

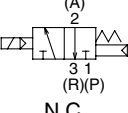
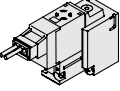
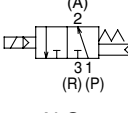
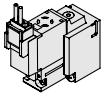

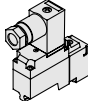
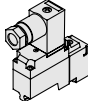


3 Port Solenoid Valve

Metal Seal/Rubber Seal, Body Ported

Series VQZ100/200/300

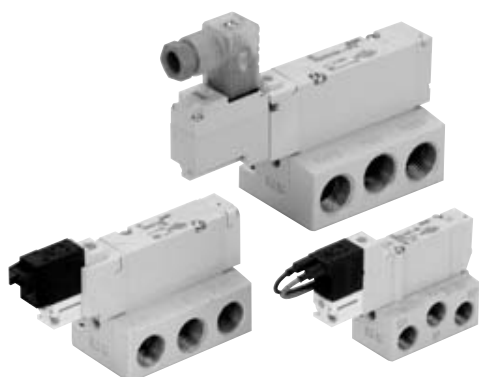
Series Variations

| | | 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 | | | Grommet (G) | | |
| | | | — | (Poppet) 0.56 | | | L plug connector (L) | With light/surge voltage suppressor | |
| | | VQZ200 | | | | | | | |
| |  | | |  N.C. | (Standard) 12 VDC 24 VDC |  L plug connector (L) | L plug connector (L) | Non-locking push type (Tool required) | |
| | | 1.3 | 1.7 |  N.O. (Except VQZ100) | (Option) 100 VAC 200 VAC 110 VAC 220 VAC |  M plug connector (M) | M plug connector (M) | | |
| | | VQZ300 | | | | | | | |
| |  | | | | |  DIN terminal (Y) | DIN terminal (YZ) | Locking type (Tool required) | |
| | | 2.4 | 3.0 | | |  (Except VQZ100) | (Except VQZ100) | | |

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

Plug Lead Unit: Single Unit Series VQZ1000/2000/3000

Standard Specifications



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)

| | | Valve specifications | |
|---|-----------------------------|---|---|
| | | Valve construction | Seal type |
| Fluid | | Air/Inert gas | |
| Maximum operating pressure | | 0.7 MPa (High pressure type: 1.0 MPa) | |
| Min. operating pressure | 2 position single | 0.1 MPa | |
| | Double | only for VQZ3000, 3 position | |
| | 3 position | 0.15 MPa | |
| Ambient and fluid temperature | | -10 to 50°C ⁽¹⁾ | -10 to 50°C ⁽¹⁾ |
| Max. operating frequency | 2 position | 20 Hz | 5 Hz |
| | 3 position | 10 Hz | 3 Hz |
| Pilot valve EXH | | Individual EXH | |
| Lubrication | | Not required | |
| Manual override | | Push type/Locking type (Tool required) Option | |
| Shock/Vibration resistance ⁽²⁾ | | 150/30 m/s ² | |
| Enclosure | | Dust-protected | |
| 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 | |
| Electricity specifications | 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) |

