

## Direct-Mount Manifolds



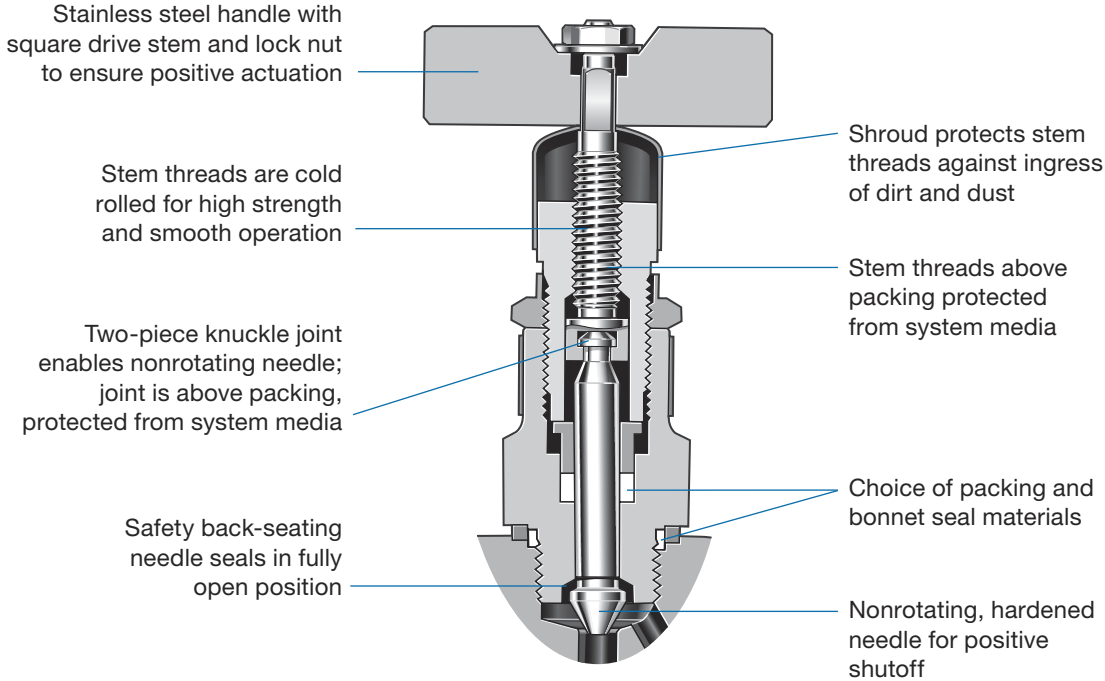
### VE Series

- Two-, three-, and five-valve instrument manifolds
- All 316 stainless steel construction with PTFE or graphite packing and seals
- Working pressures up to 6000 psig (413 bar)
- Temperatures up to 850°F (454°C) with graphite packing; up to 400°F (204°C) with PTFE packing

## Features

- Compact design
- Stainless steel stop pin
- High-tensile steel instrument bolt and PTFE seal kit included with each manifold
- MSS and DIN flange connections available
- Color-coded valve label rings
- Graphite packing and seals available
- Mounting bracket kits available
- Material traceability available; contact your authorized Swagelok® sales and service representative.

## Valve



## Materials of Construction

| Component                                                                                                                       | Grade/ASTM Specification                             |
|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| <i>Body, bonnets</i>                                                                                                            | 316/316L SS/<br>A479                                 |
| <i>Needles</i>                                                                                                                  | S17400 SS/A564<br>Condition H1150D                   |
| <i>Packing, bonnet seals</i>                                                                                                    | PTFE                                                 |
| <i>Lubricant</i>                                                                                                                | Fluorinated base with PTFE<br>and tungsten disulfide |
| Bonnet seal rings, gland nuts, shrouds, stems, glands, handles, handle lock nuts, handle washers, locking pins, gland lock nuts | 316 SS                                               |

Wetted components listed in *italics*.

