Manifold Application

ASTEC® offers a variety range of 2, 3 & 5 Valve Instrument Manifold, which are designed for safety, reliability and positive LEAK TIGHT sealing of process fluid, static pressure and for differential pressure application in a wide range of instrumentation. These Manifold gives the user greater flexibility, because these offers a variety of simple configuration of easy Block, Bleed and Calibration of Differential Pressure Transmitter, Pressure Switch and Gauges. 2 valve Manifolds are designed for static pressure and liquid level applications. 3 & 5 Valve Manifold are designed for Differential Pressure applications.

The flow through ASTEC® Manifold is controlled by a series of Stainless Steel Needle Valve. Each Valve has specific function to block the pressure, to bleed off the pressure or to equalize the pressure, depending on its location on the Manifold.

Seperately mounted Two Valve Manifold
2VMS - series

Model 2VMS1

Straight type 1, 1 Isolation and 1 Drain Valve, threaded on Process / Instrument / Drain port.
Suitable for wall mounting using two 1/4” bolts (not supplied)

Model 2VMS2

Straight type 2, 1 Isolation and 1 Drain Valve, threaded on Process / Instrument / Drain port.
Suitable for wall mounting using two 5/16” bolts (not supplied).

Note : - 1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change.
Model 2VMS3

Straight type 3, 1 Isolation and 1 Drain Valve, threaded on Process / Instrument / Drain port. Comfort design require Pen Space mounting holes provided for ¼" bolts (not supplied).

Model 2VMS4

Straight type 4, 1 Isolation and 1 Drain Valve, threaded on Process / Instrument / Drain port. Left Hand side drain Bonnet, Compact design, can be used in control panel & small enclosures. Base mounting holes are provided for M10 x 1.5 bolts (not supplied).

Model 2VMS5

Straight type 5, 1 Isolation and 1 Drain Valve, threaded on Process / Instrument / Drain port. Right hand side Bonnet, Compact design, can be used in control Panel & Small enclosures. Base mounting holes are provided for M10 x 1.5 Bolts (not supplied).

Note: 1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change
Model 2VMS6

Straight type 6, 1 Isolation and 1 Drain Valve, threaded on Process / Instrument / Drain port. Available with ¼” NPT(F) Thread, Compact design. Reduced in thread size, body size is also reduced. Mounting hole are provided for 1/4” bolts (not provided).

Model 2VMS7

Straight type 7, 1 Isolation and 1 Drain Valve, threaded on Process / Instrument / Drain port. Available with ½” NPT(F) Thread & Features a position of the Drain/ Test port. Mounting hole are provided for 5/16” bolts (not supplied).

Model 2VMS8

Straight type 8, 1 Isolation and 1 Drain Valve, threaded on Process / Instrument / Drain port. Simple line Valve Isolation for comfort. Available with mounting hole for 1/4” bolts (not supplied).

Note: - 1) End Connection of different size can be provided on request.
       2) Dimension in millimeter are for reference only and are subject to change.
Model 2VMA

Angle type, 1 Isolation and 1 Drain Valve, threaded on Process / Instrument / Drain port.
Standard type Angle design of process and instrument connection with \( \frac{1}{2} \)"NPT(F) port. Suitable for wall mounting using two 1/4" bolts (not supplied)

Model 2VME

Extended type, 1 Isolation and 1 Drain Valve, threaded on Process / Instrument / Drain port. Sleek design for easy valve operation.
Extended type. with \( \frac{1}{2} \)"NPT(F) ports.

Note : - 1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change
Directly mounted Two Valve Manifold
2VMT - series

Model 2VMT1

Direct Mounting 1, 1 Isolation and 1 Drain Valve, threaded on Process / Drain port and Flange on Instrument. Two valve single flange block & bleed or calibration manifold designed for direct mounting to Static pressure transmitter. Can be mounted to mounting bracket providing or safe isolation valve of reducing No. of fitting & space for installation. Supplied with 7/16” bolts 2 nos and Teflon Seal- 1 nos.

Model 2VMT2

Direct Mounting 2, 1 Isolation and 1 Drain Valve, threaded on Process / Drain port and Flange on Instrument. Two valve single flange block & bleed manifold design for direct mounting to static pressure transmitter. Single ½”NPT(F) process connection with 1/4”NPT(F) test connection available. Supplied with 7/16” bolts 4 nos and Teflon Seal- 1 nos.

Note : - 1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change
Model 2VMT3

Direct Mounting 3, 2 Isolation, threaded on Process / Drain port and Flange on Instrument. This 2 way valve manifold is designed for liquid level application mounted on pressure vessel consist of 2 isolation valve operating is parallel to shut-off any one of two process line. In this type equalize passage is not provided. Manifold supplied with 4 nos. 7/16” bolts & Teflon seal 2 nos.

