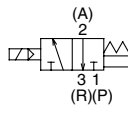
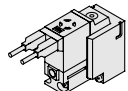
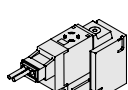
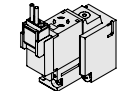
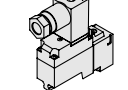
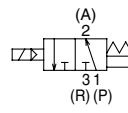


3 Port Solenoid Valve

Metal Seal/Rubber Seal, Body Ported

Series VQZ100/200/300

Series Variations

		Sonic conductance C [dm ³ /(s·bar)]		Type of actuation	Voltage	Electrical entry	With light/surge voltage suppressor	Manual override		
		Metal	Rubber							
Body Ported	3 port	VQZ100	Metal —	Rubber (Poppet) 0.56	 N.C.	(Standard) 12 VDC 24 VDC (Option) 100 VAC 200 VAC 110 VAC 220 VAC	Grommet (G)  L plug connector (L)  M plug connector (M)  DIN terminal (Y)  (Except VQZ100)	With light/surge voltage suppressor L plug connector (L) M plug connector (M) DIN terminal (YZ) (Except VQZ100)	Non-locking push type (Tool required) Locking type (Tool required)	
		VQZ200	1.3	1.7						 N.O. (Except VQZ100)
		VQZ300	2.4	3.0						

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

3 Port Solenoid Valve



For details about the applicable products conforming to international standards, visit us at www.smcworld.com.

Metal/Rubber Seal, Body Ported, Plug Lead Unit Valve Single Unit

Series VQZ100/200/300

How to Order Valves: VQZ100

VQZ 1 1 5 — **5 M** — **C6** — **PR**

Series

1	VQZ100 Body width 10 mm
---	-------------------------

Type of actuation

1	N.C.
---	----------

Body type

Function

Symbol	Specifications	DC	AC
Nil	Standard type	(1.0 W) ○	○ ⁽³⁾
K ⁽¹⁾	High pressure type	(1.0 W) ○	
Y	Low wattage type	(0.5 W) ○	
R ⁽²⁾	External pilot type	○	○

Note 1) Option
 Note 2) For details about external pilot specifications, refer to page 4-14-18.
 Note 3) For the power consumption of AC type, refer to page 4-14-6.
 Note 4) When two or more symbols are specified, indicate them alphabetically.

Option

Nil	None
F	With bracket

Port size {2(A) port}

C3	One-touch fitting for ø3.2
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
M5	M5 thread (Replaceable type)

Note) For the inch-size One-touch fittings, refer to page 4-14-18.

Manual override

Nil: Non-locking push type (Tool required) 	B: Locking type (Tool required)
---	--

Electrical entry

G: Grommet (DC specifications)	L: L plug connector With lead wire	LO: L plug connector Without connector	M: M plug connector With lead wire	MO: M plug connector Without connector
	With light/surge voltage suppressor	With light/surge voltage suppressor	With light/surge voltage suppressor	With light/surge voltage suppressor

Note) Standard lead wire length: 300 mm.

Coil 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
g ^{Note)}	Other

Note) For the special voltages, please consult with SMC.



For the One-touch fittings to be mounted on this valve and the silencer part no., refer to page 4-14-3.

3 Port Solenoid Valve (Valve Single Unit) Metal/Rubber Seal, Body Ported, Plug Lead Unit Series VQZ100/200/300

How to Order Valves: VQZ200/300

VQZ 2 1 2 5 M C6

Series

2	VQZ200 Body width 15 mm
3	VQZ300 Body width 18 mm

Type of actuation

1	N.C. (A) 2 3 1 (R)(P)	Metal seal	
	N.O. (A) 2 3 1 (R)(P)		
2	N.C. (A) 2 3 1 (R)(P)		Rubber seal
	N.O. (A) 2 3 1 (R)(P)		

Body type

2	Body ported
---	-------------

Function

Symbol	Specifications	DC	AC
Nil	Standard type	(1.0 W) ○	(3) ○
K ⁽¹⁾	High pressure type (Metal seal only)	(1.0 W) ○	
Y	Low wattage type	(0.5 W) ○	
R ⁽²⁾	External pilot type	○	○

- Note 1) Option
- Note 2) For details about external pilot specifications, refer to page 4-14-18.
- Note 3) For the power consumption of AC type, refer to page 4-14-6.
- Note 4) When two or more symbols are specified, indicate them alphabetically.