## Pressure-Temperature Ratings

| Valve Packing | Working Pressure<br>psig (bar) | Temperature<br>°F (°C) |
|---------------|--------------------------------|------------------------|
| PTFE          | 6000 (413)                     | 200 (93)               |
|               | 4000 (275)                     | 400 (204)              |
| Graphite      | 6000 (413)                     | 200 (93)               |
|               | 3000 (206)                     | 850 (454)              |

## Testing

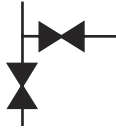
Every Swagelok VE series instrument manifold is factory tested hydrostatically. A shell test is performed at 1.5 times maximum rated working pressure, and a seat test is performed at 1.1 times maximum rated working pressure, in accordance with BS EN 12266-1 (formerly BS 6755 part 1).

## VE Series Direct-Mount Manifolds

### Two-Valve Manifold

- Direct mounting to gauges, pressure switches, or absolute pressure transmitters
- Vent port
- Instrument bolt and seal kit included with manifold

Instrument Side

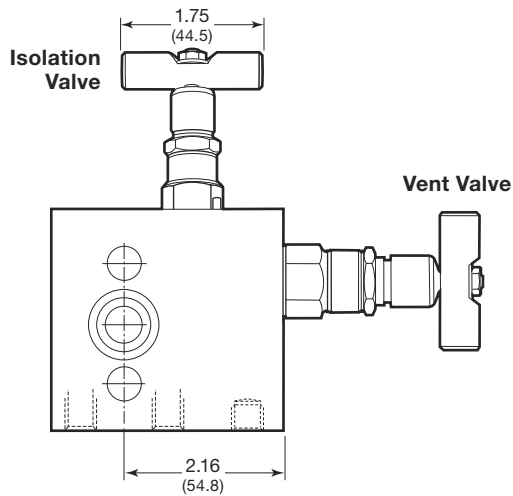
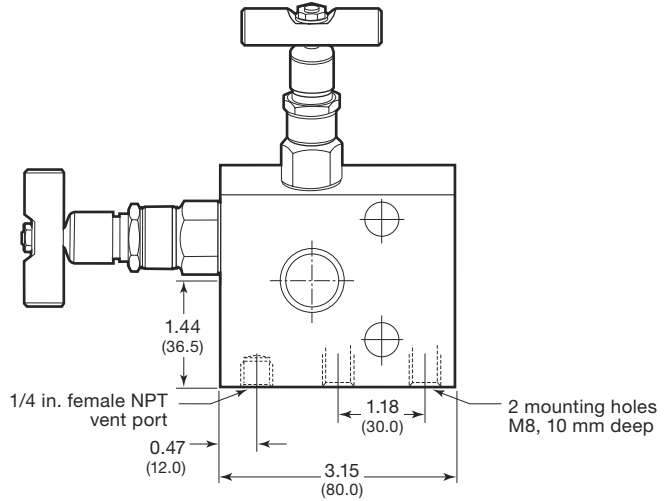
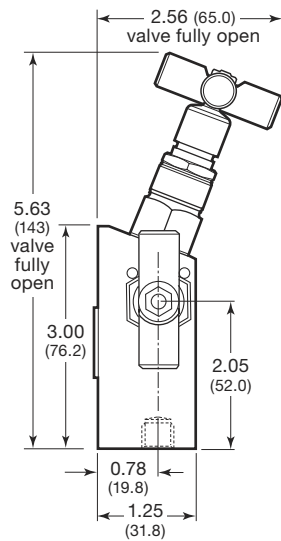


Process Side



### Dimensions

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



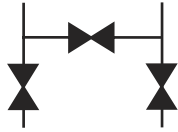
## VE Series Direct-Mount Manifolds

### Three-Valve Manifold

- Direct mounting to instrument on 2.12 in. (54.0 mm) centers
- Instrument bolt and seal kit included with manifold



