

3 Port Body Ported Rubber Seal

Series VZ100

How to Order

Body Ported VZ1 1 0 - 5 L - M5 -

Actuation

1 Normally closed
2 Normally open

Regarding VZ120, R port is a supply port.

Rated voltage

1	100V AC 50/60Hz
2	200V AC 50/60Hz
3*	110V AC 50/60Hz
4*	220V AC 50/60Hz
5	24V DC
6*	12V DC
9*	Others

*Option

Electrical entry

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

*LN, MN style: with 2 sockets

Indicator light and surge voltage suppressor

-	None
Z*	With indicator light and surge voltage suppressor
S	With surge voltage suppressor

*It is not available for GZ, HZ, DOZ.

Port size

M5	M5 X 0.8
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Option

F: With foot style bracket

Note) Bracket is not assembled.

- SY
- SYJ
- VK
- VZ**
- VT
- VT
- VP
- VG
- VP
- VQ
- VQZ
- VZ
- VS

VZ100

**Low Power Consumption:
1.8WDC**

**Applicable for Vacuum Use
-100kPa**



Refer to the p.2.4-8 to 2.4-10 for manifold use.



P.2.4-45

Option

Description	Model No.	Note
Foot style bracket	DXT170-34-1A	With mounting screw (M3 X 6)
Silencer	M5 AN120-M5 (ø8 X 17L)	For valve unit (R port), Noise reduction: 21dB or more, Effective orifice 5mm ²

Specifications

Fluid	Air
Operating pressure range	See below
Ambient and fluid temperature (°C)	Max. 50
Response time (ms) ⁽¹⁾	15 or less
Max. operating frequency (Hz)	15
Effective area	See below
Manual override	Non-locking push style
Lubrication	Non-lube
Mounting position	Free
Impact/Vibration resistance (m/s ²) ⁽²⁾	300/50
Protection structure	Dust proof



Note 1) According to dynamic performance test of JIS B8374-1981.(Coil temperature 20°C, rated voltage, without surge voltage suppressor)

Note 2) Impact resistance: No malfunction from test using drop impact tester, to axis and right angle directions of main valve and armature, each one time when energized and de-energized. (Value in the initial stage.)

Vibration resistance: No malfunction from test with 45 to 1000Hz 1 sweep, to axis and right angle directions of main valve and armature, each one time when energized and de-energized. (Value in the initial stage.)

Solenoid specifications

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



Note) At rated voltage

Operating Pressure Range and Effective Area

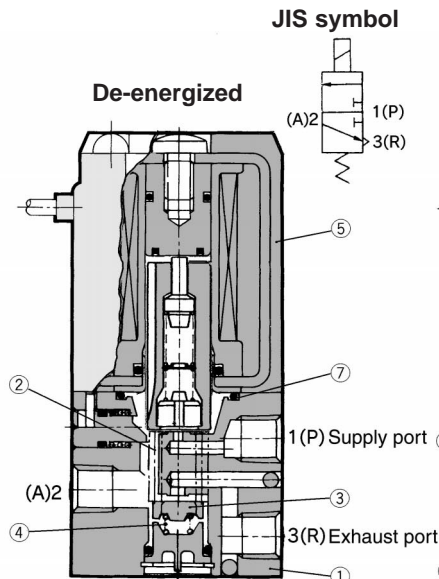
Valve	Actuation	Operating press. range (MPa)	Vacuum specification MPa		Port size	Effective area (mm ²)	Weight (g)
			P port	R port			
Construction	VZ110	N.C.	0 to 0.7	-27kPa to 0.6	M5 X 0.8	P→A:0.6 (0.034) A→R:0.9 (0.05)	70
	VZ120	N.O.	0 to 0.5	-100kPa to 0		R→A:0.6 (0.034) A→P:0.6 (0.034)	



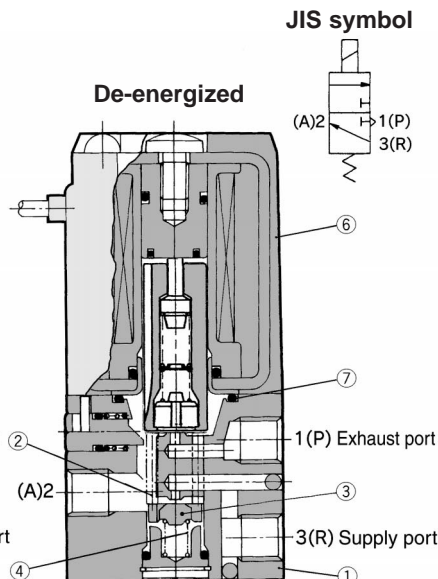
Note) Regarding VZ120, R port is a supply port.

Construction

VZ110 (N.C.)



VZ120 (N.O.)



