

3 Port Solenoid Valve Direct Operated Poppet type

Compact yet provides a large flow capacity

Dimensions (WxHxD)....45x89.5x45

C:21.6 dm³/(s·bar)
(Passage 2 to 3)

Suitable for use in vacuum applications

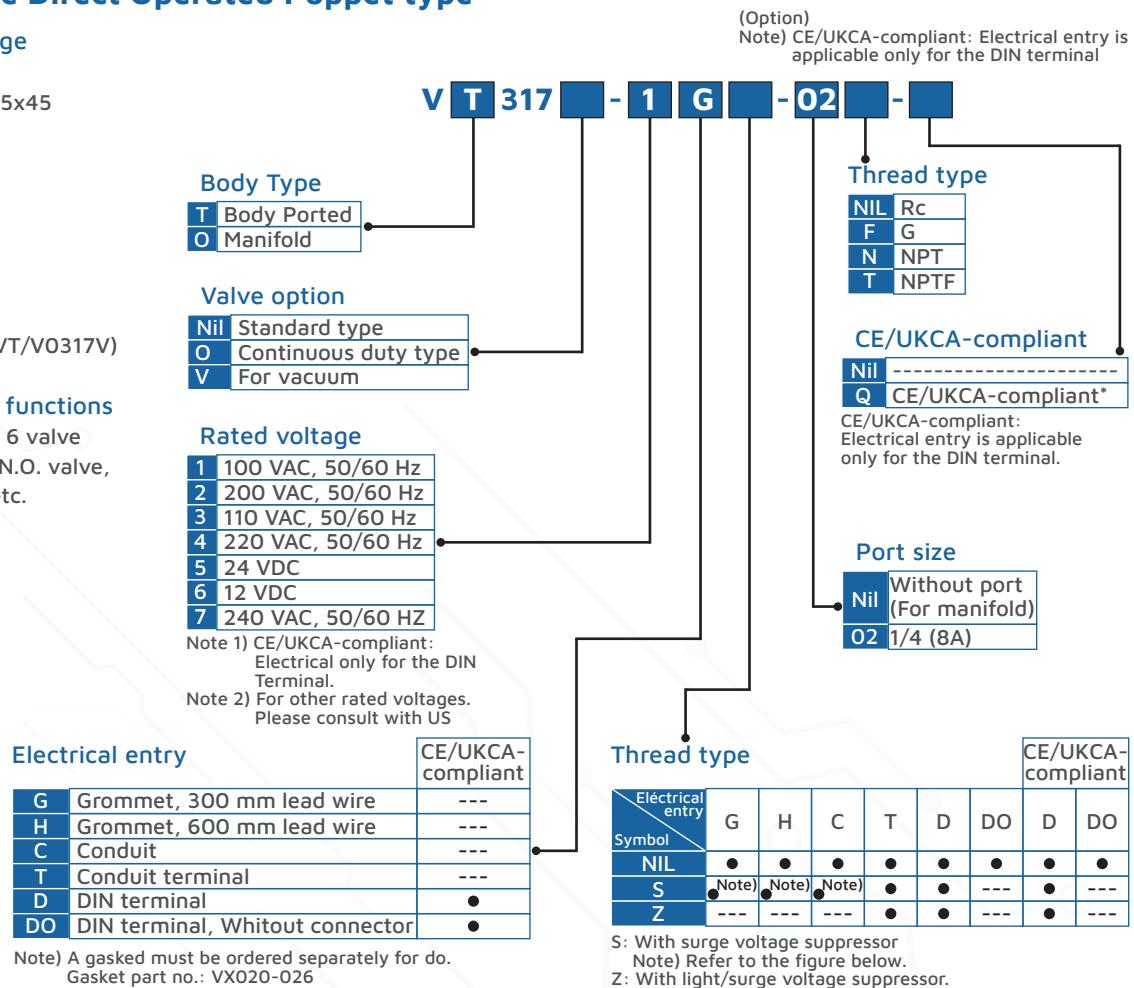
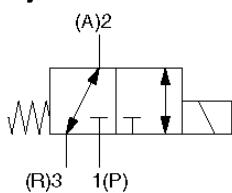
-101.2 kPa
(Fo9r vacuum specifications: VT/V0317V)

A single valve with 6 valve functions

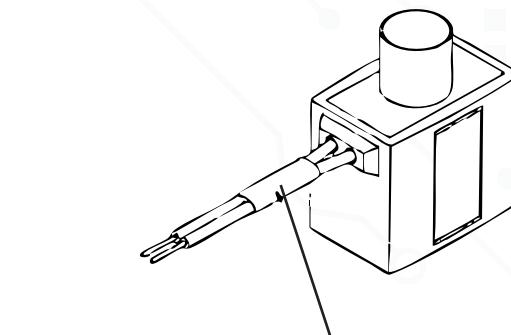
(Universal porting can provide 6 valve functions, such as N.C. valve, N.O. valve, Divider valve, Selector valve etc.



