

Standard Specifications

| | | | | |
|---------------------------|-------------------------------|------------|---|-------------|
| Valve specifications | Valve type | | Metal seal | Rubber seal |
| | Fluid | | Air, Inert gas | |
| | Maximum operating pressure | | 0.7 MPa (High-pressure type: 1.0 MPa) | 0.7 MPa |
| | Minimum operating pressure | Single | 0.1 MPa | 0.15 MPa |
| | | Double | 0.1 MPa | |
| | | 3-position | 0.1 MPa | 0.2 MPa |
| | | 4-position | — | 0.15 MPa |
| | Ambient and fluid temperature | | −10 to 50°C Note 1) | |
| | Lubrication | | Not required | |
| | Manual override | | Push type, Locking type (Tool required) semi-standard | |
| Electrical specifications | Impact/Vibration resistance | | 150/30 m/s ² Note 2) | |
| | Enclosure | | Dustproof (IP67 compatible) Note 3) | |
| | Rated coil voltage | | 24 VDC | |
| | Allowable voltage fluctuation | | ±10% of rated voltage | |
| | Coil insulation type | | Equivalent to Class B | |
| | Power consumption (Current) | 24 VDC | 0.4 W DC (17 mA), 0.95 W DC (40 mA) Note 4) | |
| | | 12 VDC | 0.4 W DC (34 mA), 0.95 W DC (80 mA) Note 4) | |



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

Note 2) Impact resistance No malfunction resulted from the impact test using a drop impact tester. Test was performed one time each in the axial and right angle directions of the main valve and armature for both energized and de-energized states.

Vibration resistance ... No malfunction occurred in a one-sweep test between 45 and 2000 Hz. Test was performed in the axial and right angle directions of the main valve and armature for both energized and de-energized states.

Note 3) Refer to page 1 and 2 for applicable variations.

Note 4) Value for high-speed response, high-pressure type (0.95 W)

Manifold Specifications

| Series | Base model | Connection type | Piping specifications | | | Applicable stations <div>Note 2)</div> | Applicable solenoid valves | 5-station mass (g) |
|---------|-------------|--|-----------------------|---|---|--|----------------------------|--|
| | | | Port direction | Port size <div>Note 1)</div> | | | | |
| | | | | 1, 3 (P, R) | 2, 4 (A, B) | | | |
| VQC1000 | VV5QC11-□□□ | F kit: D-sub connector P kit: Flat ribbon cable T kit: Terminal block box S kit: Serial transmission L kit: Lead wire M kit: Circular connector | Side | C8 (ø8) <div>Option: Direct EXH outlet with built-in silencer</div> | C3 (ø3.2) C4 (ø4) C6 (ø6) M5 (M5 thread) | <div><div>F/L/M/P kit 1 to 12 stations</div><div>T kit 1 to 10 stations</div></div> | VQC1□00-5 VQC1□01-5 | 643 (Single) 754 (Double, 3-position) |
| VQC2000 | VV5QC21-□□□ | | Side | C10 (ø10) <div>Option: Direct EXH outlet with built-in silencer</div> <div>Branch type C12 (ø12)</div> | C4 (ø4) C6 (ø6) C8 (ø8) | <div><div>S kit 1 to 8 stations: EX500</div><div>1 to 12 stations: EX250</div></div> | VQC2□00-5 VQC2□01-5 | 1076 (Single) 1119 (Double, 3-position) |



Note 1) Inch-size one-touch fittings are also available.

Note 2) Special wiring specifications are available as semi-standard to increase the maximum number of stations.

Series VQC1000/2000

Manifold Assembly Part No.

<D-Side End Plate Assembly>

⑰ D-side end plate assembly part no.

VVQC **1** 000-3A-1-□-□

Series

| | |
|---|---------|
| 1 | VQC1000 |
| 2 | VQC2000 |

Port size

| Symbol | VQC1000 | VQC2000 |
|--------|---------|---------|
| C8 | ● | |
| C10 | | ● |
| N9 | ● | |
| N11 | | ● |

Option

| | |
|-----|--|
| Nil | Common EXH |
| R | External pilot |
| S | Direct EXH outlet with built-in silencer |

<U-Side End Plate Assembly>

⑳ U-side end plate assembly part no.

VVQC **1** 000-2A-**1**-C8-□

Series

| | |
|---|---------|
| 1 | VQC1000 |
| 2 | VQC2000 |

Supply/Exhaust port entry direction

| | |
|----------|--------------------|
| 1 | Cylinder port side |
| 2 (Note) | Branch type |



Note) VQC2000 only

Port size

| Symbol | VQC1000 | VQC2000 |
|--------|---------|---------|
| C8 | ● | |
| C10 | | ● |
| C12 | | ● |
| N9 | ● | |
| N11 | | ● |
| N13 | | ● |

Option

| | |
|-----|--|
| Nil | Common EXH |
| R | External pilot |
| S | Direct EXH outlet with built-in silencer |

<Manifold Block Assembly>

⑱ Manifold block assembly part no.

VVQC **1** 000-1A-D-C6-□

Series

| | |
|---|---------|
| 1 | VQC1000 |
| 2 | VQC2000 |



Note) Tie-rods (2 pcs.) for additional stations included.

Wiring specifications

| | |
|---|---------------|
| D | Double wiring |
| S | Single wiring |

Port size

| Symbol | Port size | VQC1000 | VQC2000 |
|--------|----------------------------|---------|---------|
| C3 | For ø3.2 one-touch fitting | ● | |
| C4 | For ø4 one-touch fitting | ● | ● |
| C6 | For ø6 | ● | ● |
| C8 | For ø8 | | ● |
| N1 | For ø1/8" | ● | |
| N3 | For ø5/32" | ● | ● |
| N7 | For ø1/4" | ● | ● |
| N9 | For ø5/16" | | ● |
| M5 | For M5 thread | ● | |

Option

| | |
|-----|--------------------------------|
| Nil | None |
| B | With back pressure check valve |

<Replacement Parts>

Pilot valve assembly

V112-**5**A

Coil voltage

| | |
|---|--------|
| 5 | 24 VDC |
| 6 | 12 VDC |

Function

| | |
|-----|--------------------------------------|
| Nil | Standard (0.4 W) |
| B | High-speed response type (0.95 W) |
| K | High-pressure type (1.0 MPa, 0.95 W) |

Note) Common to single solenoid and double solenoid

⑲ Tie-rod assembly part no. (2 pcs.)

| | |
|---------|---------------|
| VQC1000 | VVQC1000-TR-□ |
| VQC2000 | VVQC2000-TR-□ |

Note 1) Please order when reducing the number of manifold stations. When increasing the number of stations, additional orders are not required since they are included in the manifold block assembly.

Note 2) □: Stations 02 to 24