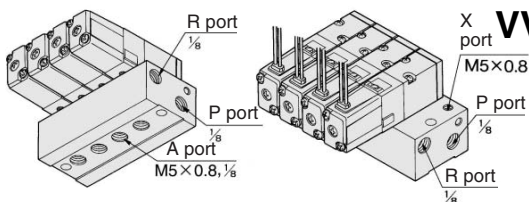
P/R port Thread type	
Nil	Rc
00F	G
00N	NPT
00T	NPTF

Applicable solenoid valve
 VZ312R-□□□□-M5
 VZ322R-□□□□-M5
Applicable blanking plate assembly
 DXT200-8-6A



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

40R-□2



How to Order

VV3Z3-40R-05 2-01-□

Stations	
02	2 stations
⋮	⋮
20	20 stations

A port side	
M5	M5 x 0.8
01	1/8

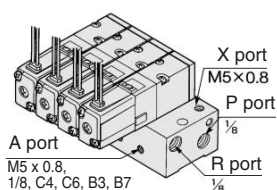
P/R port Thread type	
Nil	Rc
F	G
N	NPT
T	NPTF

Applicable solenoid valve
 VZ314R-□□□□
 VZ324R-□□□□
Applicable blanking plate assembly
 DXT200-8-3A



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

40R-□1



How to Order

VV3Z3-40R-05 1-M5-□

Stations	
02	2 stations
⋮	⋮
20	20 stations

A port side	
M5	M5 x 0.8
01	1/8
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
B3	One-touch fitting for ø5/32"
B7	One-touch fitting for ø1/4

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

Applicable solenoid valve
 VZ314R-□□□□
 VZ324R-□□□□
Applicable blanking plate assembly
 DXT200-8-3A

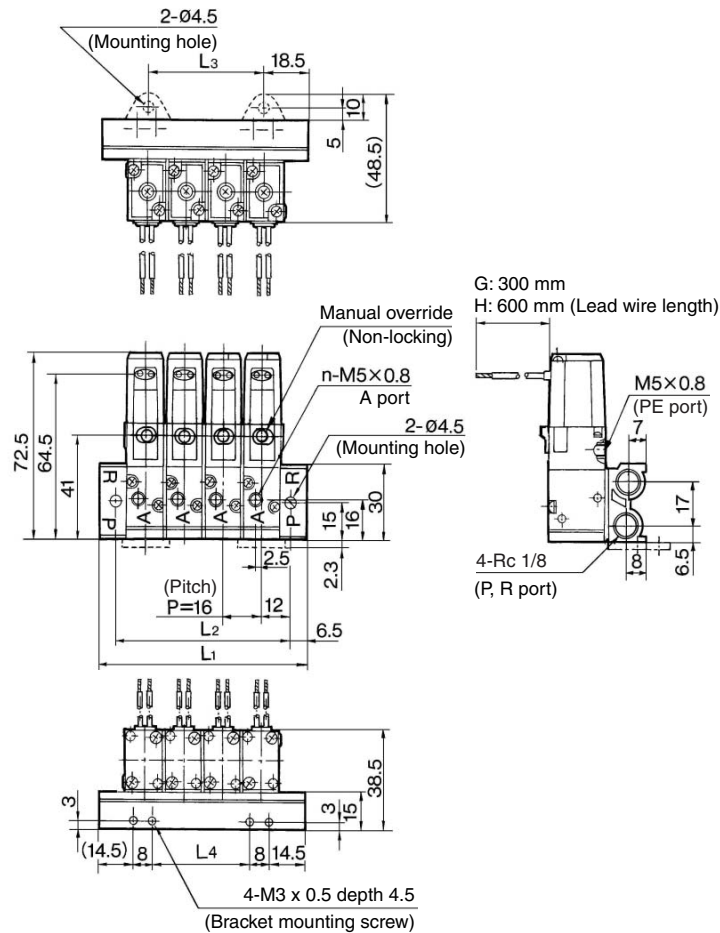


Note) For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

3 Port Solenoid Valve Rubber Seal, Body Ported/Base Mounted **Series VZ300**

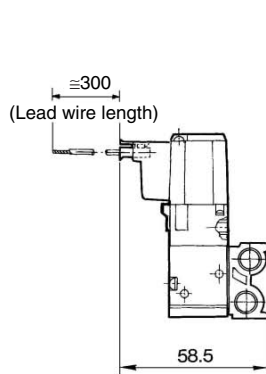
For Internal Pilot
Type 20 Manifold: Top Ported

VV3Z3-20- Stations 1(-F)
Grommet (G), (H)

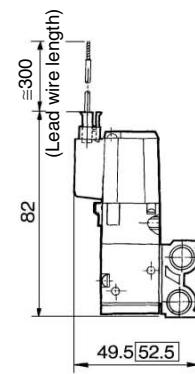


Stations n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	53	69	85	101	117	133	149	165	181	197	213	229	245	261	277	293	309	325	341
L2	40	56	72	88	104	120	136	152	168	184	200	216	232	248	264	280	296	312	328
L3	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304
L4	8	24	40	56	72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

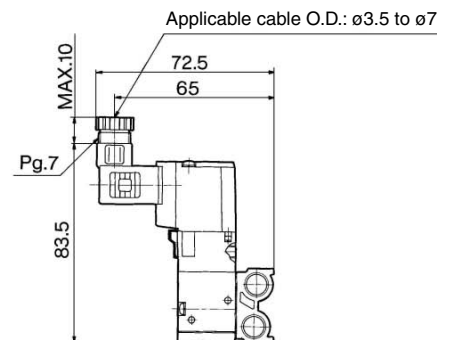
L plug connector (L)