Model 2VMT-CP1

Direct Mounting coplanar 1, 1 Isolation and 1 Drain Valve, threaded on Process / Drain and Flange on Instrument. Coplanar & Direct mounting type compact design. Supplied with 7/16” bolts 2 nos and Teflon seal - 1 nos.

Model 2VMT-CP2

Direct Mounting coplanar 2, 1 Isolation and 1 Drain Valve, threaded on Process / Drain port and Flange on Instrument. Coplanar & Direct mounting type manifold. Suitable for gauge transmitter or one cell of a differential pressure transmitter. Supplied with 7/16” bolts 2 nos and Teflon Seal - 1 nos. Base mounting is provided with pin and mounting hole for M10x1.5 bolt (not supplied)

Note : - 1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change
Ordering Information

Material Code
(select one)
Use Material Designator provided on page 1.

Basic Model Number
Refer Dimensional Tables of required Product.

End Connection (select one)
Standard available NPT.
IT  ISOT (BSPT)
IP  ISOP (BSP)
SW  Socket Weld Pipe
BW  Butt Weld Pipe

Packing Material (select one)
Standard available is PTFE. Use G (Grafoil ®) for high temperatures

Tip Options (select one)
Standard Tip available is shut-off type. Use Code
RT  for Regulating Tip
ST  for Soft Tip (for Gas application)

Other Options (add one or more..)
ATI  Anti Tamper Valve (Isolation)
LI   Locking Valve (Isolation)
ATD  Anti Tamper Valve (Drain)
LD   Locking Valve (Drain)
NC   NACE - MR - 01 - 75
MB   Mounting Bolt & Nut (set of 2)
DP   Drain Plug
Seperately mounted Three Valve Manifold
3VMS - series

Model 3VMS1

Separately mounted, 2 isolation and 1 equalizer valve, thread on process/instrument/Drain port. This Manifold is designed for Compact & limited space installation, separately Mounted with 54 mm c/c inlet & outlet port connection. Application on line instrument calibration. Avoids in used of numerous valve , nipple & fitting. Mounting holes are provided for 1/4” Bolts (not supplied).

Model 3VMS2

Separately Mounted, 2 Isolation 1 Equalizer threaded on Process / Instrument / Drain port . Designed for smaller threaded connection, as reduction in overall dimension. Downstream 1/4" NPT(F) Test/Bleed connection are provided as Std with 2 nos. vent plug. The Std inlet & outlet connection is 1/4" NPT (F) with c/c 54 mm. One mounting hole are provided for 1/4” bolts (not supplied).

Model 3VMS-CP1

Separately Mounted, 2 Isolation and 1 Equalizer valve, threaded on Process / Instrument / Drain port.
Designed to use on threaded outlet connection on 54 cm c/c to suit the inlet center connection of Instruments. Mounting holes are provided for M10 X 1.5 bolts (not supplied).

Note - 1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change.
Model 3VMS-CP2

Separately Mounted, 2 Isolation and 1 Equalize valve, threaded on Process / Instrument port. Designed to use on threaded outlet connection on 54 cm c/c to suit the inlet center connection of instruments. Optional upstream or downstream test port 1/4" NPT(F) are available. Mounting holes are provided for M10 X 1.5 bolts (not supplied).

Model 3VM-DBB

Double Block and Bleed, with 2 Isolation and 1 Drain valve, threaded on Process, Instrument and Drain port. This Manifold is designed for critical service for Isolation / Testing of Pressure Transmitter, Gauges, Switches, etc.. Two isolating valves are to ensure total isolation of measuring devices during maintenance. Due to the compact nature of block, it is popular for selection where space is at premium and connection are easy. Mounting holes are provided for panel installation for 1/4" bolting (not supplied).

Note : - 1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change.
Directly mounted Three Valve Manifold
3VMT - series

Model 3VMT

Directly Mounted, 2 Isolation and 1 Equalizer valve, threaded on Process / Drain / Flange on Instrument. This 3 Valve, single flanged manifold bolts directly to the differential pressure transmitter having 54 mm c/c connection with center line bolting features. Supplied with 4 nos. 7/16" bolts and 2 nos. Teflon seal.

Model 3VMT-CP1

Directly Mounted, 2 Isolation and 1 Equalizer valve, threaded on Process / Drain / Flange on Instrument. This 3 Valve, Co planer manifold bolts directly to the differential pressure transmitter having 54 mm c/c connection with center line bolting features. Supplied with 4 nos. 7/16" bolts and 2 nos. Teflon seal. Base mounting holes are provided for M10 X 1.5 bolts (not supplied).