Component Parts

No.	Description	Material	Note
①	Body	ZDC	Platinum silver
②	Push rod	Resin	
③	EXH poppet	NBR	
④	N.C. Back up spring	SUS	
	N.O. poppet spring		

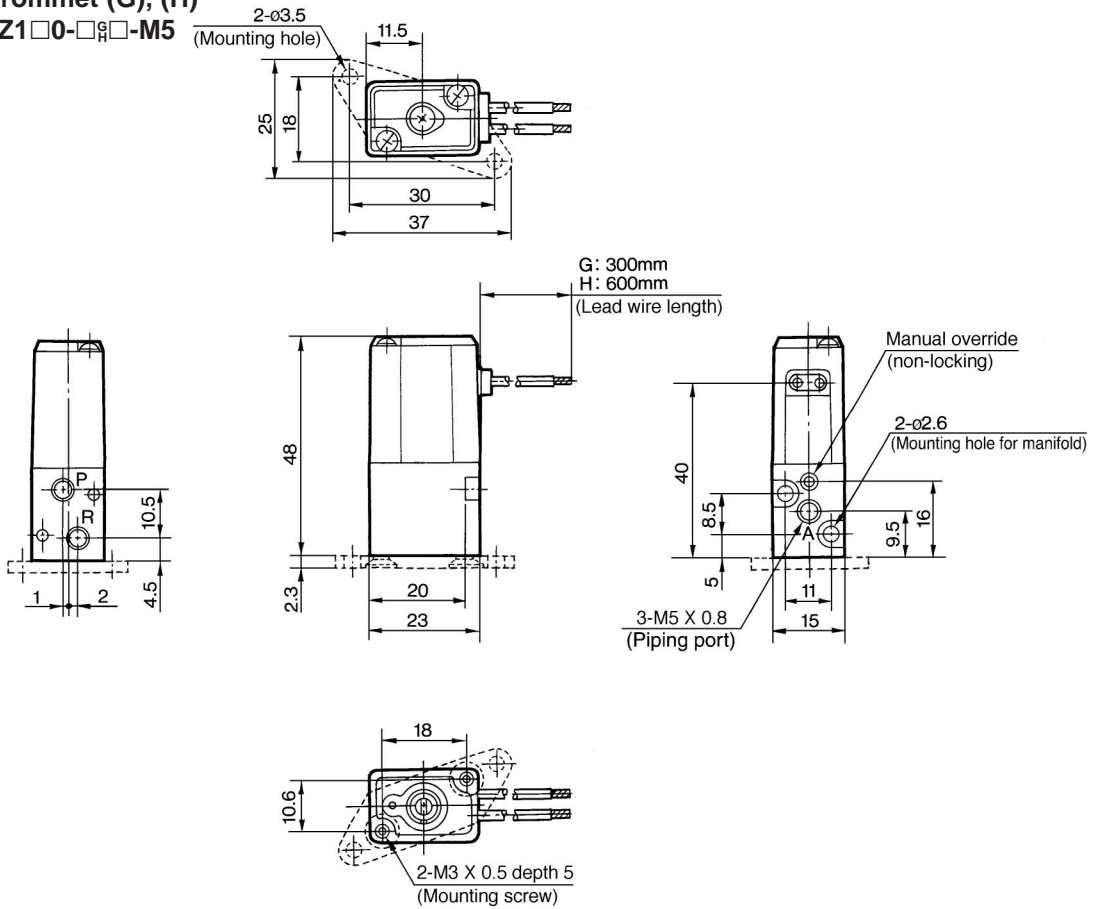
Replacement Parts

No.	Description	Part No.	Material	Note
⑤	Solenoid Ass'y	DXT170-A-□□□	Epoxy, Stainless steel	VZ110
⑥	Solenoid Ass'y	DXT170-E-□□□	Epoxy, Stainless steel	VZ120
⑦	O ring	13 X 11 X 1	NBR	Common with VZ300

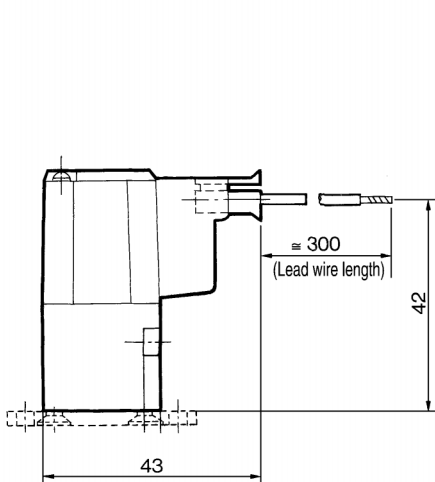


Body Ported

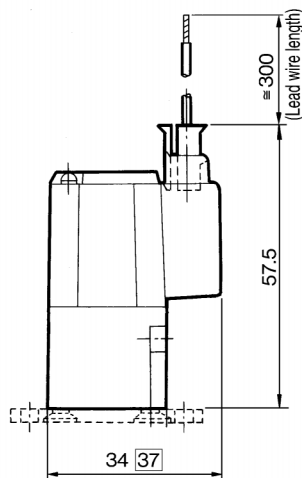
Grommet (G), (H) VZ1□0-□□□-M5



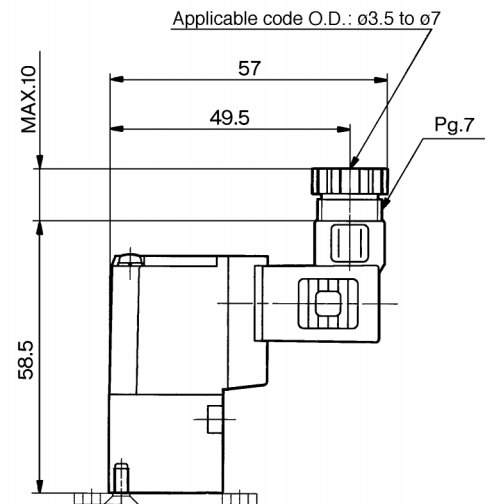
L plug connector (L) VZ1□0-□L□-M5



M plug connector (M) VZ1□0-□M□-M5



DIN terminal (D) VZ1□0-□D□-M5



□ : with indicator light and surge voltage suppressor

SY

SYJ

VK

VZ

VT

VT

VP

VG

VP

VQ

VQZ

VZ

VS