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

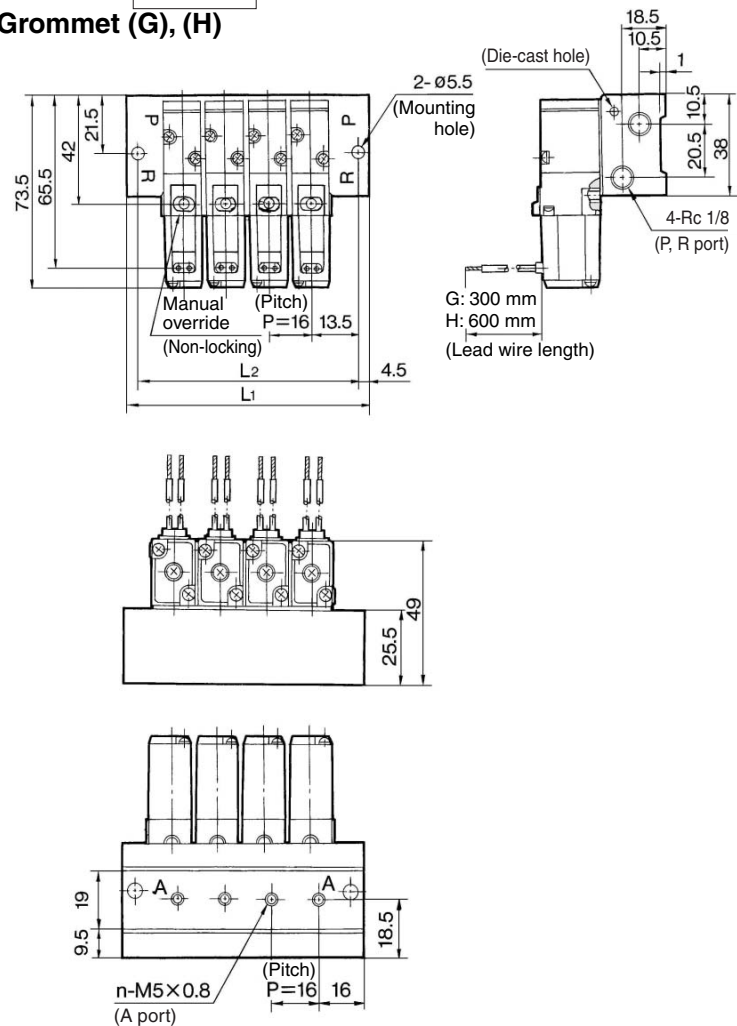
VS

VFN

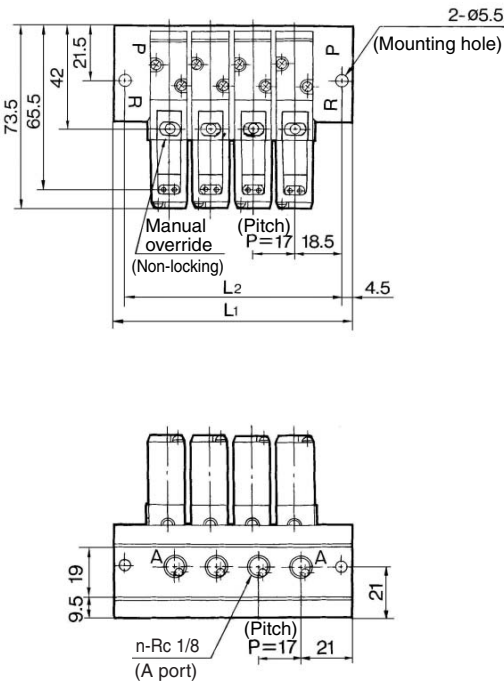
Series VZ300

Type 40 Manifold: Bottom Ported

VV3Z3-40- Stations 2-M5/01
Grommet (G), (H)

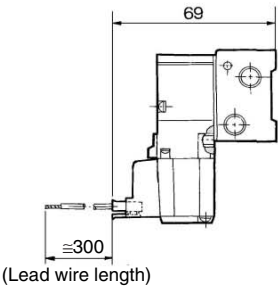


Rc 1/8

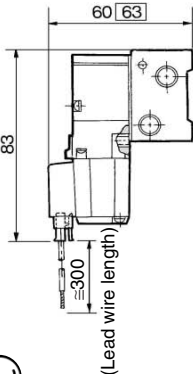


Port size	Stations n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
M5	L1	52	68	84	100	116	132	148	164	180	196	212	228	244	260	276	292	308	324	340
	L2	43	59	75	91	107	123	139	155	171	187	203	219	235	251	267	283	299	315	331
Rc 1/8	L1	63	80	97	114	131	148	165	182	199	216	233	250	267	284	301	318	335	352	369
	L2	54	71	88	105	122	139	156	173	190	207	224	241	258	275	292	309	326	343	360

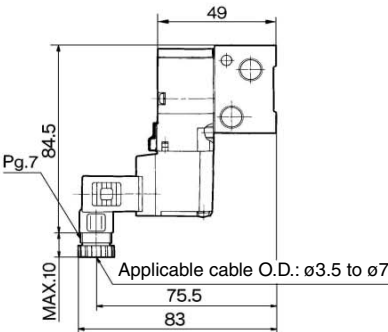
L plug connector (L)



M plug connector (M)



DIN terminal (D)

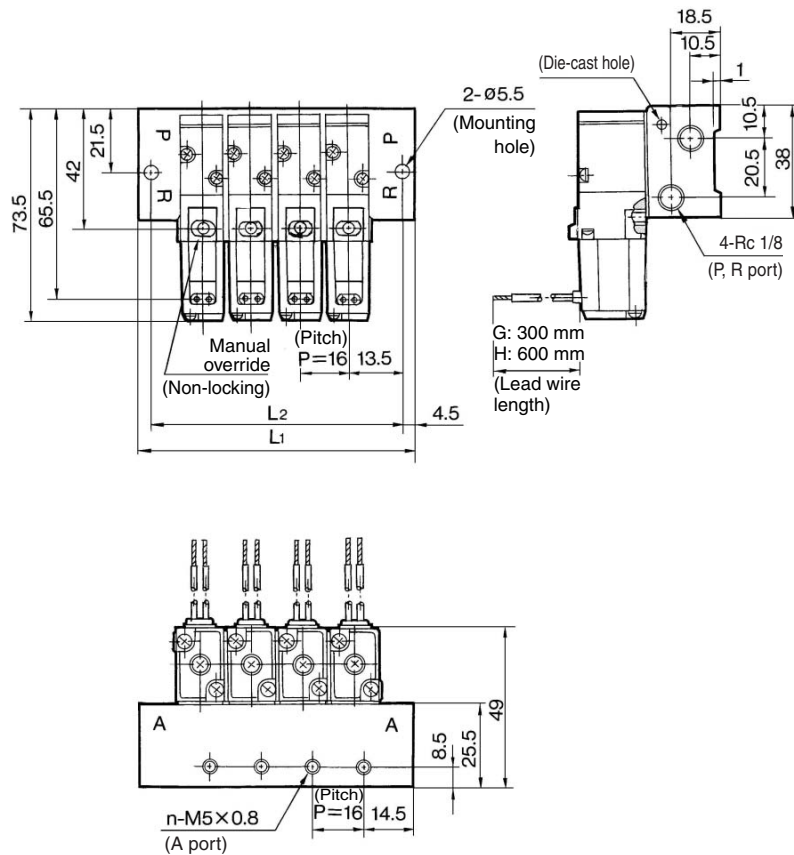


□: With light/surge voltage suppressor

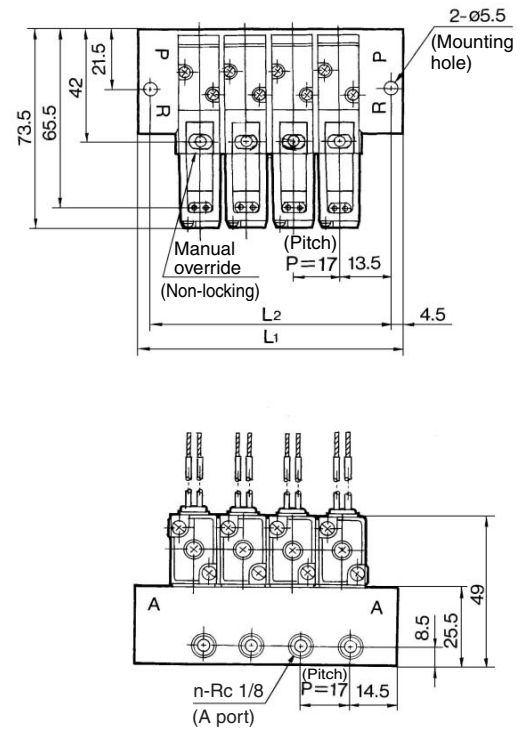
3 Port Solenoid Valve Rubber Seal, Body Ported/Base Mounted **Series VZ300**

