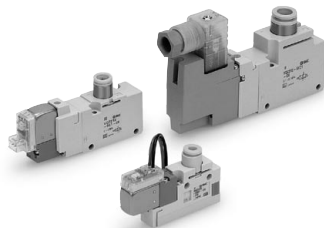


Specifications



Valve construction	Metal seal	Rubber seal	VQZ100 (Poppet seal)
Fluid	Air, Inert gas		
Max. operating pressure (MPa)	0.7 (High pressure type: 1.0)	0.7	0.7 (High pressure type: 1.0)
Min. operating pressure (MPa)	0.1	0.15	0.15
Ambient and fluid temperature (°C)	-10 to 50 (No freezing)		
Max. operating frequency (Hz)	20	5	20
Pilot exhaust method	Individual exhaust		Common exhaust
Lubrication	Not required		
Manual override	Push type, Locking type (Tool required)		
Mounting orientation	Free		
Impact/Vibration resistance (m/s ²) ^{Note 1)}	150/30		
Enclosure [*]	Dustproof (DIN terminal: IP65 ^{Note 2)})		

* Based on IEC60529

Note 1) 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. (Value in the initial state)

Vibration resistance: No malfunction occurred in one sweep test between 45 and 2000 Hz. Test was performed to axis and right angle directions of the main valve and armature when pilot signal is ON and OFF. (Value in the initial state)

Note 2) When IP65 compliant DIN terminals are selected: VQZ□□□-□Y□□W1-□□

Solenoid Specifications

Semi-standard Specifications

High speed response type
High pressure type (Metal seal type only)
External pilot type [*]

* For details on external pilot type, refer to page 1806.



Made to Order
(For details, refer to page 1825.)

Symbol	Description
X30	Pilot valve common exhaust
X90	Main valve fluororubber
X113	All fluororubber

Electrical entry		Grommet (G)		M-type plug connector (M)	
		L-type plug connector (L)		DIN terminal (Y)	
		G, L, M		Y	
Coil rated voltage (V)	DC	24, 12			
	AC 50/60 Hz	100, 110, 200, 220*			
Allowable voltage fluctuation		±10% of rated voltage*			
Power consumption (W)	DC	Standard	0.35 [(With light: 0.4 (DIN terminal with light: 0.45)]		
	DC	High speed response, high pressure	0.9 [(With light: 0.95 (DIN terminal with light: 1.0)]		
Apparent power (VA) [*]	AC	100 V	0.78 (With light: 0.81)	0.78 (With light: 0.87)	
		110 V	0.86 (With light: 0.89)	0.86 (With light: 0.87)	
		[115 V]	[0.94 (With light: 0.97)]	[0.94 (With light: 1.07)]	
		200 V	1.18 (With light: 1.22)	1.15 (With light: 1.30)	
		220 V	1.30 (With light: 1.34)	1.27 (With light: 1.46)	
		[230 V]	[1.42 (With light: 1.46)]	[1.39 (With light: 1.60)]	
Surge voltage suppressor		Varistor			
Indicator light		LED (Neon light when AC with DIN terminal)			

* In common between 110 VAC and 115 VAC, and between 220 VAC and 230 VAC.

* For 115 VAC and 230 VAC, the allowable voltage is -15% to +5% of rated voltage.