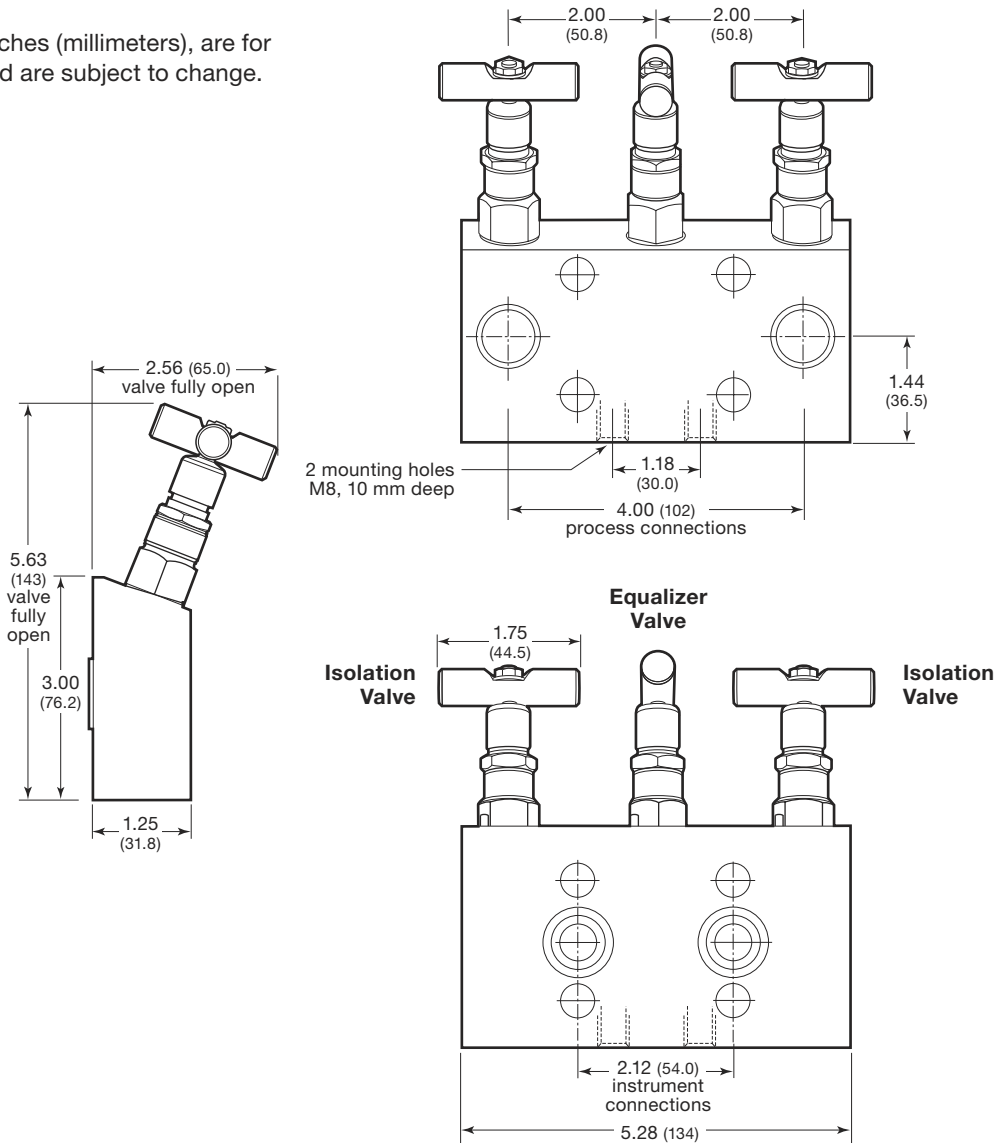
Instrument Side



Process Side

### Dimensions

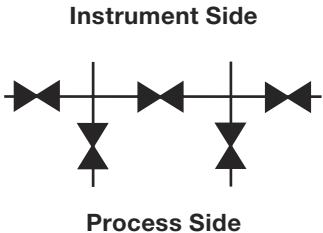
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**VE Series Direct-Mount Manifolds**