For Internal Pilot Type 40 Manifold: Side Ported

VV3Z3-40- Stations 1-M5/01
Grommet (G), (H)

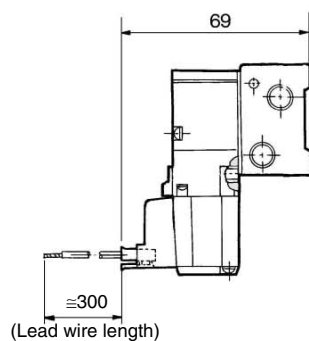


Rc 1/8

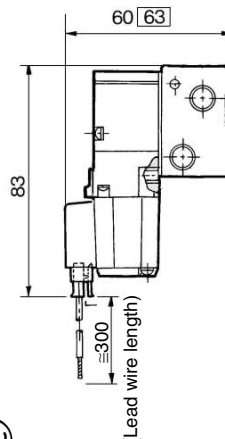


Port size	Stations n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
M5	L1	52	68	84	100	116	132	148	164	180	196	212	228	244	260	276	292	308	324	340
	L2	43	59	75	91	107	123	139	155	171	187	203	219	235	251	267	283	299	315	331
Rc 1/8	L1	53	70	87	104	121	138	155	172	189	206	223	240	257	274	291	308	325	342	359
	L2	44	61	78	95	112	129	146	163	180	197	214	231	248	265	282	299	316	333	350

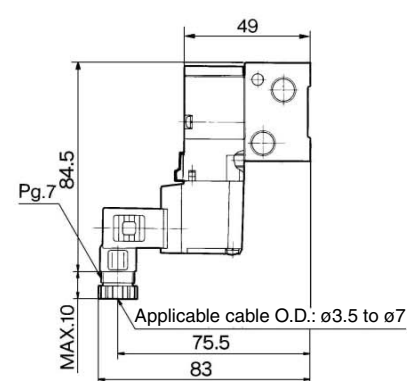
L plug connector (L)



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

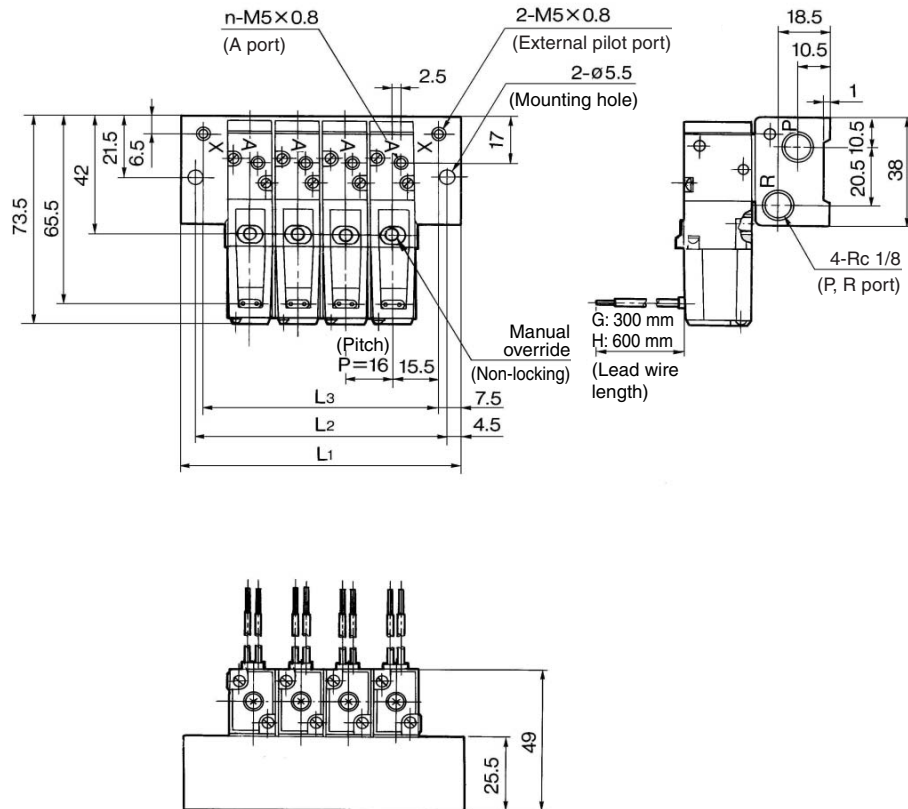
**For Internal Pilot
Type 40 Manifold: Side Ported**

[illegible]

3 Port Solenoid Valve Rubber Seal, Body Ported/Base Mounted **Series VZ300**

For External Pilot
Type 21R Manifold: Top Ported

VV3Z3-21R- Stations 1
Grommet (G), (H)

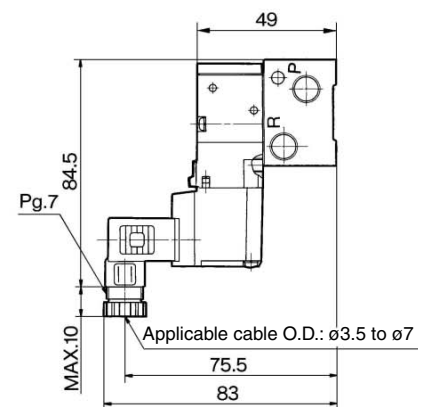
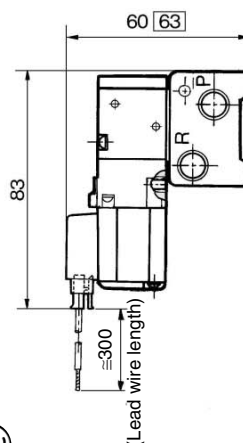
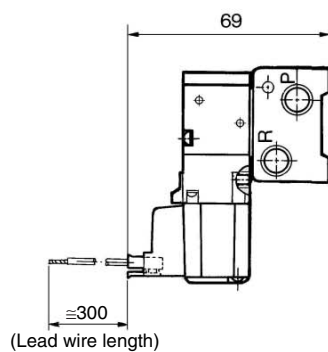