Symbol



Surge voltage suppressor mounting part (Port "G")



Tamaño del cuerpo	Applicable manifold type	Accessory
VO317(-Q)	Common or individual exhaust2FF2-B	O-ring (KA00066, 4pcs.) Note) Hexagon socket head screw (XT012-25C-1, 2pcs.)

Note) it is not applied to "Continues duty type"

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Standard Specifications

Type of actuation	Type of actuation
Fluid	Fluid
Operating pressure range	Operating pressure range
Ambient and fluid temperature	Ambient and fluid temperature
Response time(1)	Response time(1)
Max. operating frequency	Max. operating frequency
Lubrication	Lubrication
Manual override	Manual override
Mounting orientation	Mounting orientation
Impact/Vibration resistance (2)	Impact/Vibration resistance (2)
Enclosure	Enclosure

Electrical entry		Grommet, Conduit, Conduit terminal, DIN terminal	
Coil rated voltage (V)	A/C (50/60 Hz) DC	100, 200, 110°, 220°, 240° 24, 12°	
Allowable voltage fluctuation		-15 to +10% of rated voltage	
Apparent power ⁽³⁾	AC Inrush Holding	19 VA (50 Hz), 16 VA (60 Hz) 11 VA (50 Hz), 7 VA (60 Hz)	
Power consumption ⁽³⁾		DC	Without indicator light: 6W, With indicator light 6.3 W
Light/Surge voltage suppressor (Not applicable for grommet type)	AC DC	Varistor, Neon bulb.	Varistor, LED (Neon bulb for 100V or more).

*Semi-standard

Note 1) Based on dynamic performance test, JIS B 8419: 2010. (Coil temperature: 20°C, at rated voltage, without surge suppressor).

Note 2) 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 100 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).

Note 3) At rated voltage.

Flow Rate Characteristics/Weight

Valve model	Flow rate characteristics										Weight	
	1->2 (P->A)			2->3 (A->R)			3->2 (R->A)			2->1 (A->P)		
	C(dm ³ /(s-bar))	b	Cv	C(dm ³ /(s-bar))	b	Cv	C(dm ³ /(s-bar))	b	Cv	C(dm ³ /(s-bar))	b	Cv
VT317	2.4	0.26	0.62	2.6	0.34	0.67	2.8	0.25	0.67	2.5	0.37	0.66
VT317 (Vacuum spec.type)												0.29kg
VT317 (Continuous duty type)												

Note) Values for a single valve unit. It differs in the manifold case. Refer to manifold specifications on page 1254.

Valve Options

Continuous duty type: VT317E

Exclusive use of VT317E is recommended for continuous duty with long time loading.

Caution!!!

- 1.This model is for continuous duty, not for high cycle rates. But even in low cycle rates, if energizing the valve more than once a day, please consult with us.
2. Energizing solenoid should be done at least once in 30 days.

Vacuum spec. type: VT317V

This vacuum model has less air leakage than the standard model under low pressure, it is recommended for vacuum application.

Caution!!!

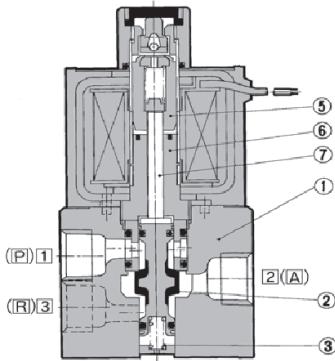
- 1.Since this valve has slight air leakage, it can not be used for vacuum holding (including positive pressure holding) in the pressure container.

Specifications different from standard are as follows.

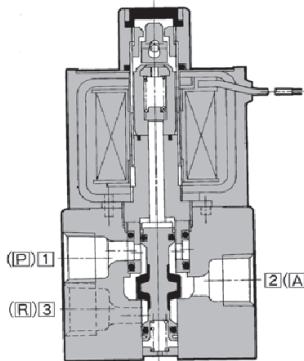
Operating pressure range -101.2 kPa to 0.1MPa

Construction

De-energized



Energized



Operation principles

De-energized

Spool valve ② is pushed upward by the return spring ③, port ④ is closed, and port ⑤ and port ⑥ are opened

Caution!!!