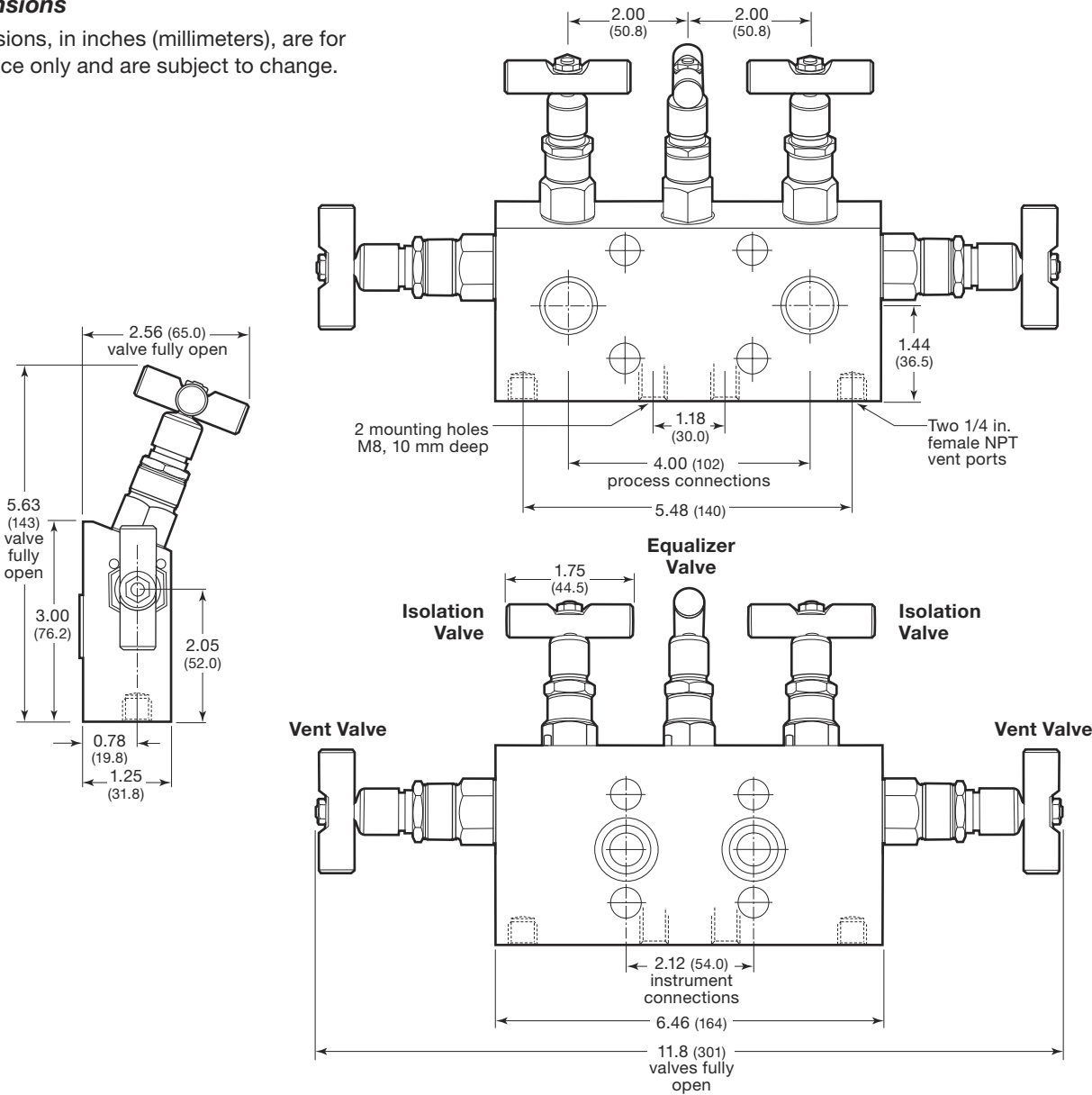
**Five-Valve Manifold**

- Direct mounting to instrument on 2.12 in. (54.0 mm) centers
- Two vent ports
- Instrument bolt and seal kit included with manifold