Stations n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	62	78	94	110	126	142	158	174	190	206	222	238	254	270	286	302	318	334	350
L2	53	69	85	101	117	133	149	165	181	197	213	229	245	261	277	293	309	325	341
L3	47	63	79	95	111	127	143	159	175	191	207	223	239	255	271	287	303	319	335

L plug connector (L)

M plug connector (M)

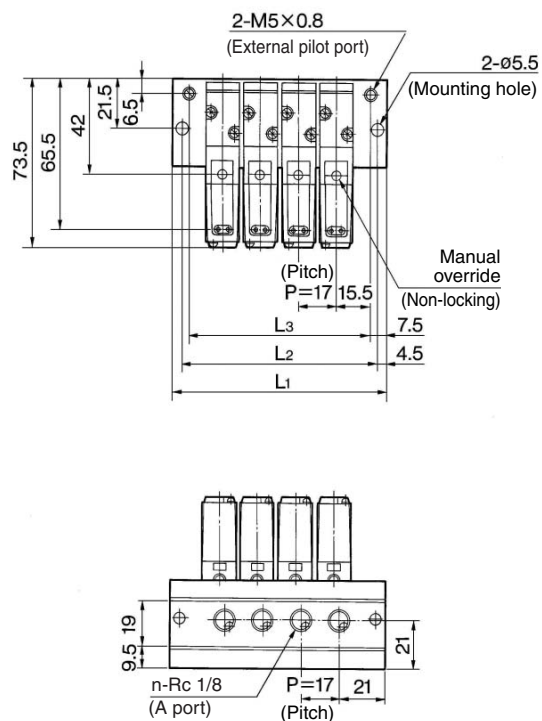
DIN terminal (D)



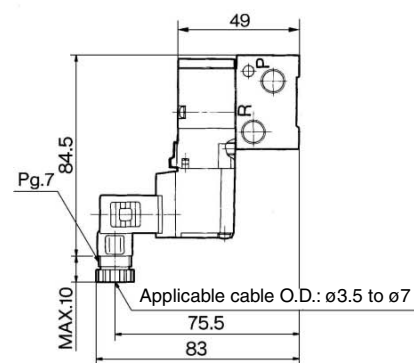
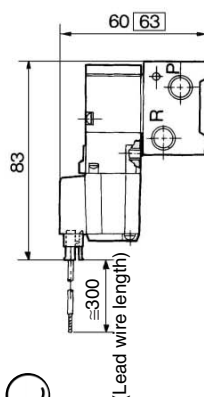
□: With light/surge voltage suppressor

For External Pilot
Type 40R Manifold: Bottom Ported

Rc 1/8



Port size	Stations n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
M5	L1	62	78	94	110	126	142	158	174	190	206	222	238	254	270	286	302	318	334	350
	L2	53	69	85	101	117	133	149	165	181	197	213	229	245	261	277	293	309	325	341
	L3	47	63	79	95	111	127	143	159	175	191	207	223	239	255	271	287	303	319	335
Rc 1/8	L1	63	80	97	114	131	148	165	182	199	216	233	250	267	284	301	318	335	352	369
	L2	54	71	88	105	122	139	156	173	190	207	224	241	258	275	292	309	326	343	360
	L3	48	65	82	99	116	133	150	167	184	201	218	235	252	269	286	303	320	337	354

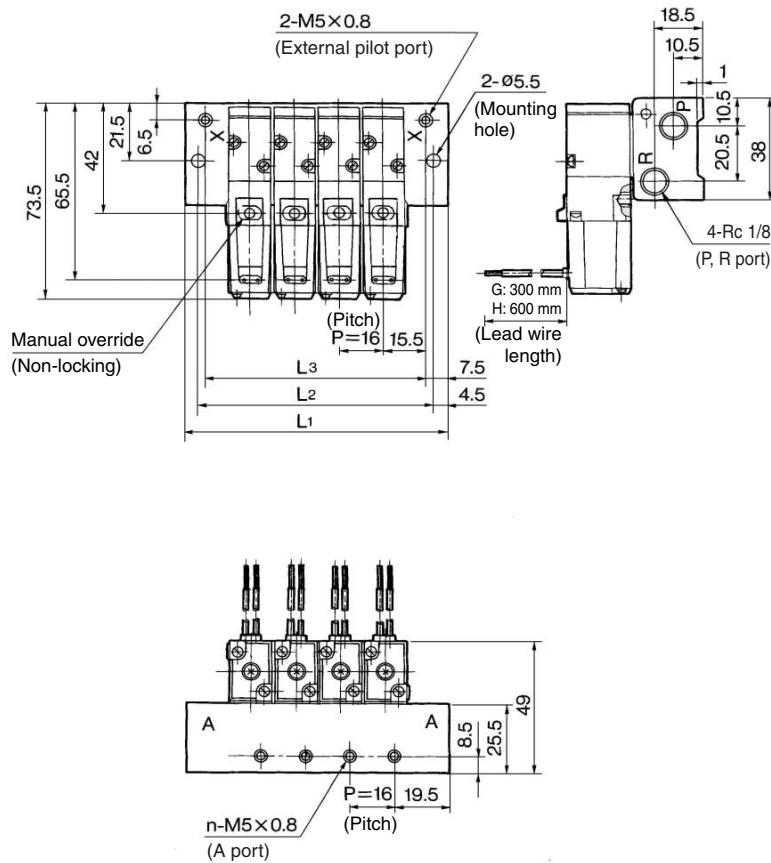
DIN terminal (D)

☐: With light/surge voltage suppressor

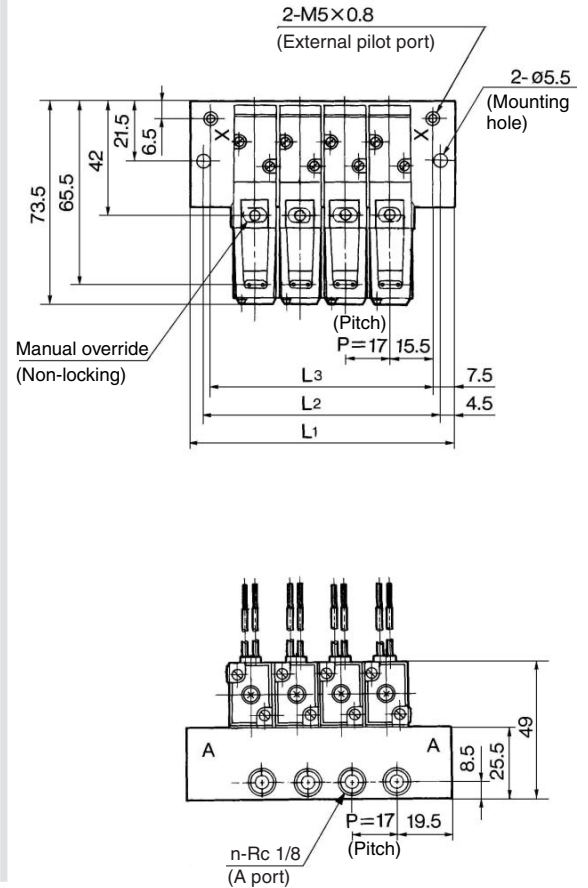
3 Port Solenoid Valve Rubber Seal, Body Ported/Base Mounted **Series VZ300**