When an electric current is applied to the moded coil ①, the armature ⑥ is attracted to the core ⑤ and through the push rod ⑦, it pushes down the spool valve ②. Then, port ④ and port ⑤ are connected. At this time, there will be gaps between the armature ⑥ and the core ⑤, but the armature will be magnetically attracted to the core ⑤.

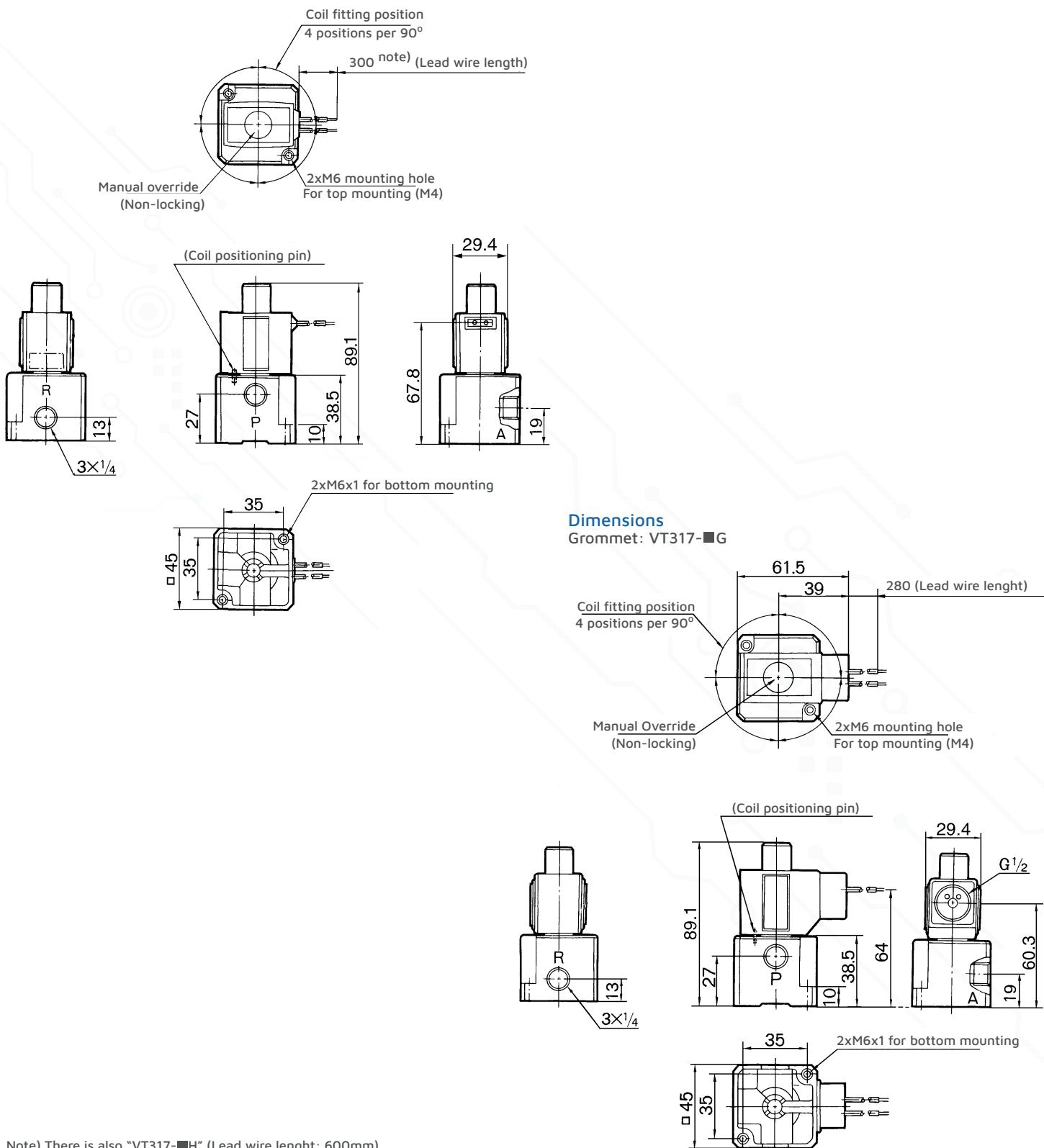
Component parts

No.	Description	Material	Note
1	Body	Aluminium die-casted	Color: Platinum Silver
2	Spool valve	Aluminium, NBR	

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Dimensions

Grommet: VT317-■G



Note) There is also "VT317-■H" (Lead wire length: 600mm).