VQC

SQ

VQ0

VQ4

VQ5

VQZ

VQD

Model

| Series | Configuration | Model | Flow characteristics | | | | | | Response time (ms) ⁽¹⁾ | | | Weight (g) ⁽²⁾ | | | |
|-----------------|---------------|----------------|-----------------------------|---------|------|-----------------------------|------|------|-----------------------------------|--|------------|---------------------------|------------|-----|----|
| | | | 1 → 4/2 (P → A/B) | | | 4/2 → 5/3 (A/B → EA/EB) | | | Standard: 1 W | High pressure: 1 W Low wattage: 0.5 W | AC | | | | |
| | | | C[dm ³ /(s·bar)] | b | Cv | C[dm ³ /(s·bar)] | b | Cv | | | | | | | |
| VQZ1000 | 2 position | Single | Metal seal | VQZ1150 | 0.70 | 0.21 | 0.17 | 0.70 | 0.21 | 0.17 | 12 or less | 15 or less | 29 or less | 37 | |
| | | | Rubber seal | VQZ1151 | 1.2 | 0.35 | 0.30 | 1.3 | 0.24 | 0.32 | 12 or less | 15 or less | 34 or less | | |
| | | Double | Metal seal | VQZ1250 | 0.70 | 0.21 | 0.17 | 0.70 | 0.21 | 0.17 | 10 or less | 13 or less | 13 or less | | |
| | | | Rubber seal | VQZ1251 | 1.2 | 0.35 | 0.30 | 1.3 | 0.24 | 0.32 | 10 or less | 13 or less | 13 or less | | |
| | 3 position | Closed center | Metal seal | VQZ1350 | 0.56 | 0.20 | 0.13 | 0.57 | 0.22 | 0.14 | 20 or less | 26 or less | 40 or less | | 56 |
| | | | Rubber seal | VQZ1351 | 1.1 | 0.33 | 0.27 | 1.0 | 0.38 | 0.27 | 25 or less | 33 or less | 47 or less | | |
| Exhaust center | | Metal seal | VQZ1450 | 0.56 | 0.20 | 0.13 | 0.70 | 0.21 | 0.17 | 20 or less | 26 or less | 40 or less | | | |
| | | Rubber seal | VQZ1451 | 1.1 | 0.33 | 0.27 | 1.3 | 0.24 | 0.32 | 25 or less | 33 or less | 47 or less | | | |
| Pressure center | Rubber seal | VQZ1551 | 1.4 | 0.20 | 0.34 | 1.0 | 0.38 | 0.27 | 25 or less | 33 or less | 47 or less | | | | |
| VQZ2000 | 2 position | Single | Metal seal | VQZ2150 | 1.6 | 0.13 | 0.36 | 1.9 | 0.16 | 0.40 | 14 or less | 18 or less | 34 or less | 60 | |
| | | | Rubber seal | VQZ2151 | 2.0 | 0.35 | 0.51 | 2.3 | 0.29 | 0.53 | 15 or less | 20 or less | 36 or less | | |
| | | Double | Metal seal | VQZ2250 | 1.6 | 0.13 | 0.36 | 1.9 | 0.16 | 0.40 | 10 or less | 13 or less | 13 or less | | |
| | | | Rubber seal | VQZ2251 | 2.0 | 0.35 | 0.51 | 2.3 | 0.29 | 0.53 | 12 or less | 15 or less | 15 or less | | |
| | 3 position | Closed center | Metal seal | VQZ2350 | 1.5 | 0.16 | 0.35 | 1.3 | 0.26 | 0.32 | 23 or less | 30 or less | 44 or less | 84 | |
| | | | Rubber seal | VQZ2351 | 1.7 | 0.27 | 0.39 | 1.7 | 0.28 | 0.39 | 25 or less | 33 or less | 47 or less | | |
| | | Exhaust center | Metal seal | VQZ2450 | 1.5 | 0.16 | 0.35 | 1.9 | 0.16 | 0.40 | 23 or less | 30 or less | 44 or less | | |
| | | | Rubber seal | VQZ2451 | 1.7 | 0.27 | 0.39 | 2.3 | 0.29 | 0.53 | 25 or less | 33 or less | 47 or less | | |
| Pressure center | Metal seal | VQZ2550 | 1.8 | 0.13 | 0.39 | 1.5 | 0.26 | 0.36 | 23 or less | 30 or less | 44 or less | | | | |
| | Rubber seal | VQZ2551 | 2.0 | 0.35 | 0.50 | 1.7 | 0.28 | 0.39 | 25 or less | 33 or less | 47 or less | | | | |
| VQZ3000 | 2 position | Single | Metal seal | VQZ3150 | 2.6 | 0.12 | 0.60 | 3.0 | 0.15 | 0.74 | 17 or less | 22 or less | 34 or less | 94 | |
| | | | Rubber seal | VQZ3151 | 3.9 | 0.29 | 1.0 | 4.6 | 0.26 | 1.2 | 25 or less | 33 or less | 57 or less | | |
| | | Double | Metal seal | VQZ3250 | 2.6 | 0.12 | 0.60 | 3.0 | 0.15 | 0.74 | 10 or less | 13 or less | 13 or less | | |
| | | | Rubber seal | VQZ3251 | 3.9 | 0.29 | 1.0 | 4.6 | 0.26 | 1.2 | 15 or less | 20 or less | 20 or less | | |
| | 3 position | Closed center | Metal seal | VQZ3350 | 2.4 | 0.12 | 0.58 | 2.8 | 0.16 | 0.65 | 25 or less | 33 or less | 53 or less | 119 | |
| | | | Rubber seal | VQZ3351 | 3.1 | 0.33 | 0.82 | 3.6 | 0.35 | 0.97 | 30 or less | 39 or less | 59 or less | | |
| | | Exhaust center | Metal seal | VQZ3450 | 2.4 | 0.12 | 0.58 | 3.0 | 0.15 | 0.74 | 25 or less | 33 or less | 53 or less | | |
| | | | Rubber seal | VQZ3451 | 3.9 | 0.33 | 0.82 | 4.6 | 0.26 | 1.2 | 30 or less | 39 or less | 59 or less | | |
| Pressure center | Metal seal | VQZ3550 | 3.0 | 0.12 | 0.69 | 2.9 | 0.16 | 0.65 | 25 or less | 33 or less | 53 or less | | | | |
| | Rubber seal | VQZ3551 | 4.4 | 0.27 | 1.1 | 3.6 | 0.35 | 0.97 | 30 or less | 39 or less | 59 or less | | | | |