For External Pilot Type 40R Manifold: Bottom Ported

VV3Z3-40R- Stations 1-M5/01
Grommet (G), (H)



Rc 1/8

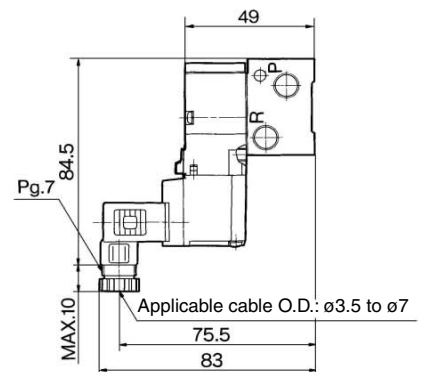
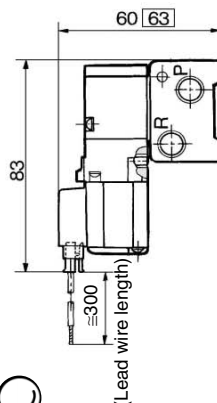
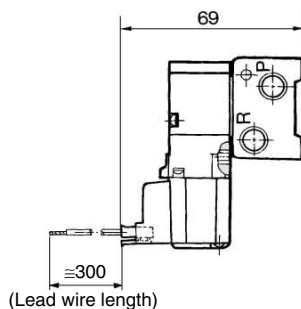


Port size	Stations n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
M5	L1	62	78	94	110	126	142	158	174	190	206	222	238	254	270	286	302	318	334	350
	L2	53	69	85	101	117	133	149	165	181	197	213	229	245	261	277	293	309	325	341
	L3	47	63	79	95	111	127	143	159	175	191	207	223	239	255	271	287	303	319	335
Rc 1/8	L1	63	80	97	114	131	148	165	182	199	216	233	250	267	284	301	318	335	352	369
	L2	54	71	88	105	122	139	156	173	190	207	224	241	258	275	292	309	326	343	360
	L3	48	65	82	99	116	133	150	167	184	201	218	235	252	269	286	303	320	337	354

L plug connector (L)

M plug connector (M)

DIN terminal (D)

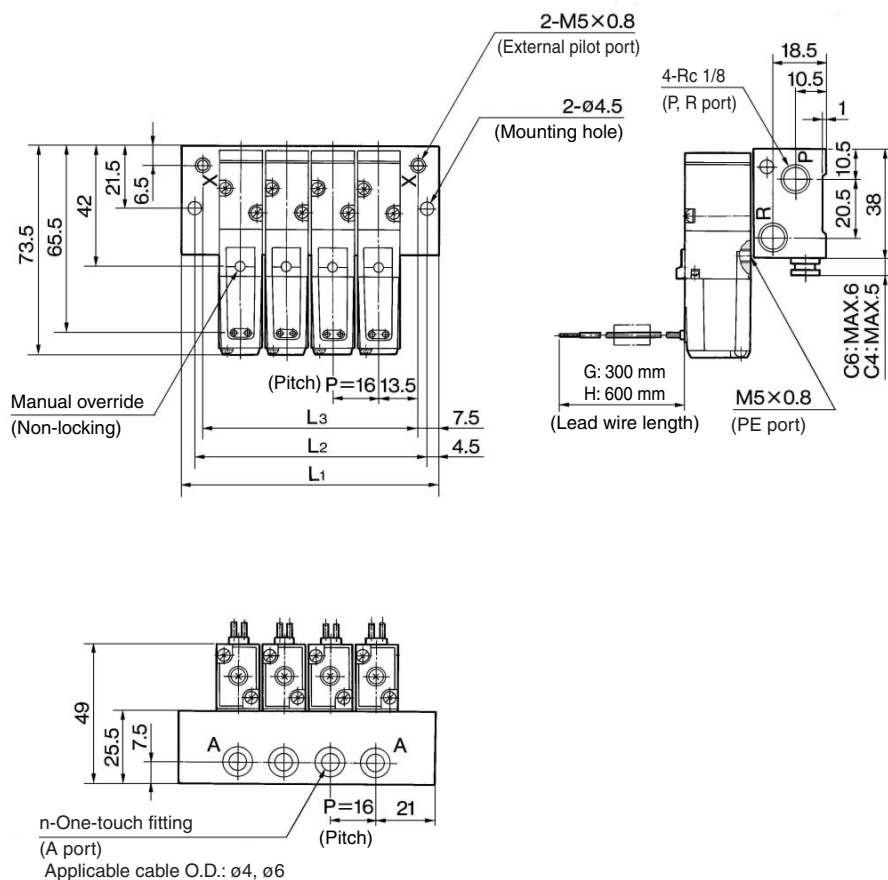


□: With light/surge voltage suppressor

Series VZ300

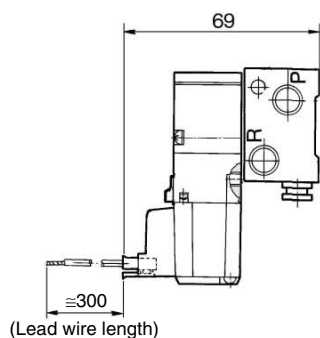
For External Pilot
Type 40R Manifold: Side Ported

VV3Z3-40R- Stations 1-C4/C6
Grommet (G), (H)

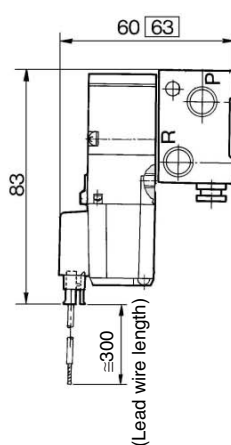


Stations n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L ₁	58	74	90	106	122	138	154	170	186	202	218	234	250	266	282	298	314	330	346
L ₂	49	65	81	97	113	129	145	161	177	193	209	225	241	257	273	289	305	321	337
L ₃	43	59	75	91	107	123	139	155	171	187	203	219	235	251	267	283	299	315	331

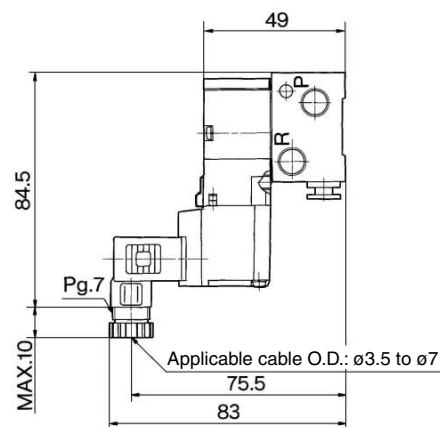
L plug connector (L)