Flow Characteristics

Series	Valve construction	Model	Flow characteristics						Response time (ms) ^{Note 1)}				Note 2) Weight (g)	
			1 → 2 (P → A)			2 → 3 (A → R)			Standard: 0.35 W	High speed response: 0.9 W	High pressure: 1.8 or less	AC		
			C [dm ³ /(s·bar)]	b	Cv	C [dm ³ /(s·bar)]	b	Cv						
VQZ100	N.C. valve	Poppet	VQZ115	0.59	0.44	0.17	0.56	0.30	0.14	10 or less	—	13 or less	22 or less	24
VQZ200	N.C. valve	Metal seal	VQZ212	1.2	0.21	0.30	1.3	0.24	0.33	22 or less	14 or less	18 or less	34 or less	57
		Rubber seal	VQZ232	1.6	0.33	0.39	1.7	0.37	0.45	22 or less	15 or less	—	36 or less	
	N.O. valve	Metal seal	VQZ222	1.2	0.25	0.31	1.3	0.20	0.31	22 or less	14 or less	18 or less	34 or less	
		Rubber seal	VQZ242	1.6	0.36	0.40	1.7	0.36	0.45	22 or less	15 or less	—	36 or less	
VQZ300	N.C. valve	Metal seal	VQZ312	2.7	0.18	0.62	2.4	0.28	0.56	22 or less	17 or less	22 or less	34 or less	93
		Rubber seal	VQZ332	3.5	0.34	0.87	3.0	0.33	0.72	33 or less	25 or less	—	57 or less	
	N.O. valve	Metal seal	VQZ322	2.6	0.21	0.59	2.2	0.16	0.49	22 or less	17 or less	22 or less	34 or less	
		Rubber seal	VQZ342	3.5	0.38	0.88	2.9	0.27	0.69	33 or less	25 or less	—	57 or less	

Note 1) Based on JIS B 8374-1981 (Supply pressure: 0.5 MPa; with light/surge voltage suppressor: clean air)

Response time values will change depending on pressure and air quality.

Note 2) Weight for threaded connection

Body Ported
Plug Lead Unit

3 Port Solenoid Valve

Series VQZ100/200/300

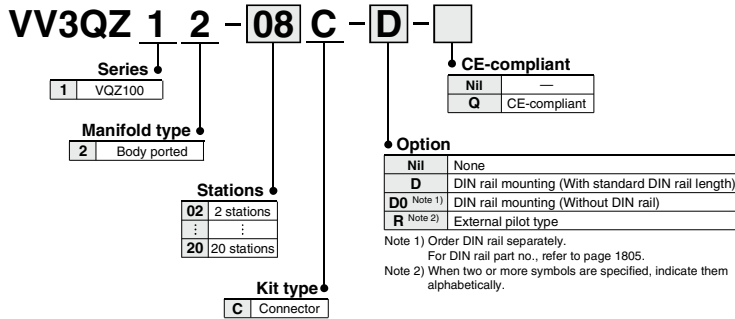
Manifold Connector Kit



[Option]

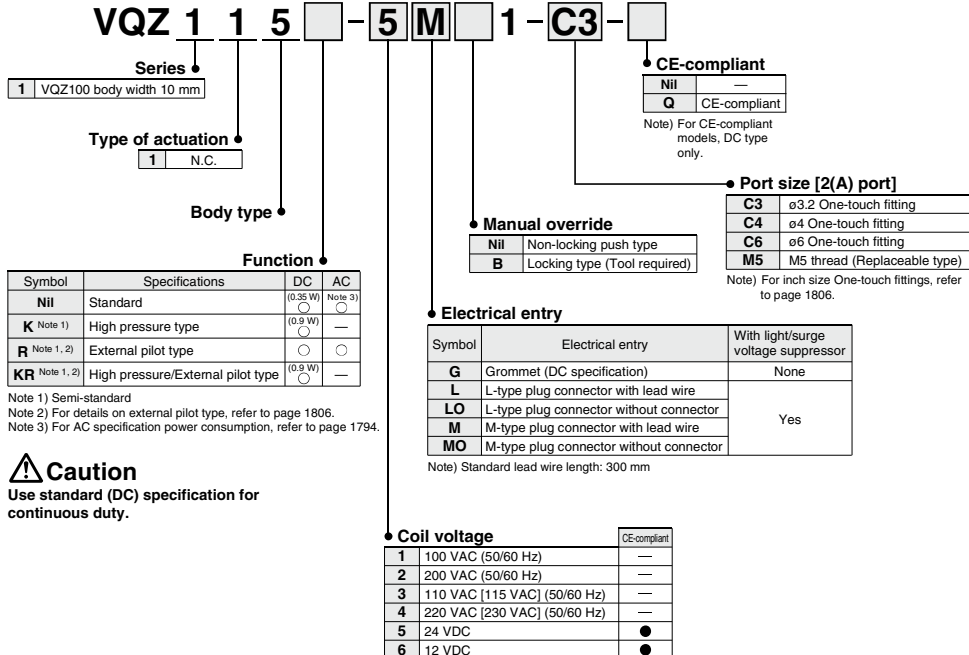
Note) For CE-compliant models, DC type only.

