

# 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.



No Proximity Sensor Interface



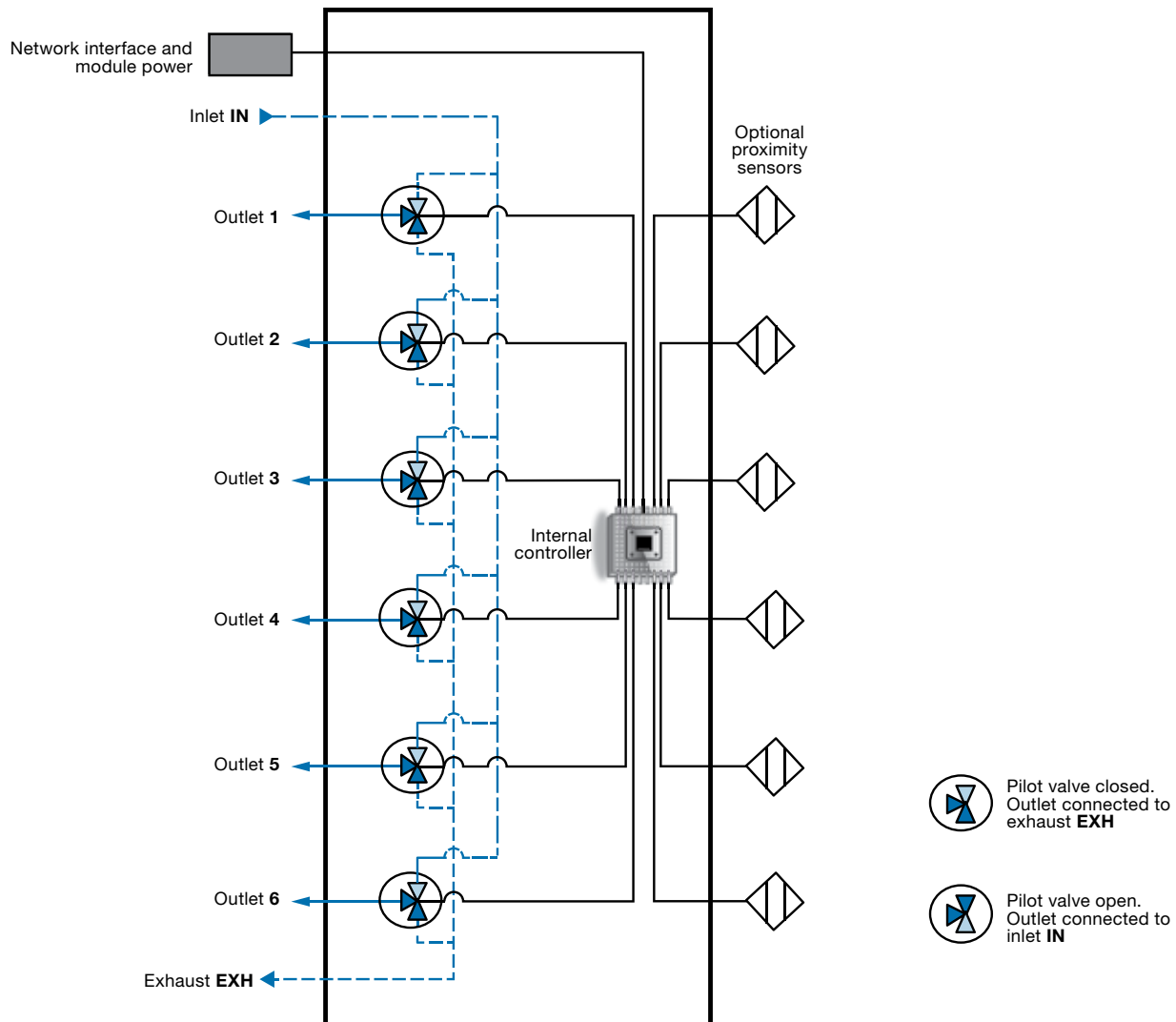
Terminal Strip Proximity Sensor Interface (shown enlarged, without sealed enclosure)



Terminal Strip Proximity Sensor Interface With Sealed Enclosure

### 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

### 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/s<sup>2</sup> (7.2 g)

### Electromagnetic Compatibility

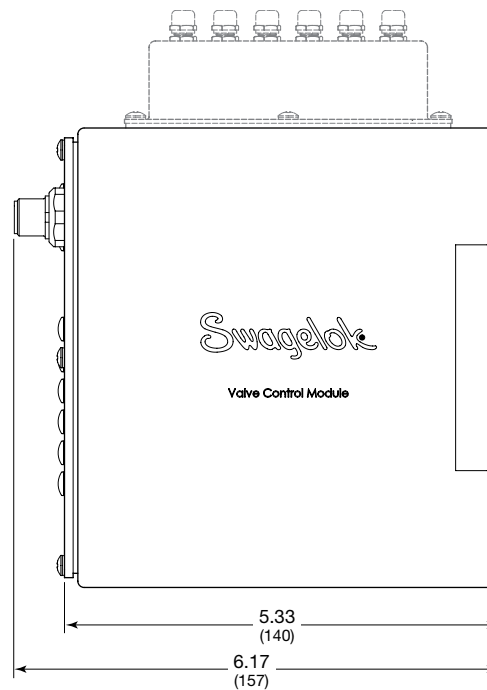
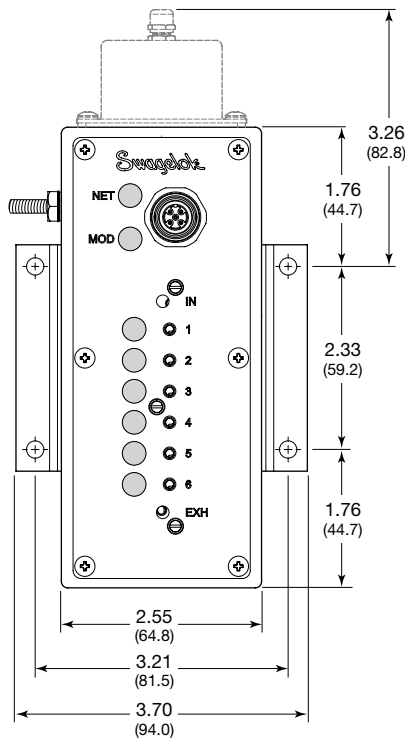
- EN 61326-1:2006
  - RF Emissions: EN 55011
  - ESD Immunity: EN 61000-4-2
  - RF Immunity: EN 61000-4-3
  - EFT Immunity: EN 61000-4-4
  - Conducted Immunity: EN 61000-4-6

### 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.

Proximity Sensor Interface	Ordering Number
No interface	SS-VCM-D-6-0
Terminal strip with sealed enclosure	SS-VCM-D-6-2

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.

## 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

There 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**

#### 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.**

## Warranty Information

Swagelok products are backed by The Swagelok Limited Lifetime Warranty. For a copy, visit [swagelok.com](http://swagelok.com) or contact your authorized Swagelok representative.