M plug connector (M)



DIN terminal (D)



□: With light/surge voltage suppressor

Series VZ

Made to Order Specifications:

1. Solenoid Valve: Opposite Mounting of Solenoid Assembly

Applicable solenoid valve series

VZ100/300/500

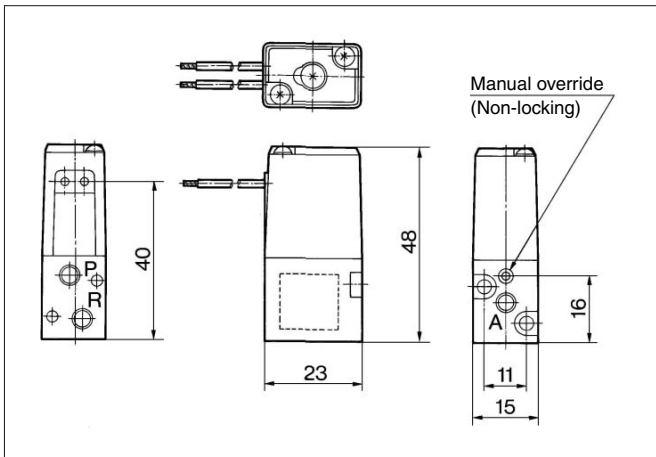
Model no.

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

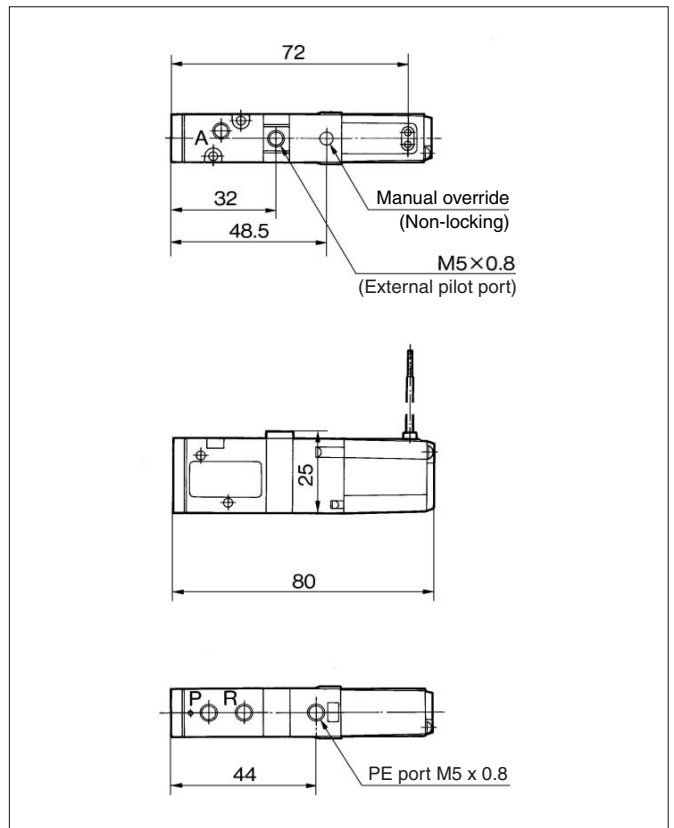
Operating pressure range (MPa)	Main pressure	-100 kPa to 0.7
	External pilot pressure	0.15 to 0.7
Pilot exhaust method	Pilot valve individual exhaust	

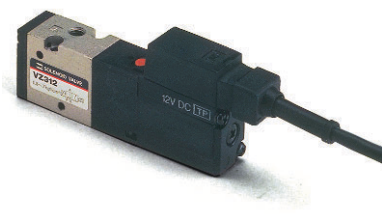
Dimensions

VZ300: 8 mm longer in total length

VZ500: 8 mm longer in total length

Dimensions: VZ312R-□G-M5-X20





3/2 PILOT OPERATED
SOLENOID/SPRING VALVE 10-32NOM

- ✓ N/O or N/C Option
- ✓ 10-32Nom Body Ported or Sub Base Manifold Mounted
- ✓ Cv 0.2 ~ 0.25
- ✓ Optional Lamp and Surge Voltage Suppressor
- ✎ Solenoid Coils are integral and must not be removed
- ✎ These valves are supplied without leads which must be ordered separately (see Accessories Section).

TECHNICAL
SPECIFICATIONS

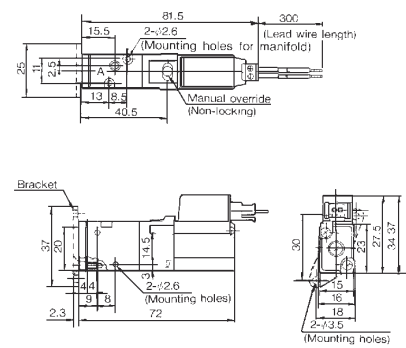
Fluid	Air and Inert Gases
Operating Pressure Range	20 ~ 100PSI (1.5-7kgf/cm²)
Ambient and Fluid Temperature	Max 50°C / 122°F
Response Time	20ms or less
Max Operating Frequency	50 Cycles per Second
Manual Override	Non-Locking Push Type
Pilot Exhaust	Individual, Common
Lubrication	Not Required; If Lubrication is provided, use SMC Lubricant
Enclosure	Dust Proof

SOLENOID
SPECIFICATIONS

Electrical Entry	Grommet (G), Plug Connector (MN)	
Voltages	AC	24V, 110V, 240V
	DC	12V, 24V
Allowable voltage	-15~+10% of rated voltage	
Coil insulation	Class E or equivalent	
Temperature rise	45°C or less / 113°F or less	
Power consumption DC	1.8W/2.1W (W/LED)	
Apparent power AC	Inrush	4.5VA/50Hz, 4.2VA/60Hz
	Holding	3.5VA/50Hz, 3VA/60Hz
Surge voltage suppressor	DC: Diode, AC: ZNR	
Indicator light	DC: LED (Red), AC: Neon lamp	

DIMENSIONS

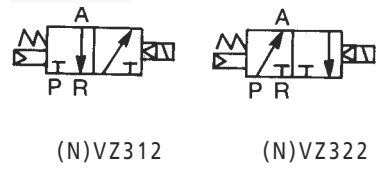
SERIES (N)VZ300 BODY PORTED M PLUG TYPE



Observe Operating Pressure Ranges -
see Technical Specifications for details

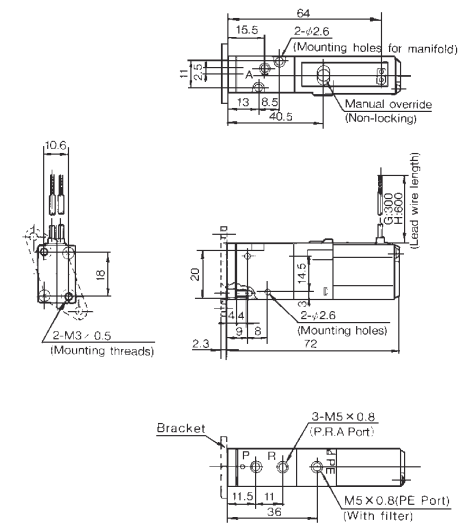
Model		Type of Actuation	Effective Orifice mm2/(Cv factor)
Body Ported Type	(N)VZ312	NC	3.6 (0.2)
	(N)VZ322	NO	
Base Mounted Type (with Subplate)	(N)VZ314	NC	4.5 (0.25)
	(N)VZ324	NO	