Note: - 1) End Connection of different size can be provided on request.
   2) Dimension in millimeter are for reference only and are subject to change.
Model 3VMT-CP2

Directly Mounted, 2 Isolation and 1 Equalizer valve, threaded on Process / Drain / Flange on Instrument. Coplanar design suitable for direct mounting to a differential pressure transmitter having a 54mm c/c connection with centerline bolting features. Optional upstream & downstream Test port 1/4” NPT (F) are available. Manifolds are supplied with 2 nos. Teflon seal & 4 nos. 7/16” bolt. Base mounting holes are provided for M10 X 1.5 bolts (not supplied).

Model 3VMT-CP3

Directly Mounted Type, with 2 Isolation, 1 Equalizer threaded on Process / Drain / Flange on Instrument. Coplanar design with compact manifold for direct mounting to a differential pressure transmitter having 54mm c/c connection with centerline bolting features. Supplied with 2 nos. Teflon seal & 4 nos. 7/16” bolt. Base mounting holes are provided for M10 X 1.5 bolts (not supplied).

Note - 1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change
Model 3VMH

Directly Mounted, 2 Isolation and 1 Equalizer valve, threaded on Drain / Flange on both Process and Instrument. Manifold suitable for direct mounting to a differential pressure transmitter having 54mm c/c connection with centerline bolting features. It also permits the Transmitter Oval Flange to connect the Process line to the manifold directly with either ½" Pipe or Tubing connection. Manifold are supplied with 4 nos. Teflon seal for Instrument & Process Flange.

Note:
1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change.
3- Valve Manifold

Ordering Code

Material Code (select one)
Use Material Designator provided on page 1.

Basic Model Number
Refer Dimensional Tables of required Product.

End Connection (select one)
Standard available NPT, Not applicable for direct mounting Flange connections

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT</td>
<td>ISOT (BSPT)</td>
</tr>
<tr>
<td>IP</td>
<td>ISOP (BSP)</td>
</tr>
<tr>
<td>SW</td>
<td>Socket Weld Pipe</td>
</tr>
</tbody>
</table>

Packing Material (select one)
Standard available is PTFE. Use G (Grafoil ®) for high temperatures

Tip Options (select one)
Standard Tip available is shut-off type. Use Code

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT</td>
<td>for Regulating Tip</td>
</tr>
<tr>
<td>ST</td>
<td>for Soft Tip (for Gas application)</td>
</tr>
</tbody>
</table>

Other Options (add one or more..)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATI</td>
<td>Anti Tamper Valve (both Isolation)</td>
</tr>
<tr>
<td>LI</td>
<td>Locking Valve (both Isolation)</td>
</tr>
<tr>
<td>ATE</td>
<td>Anti Tamper Valve (Equalizer)</td>
</tr>
<tr>
<td>LE</td>
<td>Locking Valve (Equalizer)</td>
</tr>
<tr>
<td>NC</td>
<td>NACE - MR - 01 - 75</td>
</tr>
<tr>
<td>MB</td>
<td>Mounting Bolt (set of 2)</td>
</tr>
<tr>
<td>DP</td>
<td>Drain Plug</td>
</tr>
</tbody>
</table>
Seperately mounted Five Valve ManiFold
5VMS - series

Purpose
Five Valve Manifold are designed for single and double equalizing function, for mounting to a differential pressure transmitter providing isolation, equalizing for zero adjustment of instrument and drain for test or calibration.
For double equalizing, this manifold is used for the function of metering system or for gas flow measurement.

Model 5VMS
Separately Mounted, 2 Isolation, 1 Equalizer and 2 Instrument Drain Valves, threaded on Process / Instrument and Drain Port. Design for mounting to a differential pressure transmitter where double bleed function is required having two vent / test port 1/4" NPT(F) for ease of venting and field calibration of the instrument.

Model 5VMS-2E
Separately Mounted, 2 Isolation, 2 Equalizer and 1 Drain Valves, threaded on Process / Instrument and Drain Port. Design for mounting to a differential pressure transmitter where equalizing function are required for metering system or for gas flow measurement.
Supplied with 2 nos. 1/4" NPT(F) vent plug. Mounting hole provided for 1/4" bolt (not supplied)

Note:
1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change
Model 5VMS-PD

Separately Mounted, 2 Isolation, 1 Equalizer and 2 Process Drain Valves, threaded on Process / Instrument and Drain port. Design for mounting to a differential pressure transmitter where as process drain function is required.

Model 5VMS-CP1

Separately Mounted coplanar 1, 2 Isolation, 1 Equalizer and 2 Drain Valves for draining or test facilities, threaded on Process / Instrument and Drain Port. Design for mounting to a differential pressure transmitter by including outlet threaded connection which are on c/c 54mm to suit the inlet connection on the Instrument. Base mounting hole are provided for M10 x 1.5 bolts (not supplied).