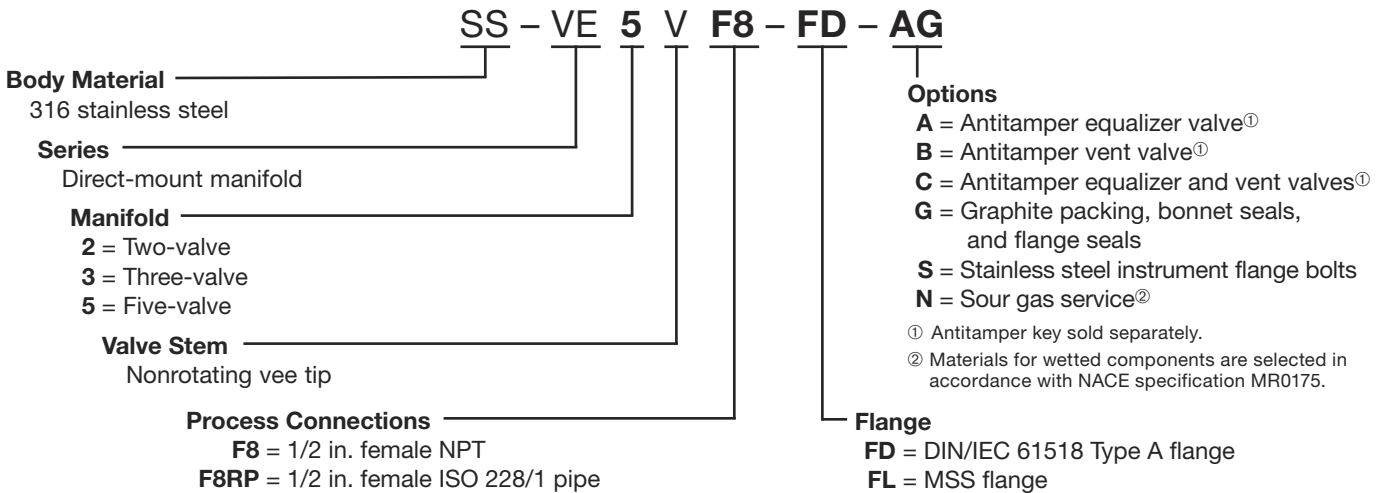
**Dimensions**

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



## Ordering Information

Build a VE series manifold ordering number by combining the designators in the sequence shown below.



## Options and Accessories

### Antitamper Key

- Fits all vent and equalizer valves on the manifold
- Order separately

Ordering number: **S004468**



### Mounting Bracket Kit

Kit contains stainless steel bracket, U-bolts, cap screws, nuts, lock washers, spacer, and instructions.

Ordering number: **SS-MB-VCBK**

### Flange Seal and Bolt Kits

A high-tensile steel instrument bolt and PTFE seal kit is included with each VE manifold. Additional instrument bolt and seal kits may be ordered.

- Kit contains flange seals and flange bolts.
- For additional or alternative bolt and seal kits, select an ordering number from the table based on the manifold, flange, bolt material, and flange seal material.

| Manifold                   | Flange   | Bolt Material              | Flange Seal Material | Ordering Number |
|----------------------------|----------|----------------------------|----------------------|-----------------|
| 2-valve                    | DIN      | Stainless steel/A193 B8M   | PTFE                 | K100934-FD-S    |
|                            |          |                            | Graphite             | K100934-FD-GS   |
|                            |          | High-tensile steel grade S | PTFE                 | K100934-FD-H    |
|                            | Graphite |                            | K100934-FD-GH        |                 |
|                            | MSS      | Stainless steel/A193 B8M   | PTFE                 | K100934-S       |
|                            |          |                            | Graphite             | K100934-GS      |
| High-tensile steel grade S |          | PTFE                       | K100934-H            |                 |
|                            |          | Graphite                   | K100934-GH           |                 |
| 3-valve                    | DIN      | Stainless steel/A193 B8M   | PTFE                 | K100935-FD-S    |
|                            |          |                            | Graphite             | K100935-FD-GS   |
|                            |          | High-tensile steel grade S | PTFE                 | K100935-FD-H    |
|                            | Graphite |                            | K100935-FD-GH        |                 |
|                            | MSS      | Stainless steel/A193 B8M   | PTFE                 | K100935-S       |
|                            |          |                            | Graphite             | K100935-GS      |
| High-tensile steel grade S |          | PTFE                       | K100935-H            |                 |
|                            | Graphite | K100935-GH                 |                      |                 |

⚠ **Packing adjustment may be required during the service life of the valve.**

⚠ **Valves that have not been cycled for a period of time may have a higher initial actuation torque.**

#### 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.