SYMBOLS



DIMENSIONS

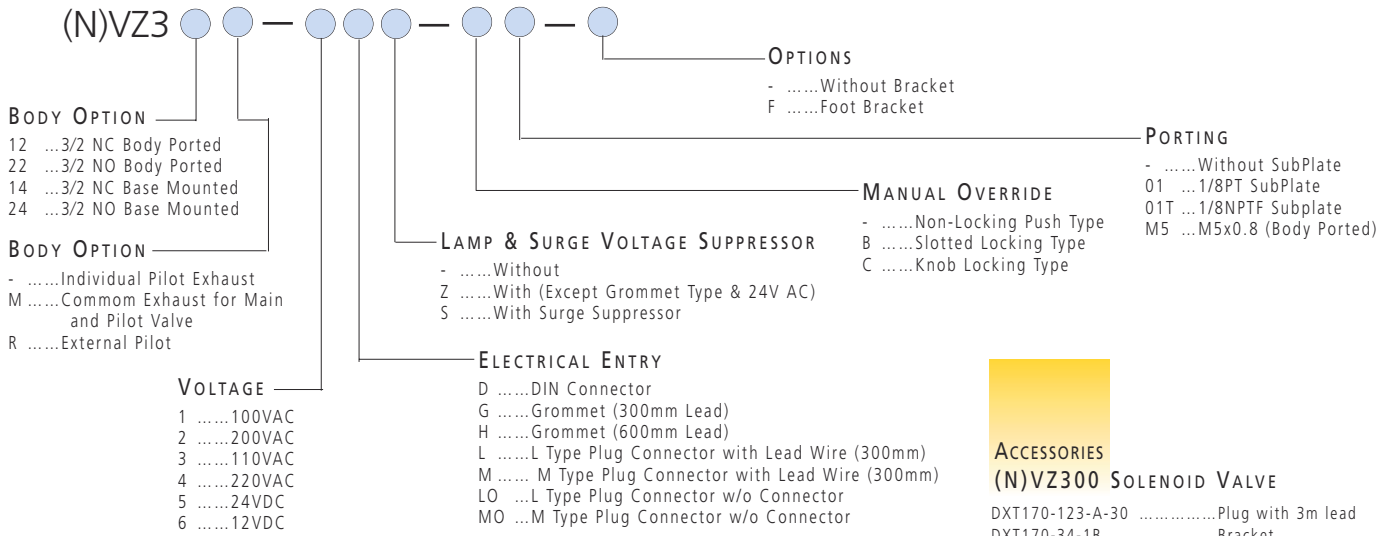
SERIES (N)VZ300 BODY PORTED GROMMET TYPE



How To
ORDER
SEE NEXT PAGE

How To ORDER

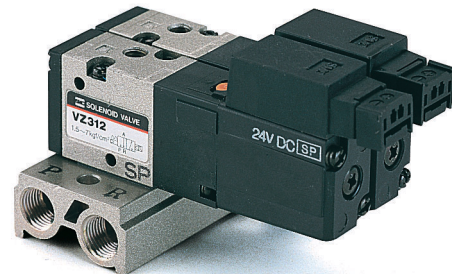
(N)VZ300 SOLENOID VALVE



SERIES (N)VZ300 MANIFOLDS

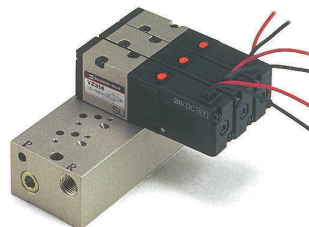
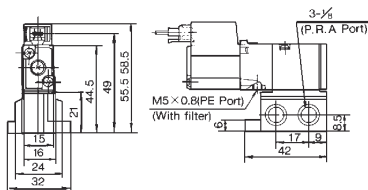
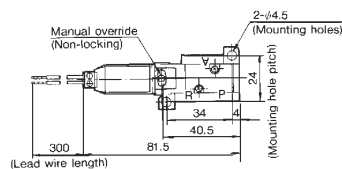
A Single Sub-base and 3 different Manifold Designs.

- (i) Side Entry Single Sub-base for use with the Base Mounted Valve (Type 40).
- (ii) 2-10 Station Type 20 Mmanifold for use with the Body Ported Valve (Type 20).
- (iii) 2-10 Station Type 40 Side Entry Manifold for use with the Base Mounted Valve (Type 40).
- (iv) 2 - 10 Station Type 40 Bottom Entry Manifold for use with the Base Mounted Valve (Type 40).