Option

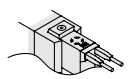
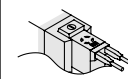
Nil	None
F	With bracket

Port size {2(A) port}

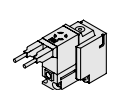




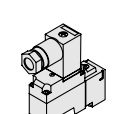
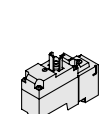
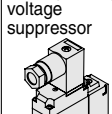
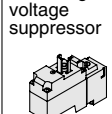
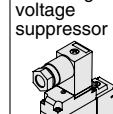
Symbol	Port size	VQZ200	VQZ300
C4	One-touch fitting for ø4	○	—
C6	One-touch fitting for ø6	○	○
C8	One-touch fitting for ø8	—	○
C10	One-touch fitting for ø10	—	○
M5	M5 thread	○	—
02	Rc 1/4	—	○

Note) For the inch-size One-touch fittings, refer to page 4-14-18.

Manual override

<p>Nil: Non-locking push type (Tool required)</p> 	<p>B: Locking type (Tool required)</p> 
---	---

Electrical entry

G: Grommet (DC specifications)	L: L plug connector With lead wire	LO: L plug connector Without connector	M: M plug connector With lead wire	MO: M plug connector Without connector
	With light/surge voltage suppressor	With light/surge voltage suppressor	With light/surge voltage suppressor	With light/surge voltage suppressor
				
Y: DIN terminal	YO: DIN terminal Without connector	YZ: DIN terminal	YOS: DIN terminal Without connector	YS: DIN terminal
		With light/surge voltage suppressor	With surge voltage suppressor	With surge voltage suppressor
				

Note) Standard lead wire length: 300 mm.

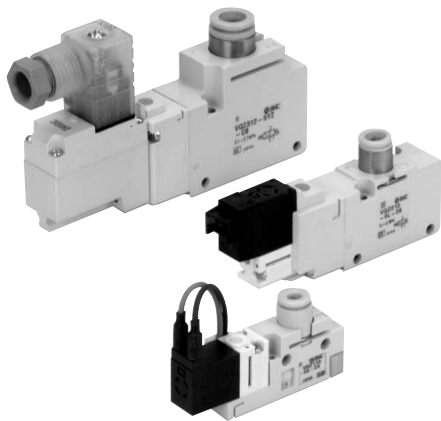
Coil voltage

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

Note) For the special voltages, please consult with SMC.

For the One-touch fittings to be mounted on this valve and the silencer part no., refer to page 4-14-3.

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



Standard Specifications

		Metal seal	Rubber seal	VQZ100 (Poppet seal)	
Valve specifications	Valve construction	Air/Inert gas			
	Fluid	Air/Inert gas			
	Maximum operating pressure	0.7 MPa (High pressure type: 1.0 MPa)	0.7 MPa	0.7 MPa (High pressure type: 1.0 MPa)	
	Minimum operating pressure	0.1 MPa	0.15 MPa	0.15 MPa	
	Ambient and fluid temperature	-10 to 50°C ⁽¹⁾	-10 to 50°C ⁽¹⁾	-10 to 50°C ⁽¹⁾	
	Maximum operating frequency	20 Hz	5 Hz	20 Hz	
	Pilot valve EXH	Individual EXH		Common exhaust	
	Lubrication	Not required			
	Pilot valve manual override	Non-locking push type/Slotted locking type (tool required) as an option			
	Shock/Vibration resistance ⁽²⁾	150/30 m/s ²			
Enclosure	Dustproof				
Electricity specifications	Coil rated voltage	12, 24 VDC and 100, 110, 200, 220 VAC			
	Allowable voltage fluctuation	±10% of rated voltage			
	Coil insulation type	Equivalent to class B			
	Power consumption (Current)	24 VDC	1 W DC (42 mA), 0.5 W DC (21 mA)		
		12 VDC	1 W DC (83 mA), 0.5 W DC (42 mA)		
		100 VAC	Inrush 0.5 VA (5 mA), Holding 0.5 VA (5 mA)		
		110 VAC	Inrush 0.55 VA (5 mA), Holding 0.55 VA (5 mA)		
200 VAC		Inrush 1.0 VA (5 mA), Holding 1.0 VA (5 mA)			
220 VAC	Inrush 1.1 VA (5 mA), Holding 1.1 VA (5 mA)				