VQZ100 / How to Order Manifold



Note) For 1(P), 3(R) of optional thread type, refer to page 1806.

VQZ100 / How to Order Valve

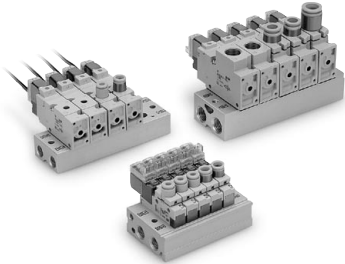


Caution
Use standard (DC) specification for continuous duty.

SYJ
VQZ
VP
VG
VP3

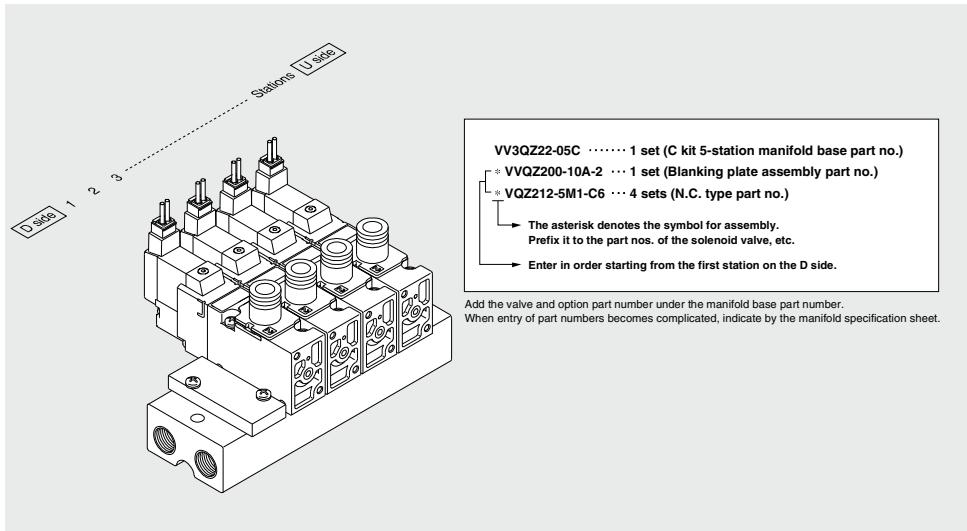
Body Ported *Series VQZ100/200/300*

Manifold Specifications



Series	Base model	Piping specifications			Applicable solenoid valve	Applicable stations	Manifold base weight (g)
		Piping direction	Port size				
			1(P), 3(R)	2(A)			
VQZ100	VV3QZ12-□□□	Top	Rc 1/8	C3 (for ø3.2) C4 (for ø4) C6 (for ø6) M5 (M5 thread)	VQZ115	2 to 20 stations	2 stations: 83 Addition per station: 19
VQZ200	VV3QZ22-□□□	Top	Rc 1/8	C4 (for ø4) C6 (for ø6) M5 (M5 thread)	VQZ2□2	2 to 20 stations	2 stations: 68 Addition per station: 20
VQZ300	VV3QZ32-□□□	Top	Rc 1/4	C6 (for ø6) C8 (for ø8) C10 (for ø10) Rc 1/4	VQZ3□2	2 to 20 stations	2 stations: 114 Addition per station: 37

How to Order Manifold Assembly (Example)



Add the valve and option part number under the manifold base part number.
When entry of part numbers becomes complicated, indicate by the manifold specification sheet.