DIMENSIONS

SINGLE SUB-BASE SIDE PORTED
M TYPE PLUG CONNECTOR



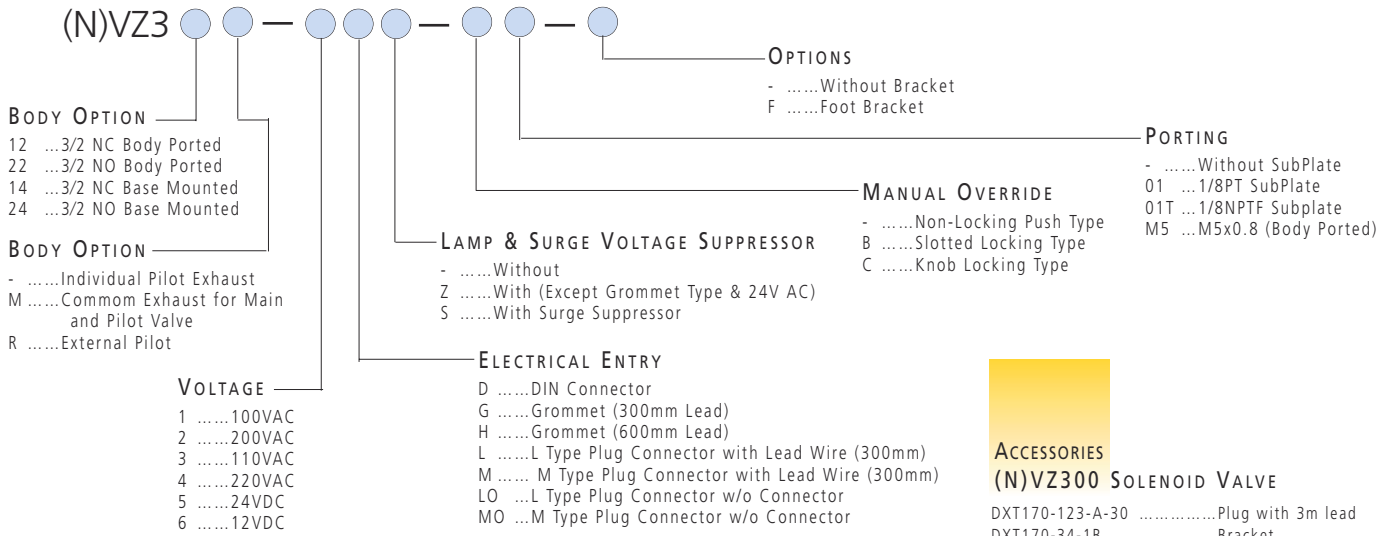
SEE INSIDE FRONT COVER FOR
DETAILS OF YOUR LOCAL SALES OFFICE



FOR FURTHER TECHNICAL
DETAILS ON THIS
PRODUCT, REQUEST
CATALOG REFERENCE
E120

How To ORDER

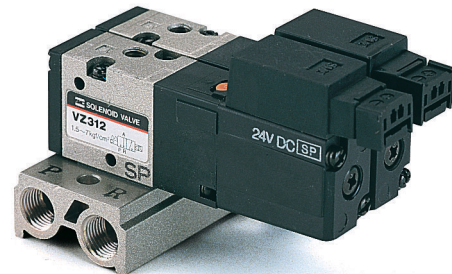
(N)VZ300 SOLENOID VALVE



SERIES (N)VZ300 MANIFOLDS

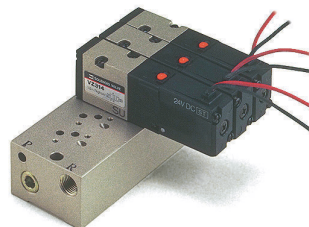
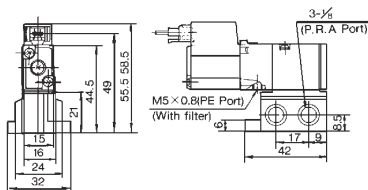
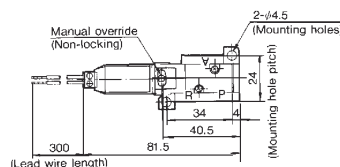
A Single Sub-base and 3 different Manifold Designs.

- (i) Side Entry Single Sub-base for use with the Base Mounted Valve (Type 40).
- (ii) 2-10 Station Type 20 Mmanifold for use with the Body Ported Valve (Type 20).
- (iii) 2-10 Station Type 40 Side Entry Manifold for use with the Base Mounted Valve (Type 40).
- (iv) 2 - 10 Station Type 40 Bottom Entry Manifold for use with the Base Mounted Valve (Type 40).



DIMENSIONS

SINGLE SUB-BASE SIDE PORTED
M TYPE PLUG CONNECTOR



SEE INSIDE FRONT COVER FOR
DETAILS OF YOUR LOCAL SALES OFFICE

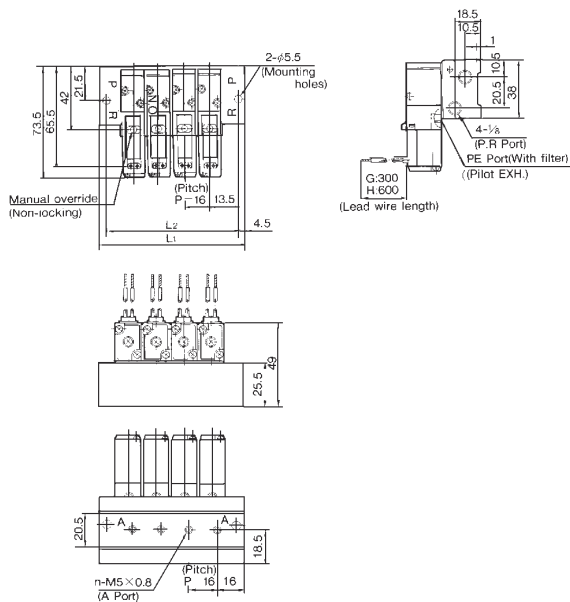


FOR FURTHER TECHNICAL
DETAILS ON THIS
PRODUCT, REQUEST
CATALOG REFERENCE
E120

FOR FURTHER TECHNICAL
DETAILS ON THIS
PRODUCT, REQUEST
CATALOG REFERENCE
F120

DIMENSIONS

MANIFOLD TYPE 40 BOTTOM PORTED



Stations (n)		2	3	4	5	6	7	8	9	10
M5x0.8	L1	52	68	84	100	116	132	148	164	180
	L2	43	59	75	91	107	123	139	155	171

How To Order

MANIFOLD TYPE 40 BOTTOM PORTED

(N)VV3Z3-40-2-

NUMBER OF STATIONS

02 ...2 stations
to
20 ...20 stations

SIZE OF A, B PORT

M5 ...10-32Nom (P, R Port PT)
M5T...10-32Nom (P, R Port NPTF)
01T ... 1/8" NPTF

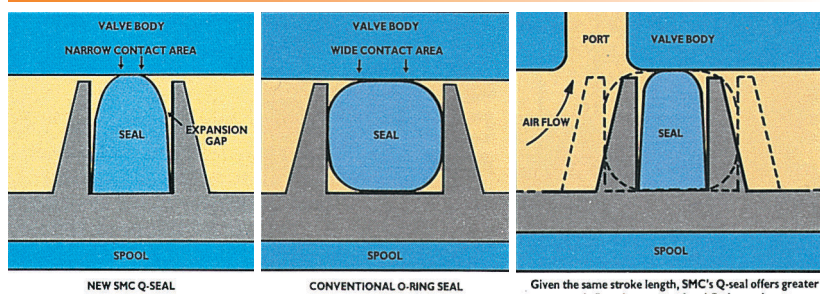
ACCESSORIES

MANIFOLD TYPE 40 SIDE PORTED

DXT200-8-1ABlanking Plate Kit

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ON THIS SERIES, REQUEST CAT:E120

THE Q SEAL



AS PART OF A LONG TERM DEVELOPMENT PROGRAM TO IMPROVE THE PERFORMANCE AND DURABILITY OF PNEUMATIC VALVE SEALS, SMC HAS DEVELOPED A NEW TYPE OF SEAL WHICH OVERCOMES THE PROBLEMS INHERENT WITH TRADITIONAL O-RINGS AND BONDED SEALS - CALLED Q SEAL, IT FEATURES A SPECIAL PROFILE WHICH REDUCES SLIDING RESISTANCE TO A MINIMUM, ENHANCES BOTH LONG TERM RELIABILITY AND AIR FLOW CHARACTERISTICS AND PROVIDES BI-DIRECTIONAL PORT ACCESS.

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