Digital Valve Control Module (VCM)

VCM Series

- Up to six network-controlled pilot valves
- LED valve status indicators
- Threaded end connections for inlet, outlets, and exhaust
- Integrates easily with conventional or Swagelok® modular platform component (MPC) systems
- DeviceNet™ network interface
- IP64 ingress protection
Valve Control Module (VCM)

The Swagelok® VCM uses a sophisticated control and monitoring system to operate up to six pneumatic stream selecting valves or other discrete valves. This compact system reduces complicated cabling and minimizes overall power consumption.

Features

- 300 series stainless steel construction.
- Network-controlled automatic valve actuation.
- Indicator LEDs for pilot valve state, network status, and module status.
- Threaded end connections for inlet, outlets, and exhaust; push-to-connect fittings available for 1/8 in. plastic tubing.
- UL certified for use in hazardous areas.
- Proximity sensor interface option to ensure proper valve actuation.

Operation

The schematic shows the powered-off state—all valves are closed. For complete information on VCM setup and operation, see the Swagelok Valve Control Module User’s Manual, MS-13-221.
Technical Data

Operating Medium
Compressed air, lubricated or unlubricated, 40 µm filtration

Operating Pressure Range
40 to 116 psig (2.8 to 7.9 bar)

Operating Temperature
23 to 122°F (–5 to 50°C)

Storage Temperature
–4 to 140°F (–20 to 60°C)

Power
■ Voltage input: 11 to 28 V (dc)
■ Maximum current draw: 310 mA (dc) at 24 V (dc)

Approvals / Compliance
■ Class I, Division 2, Groups C, D. Temperature class T4A
■ ANSI/ISA 12.12.01
■ UL 61010-1
■ CSA C22.2 No. 213-M
■ CSA C22.2 No. 61010-1
■ DeviceNet Conformance Tested®, vendor ID 1165

Electromagnetic Compatibility
■ EN 61326-1:2006
■ RF Emissions: EN 55011
■ ESD Immunity: EN 61000-4-2
■ RF Immunity: EN 61000-4-3
■ EFT Immunity: EN 61000-4-4
■ Conducted Immunity: EN 61000-4-6

Vibration / Shock Resistance
■ Vibration: sinusoidal 9 to 200 Hz, 5 g acceleration
■ Vibration: random 20 to 500 Hz, 15.5 g average acceleration
■ Shock: pulse 70 m/s² (7.2 g)

Proximity Sensor Interface Options
■ No interface, IP64
■ Terminal strip with sealed enclosure, IP64

Dimensions
Dimensions, in inches (millimeters), are for reference only and are subject to change.

Ordering Information
Select an ordering number.

<table>
<thead>
<tr>
<th>Proximity Sensor Interface</th>
<th>Ordering Number</th>
</tr>
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<tbody>
<tr>
<td>No interface</td>
<td>SS-VCM-D-6-0</td>
</tr>
<tr>
<td>Terminal strip with sealed enclosure</td>
<td>SS-VCM-D-6-2</td>
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Push-to-connect fittings, used to attach 1/8 in. plastic tubing to the inlet, outlet, and exhaust connections, are available separately. See page 4.
**Safe Product Selection**

When selecting a product, the total system design must be considered to ensure safe, trouble-free performance. Function, material compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system designer and user.

**Caution:** Do not mix or interchange parts with those of other manufacturers.

**Accessories**

**Push-to-Connect Fittings**
This kit contains eight 10-32 face-seal push-to-connect fittings to be used when using 1/8 in. plastic tubing with the VCM.
Ordering number: **MS-VCM-KIT2**

**Maintenance Kits**
These are no field-maintainable components within the VCM. Contact your authorized Swagelok representative for assistance.
Replacement enclosure hardware kits are available.

**Enclosure Hardware**
This kit contains the components used to attach and seal the terminal strip enclosure included with the SS-VCM-D-6-2 model. The contents of the kit are included with that model when shipped from the factory.
- 6 screws
- 6 washers
- 1 interface cover gasket
- 6 acorn nuts
- 6 cable gland O-rings
- 6 cable glands
Ordering number: **MS-VCM-KIT1**

**Warranty Information**

Swagelok products are backed by The Swagelok Limited Lifetime Warranty. For a copy, visit swagelok.com or contact your authorized Swagelok representative.