Note 1) Use dry air to prevent condensation when operating at low temperatures.
 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 2000 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)

Flow Characteristics/Weight

Series	Valve construction	Model		Flow characteristics						Response time (ms) ⁽¹⁾			Weight ⁽²⁾ (g)
				1 → 2 (P → A)			2 → 3 (A → R)			Standard type: 1 W	High pressure type: 1.0 W Low wattage type: 0.5 W	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	25
VQZ200	N.C. valve	Metal seal	VQZ212	1.2	0.21	0.30	1.3	0.24	0.33	14 or less	18 or less	34 or less	58
		Rubber seal	VQZ232	1.6	0.33	0.39	1.7	0.37	0.45	15 or less	20 or less	36 or less	
	N.O. valve	Metal seal	VQZ222	1.2	0.25	0.31	1.3	0.20	0.31	14 or less	18 or less	34 or less	
		Rubber seal	VQZ242	1.6	0.36	0.40	1.7	0.36	0.45	15 or less	20 or less	36 or less	
VQZ300	N.C. valve	Metal seal	VQZ312	2.7	0.18	0.62	2.4	0.28	0.56	17 or less	22 or less	34 or less	92
		Rubber seal	VQZ332	3.5	0.34	0.87	3.0	0.33	0.72	25 or less	33 or less	57 or less	
	N.O. valve	Metal seal	VQZ322	2.6	0.21	0.59	2.2	0.16	0.49	17 or less	22 or less	34 or less	
		Rubber seal	VQZ342	3.5	0.38	0.88	2.9	0.27	0.69	25 or less	33 or less	57 or less	

Note 1) Based on JIS B 8375-1981 (Supply pressure: 0.5 MPa; with light/surge voltage suppressor; clean air) The response time is subject to the pressure and the air quality. Response time values will change depending on pressure and air quality.
 Note 2) Weight without sub-plate

3 Port Solenoid Valve

Metal/Rubber Seal, Body Ported, Plug Lead Unit Manifold (Connector Kit)

Series VQZ100/200/300

How to Order Manifold: VQZ100

VV3QZ 1 2 — 08 C — D

Series

1	VQZ100
---	--------

Manifold

2	Body ported
---	-------------

Stations

02	2 stations
⋮	⋮
20	20 stations

Kit type

C	Connector
---	-----------

Option

Nil	None
D	DIN rail mounting style (With DIN rail in standard length)
DO ^(Note)	DIN rail mounting style (Without DIN rail)
R	External pilot specifications

Note) Order DIN rail separately.
For the DIN rail model number, refer to page 4-14-17.

How to Order Valves: VQZ100

VQZ 1 1 5 — 5 M — C3

Series

1	VQZ100 Body width 10 mm
---	-------------------------

Type of actuation

1	N.C. (Normal Closed)
---	----------------------

Body type

Function

Symbol	Specifications	DC	AC
Nil	Standard type	(1.0 W) ○ ⁽³⁾	○ ⁽³⁾
K ⁽¹⁾	High pressure type	(1.0 W) ○	—
Y	Low wattage type	(0.5 W) ○	—
R ⁽²⁾	External pilot type	○	○

Note 1) Option
Note 2) For details about external pilot specifications, refer to page 4-14-18.
Note 3) For the power consumption of AC type, refer to page 4-14-6.
Note 4) When two or more symbols are specified, indicate them alphabetically.

Port size {2(A) port}

C3	One-touch fitting for ø3.2
C4	One-touch fitting for ø4
C6	One-touch fitting for ø6
M5	M5 thread (Replaceable type)

Note) For the inch-size One-touch fittings, refer to page 4-14-18.

Manual override

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)

Electrical entry

Symbol	Electrical entry	Light/Surge voltage suppressor
G	Grommet (DC specifications)	No
L	L plug connector with lead wire	Yes
LO	L plug connector without connector	
M	M plug connector with lead wire	
MO	M plug connector without connector	

Note) Standard lead wire length: 300 mm.

Coil 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 ^(Note)	12 VDC
9	Other

Note) For the special voltages, please consult with SMC.

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