- SYJ
- VQZ
- VP
- VG
- VP3

Series VQZ100/200/300

Dimensions: VQZ100

VV3QZ12- [Stations] C

Grommet (G)

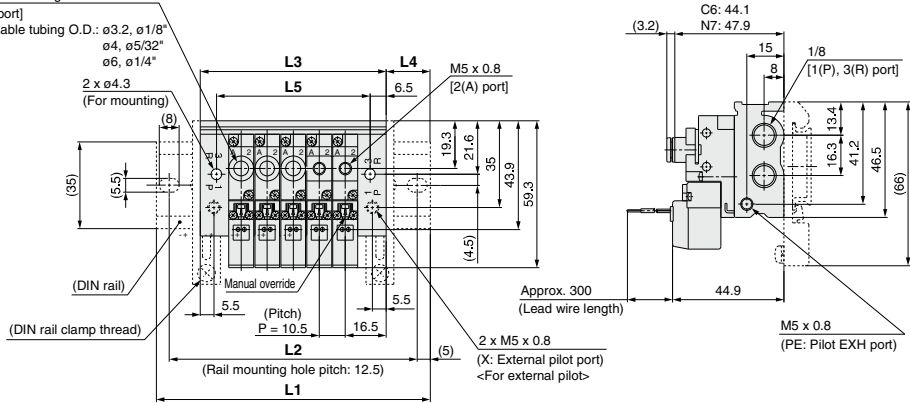
[U side

[D side

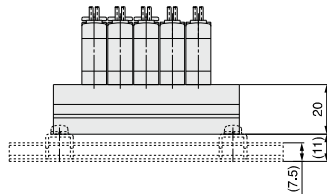
One-touch fitting

[2(A) port]

Applicable tubing O.D.: $\phi 3.2$, $\phi 1/8"$
 $\phi 4$, $\phi 5/32"$
 $\phi 6$, $\phi 1/4"$

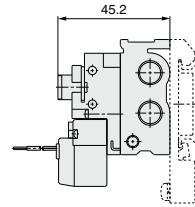


(Station n) ----- (Station 1)

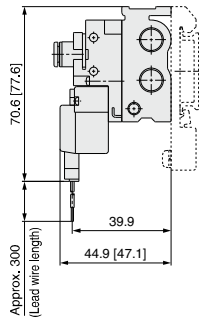


The dashed lines indicate the DIN rail mounting [-D].

M5

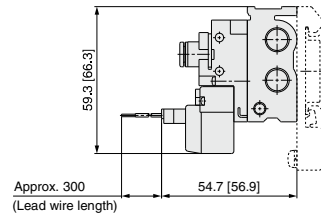


L-type plug connector (L)



Unless otherwise indicated, dimensions are the same as Grommet (G).
 [] : AC

M-type plug connector (M)



Unless otherwise indicated, dimensions are the same as Grommet (G).
 [] : AC

Dimensions

Formula: $L5 = 10.5n + 9.5$ $L3 = 10.5n + 22.5$ n: Stations (Max. 20 stations)

n	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	85.5	85.5	98	110.5	123	135.5	148	148	160.5	173	185.5	198	210.5	210.5	223	235.5	248	260.5	273
L2	75	75	87.5	100	112.5	125	137.5	137.5	150	162.5	175	187.5	200	200	212.5	225	237.5	250	262.5
L3	43.5	54	64.5	75	85.5	96	106.5	117	127.5	138	148.5	159	169.5	180	190.5	201	211.5	222	232.5
L4	21	16	17	18	19	20	21	15.5	16.5	17.5	18.5	19.5	20.5	15.5	16.5	17.5	18.5	19.5	20.5
L5	30.5	41	51.5	62	72.5	83	93.5	104	114.5	125	135.5	146	156.5	167	177.5	188	198.5	209	219.5