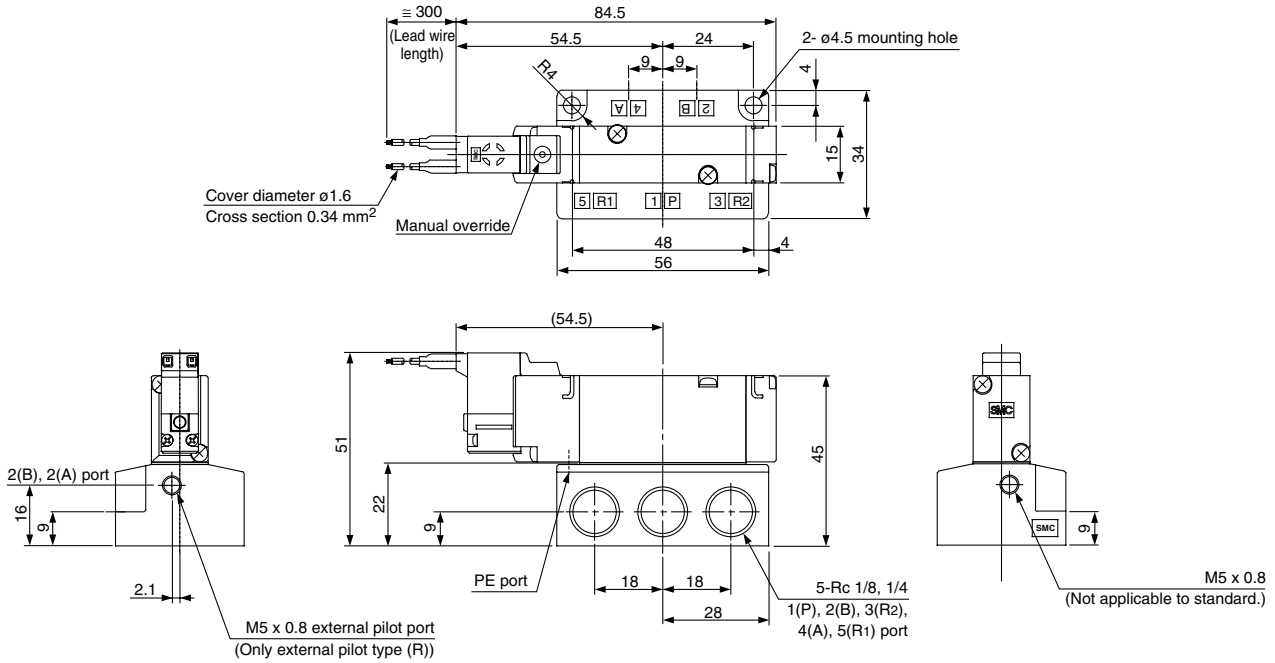
Note 1) Based on JIS B 8375-1981 (Supply pressure; 0.5 MPa; with indicator light/surge voltage suppressor; clean air). Response time values will change depending on pressure and air quality. The values at the time of ON are given for double types.
 Note 2) Weight without sub-plate

Series VQZ1000/2000/3000

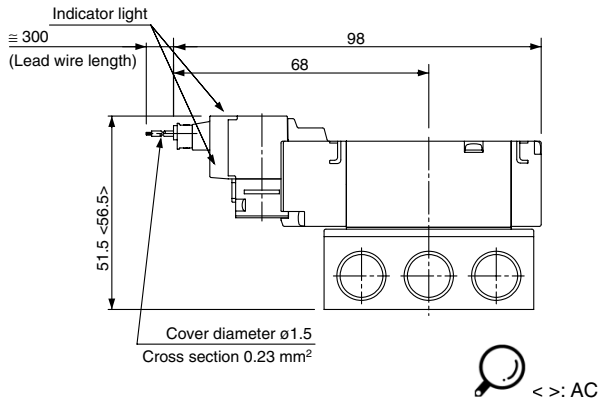
Dimensions: VQZ2000

2 position single

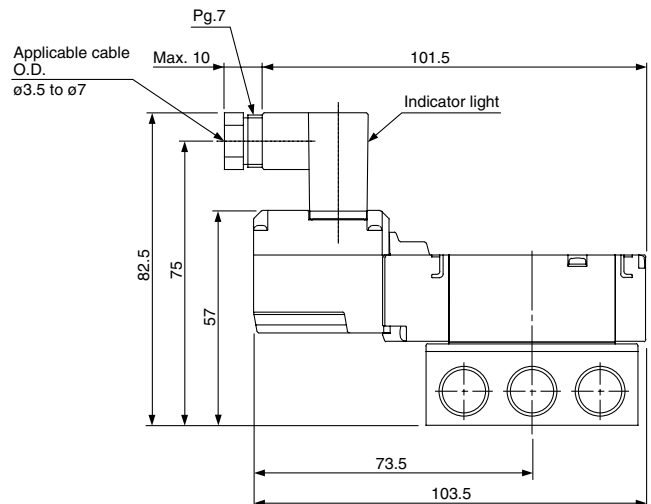
Grommet (G): VQZ215⁰(R)-□G□-0₁⁰¹



L plug connector (L): VQZ215⁰(R)-□L□-0₁⁰¹



DIN terminal (Y): VQZ215⁰(R)-□Y□-0₁⁰¹



M plug connector (M): VQZ215⁰(R)-□M□-0₁⁰¹