Note : - 1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change
Model 5 VMS-CP1-2E

Separately Mounted coplanar 1, 2 Isolation, 2 Equalizer and 1 Drain Valves, threaded on Process / Instrument and drain port. Design for mounting to a differential pressure transmitter where as double equalizing function are required for metering system or for gas flow measurement. Supplied with 2 Nos. 1/4” NPT plug. Base Mounting hole are provided for M10 x 1.5 bolts (not supplied).

Model 5 VMS-CP1-PD

Separately Mounted coplanar 1, 2 Isolation, 1 Equalizer and 2 Process Drain Valves, threaded on Process / Instrument / Drain Port. Design for mounting to a differential pressure transmitter where as process drain function is required. Base Mounting hole are provided for M10 x 1.5 bolts (not supplied).

Note :
1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change.
Model 5 VMS-CP2

Separately Mounted coplanar 2, 2 Isolation, 1 Equalizer and 2 Drain Valves, threaded on Process / Instrument / Drain port. Design for mounting to a differential pressure transmitter by including outlet threaded connection which are on c/c 54mm to suit the inlet connection on the instrument. Isolation valves are placed on left and right side of the body. Base mounting holes are provided for M10 x 1.5 bolts (not supplied).

Model 5 VMS-CP2-2E

Separately Mounted coplanar 2, 2 Isolation, 2 Equalizer and 1 Drain Valves, threaded on Process / Instrument / Drain port. Design for mounting to a differential pressure transmitter where as double equalizing function are required for metering system or for gas flow measurement. Isolation valve are placed on left and right side of the body. Base mounting are provided for M10 x 1.5 bolts (not supplied).

Note : - 1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change.
Model 5VMS-CP2-PD

Separately Mounted coplanar 2, 2 Isolation, 1 Equalizer and 2 Process Drain Valves, threaded on Process / Instrument and Drain Port. Design for mounting to a differential pressure transmitter where as process drain function is required. Provided with two mountinghole for M10 x 1.5 bolts (not supplied).

Note: - 1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change.
Directly Mounted Five Valve Manifold
5VMT - series

Model 5 VMT

Directly Mounted, 2 Isolation, 1 Equalizer and 2 Instrument Drain Valves, threaded on Process / Drain Port / Flange on Instrument. These five valves manifold bolts directly to the differential pressure transmitter having 54mm c/c connection with center line bolting features where as required for double bleed functions and field calibration of the Instrument by test port. Provided with 2 nos. Teflon seal and 4 nos. 7/16” bolts.

Model 5 VMT-2E

Directly Mounted with 2 Isolation, 2 Equalizer and 1 Drain Valves, threaded on Process / Drain Port / Flange on Instrument. Design for bolting directly to the differential pressure transmitter having 54mm c/c connection with center line bolting feature where as double equalizer function is required for metering system or for gas flow measurement. Supplied with 2 nos. 1/4” NPT drain plug, 2 nos. Teflon seal and 4 nos. 7/16” bolts.

Note : - 1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change.
Model 5 VMT-PD

Directly Mounted, 2 Isolation, 1 Equalizer and 2 Process Drain Valves, threaded on Process / Flange on Instrument. Design for bolting directly to differential pressure transmitter having 54mm c/c with center line bolting feature where as the process drain function is required. supplied with 2 nos Teflon seals and 4 nos 7/16” bolts.

Model 5 VMT-CP1

Directly Mounted coplaner 1, 2 Isolation, 1 Equalizer and 2 Instrument Drain Valves, threaded on Process / Drain port/Flange on Instrument. Design for direct bolting to the differential pressure transmitter having 54mm c/c connection with center line bolting feature. Base mounting hole are provided for M10 x 1.5 bolt (not supplied).Supplied with 2 nos Teflon seals and 4 nos 7/16” bolts.

Note : - 1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change.
Model 5 VMT-CP1-2E

Directly Mounted coplanar 2, 2 Isolation, 2 Equalizer and 1 Drain Valves, threaded on Process / Flange on Instrument. Design for direct mounting to differential pressure transmitter having 54mm c/c connection with center line bolting feature where as double equalizing function is required for metering system or gas flow measurement. supplied with 2 nos. Teflon seal and 4 nos. 7/16” bolts.

Model 5 VMT-CP1-PD

Directly Mounted coplaner, 2 Isolation, 1 Equalizer and 2 Process Drain Valves, threaded on Process / Drain Port / Flange on Instrument. Design suitable for direct mounting to differential pressure transmitter having 54mm c/c connection with center line bolting feature where process drain function is required supplied with 2 nos. Teflon seal and 4 nos. 7/16” bolt. Base mounting holes are provided for M10 x 1.5 bolt (not supplied).

Note : - 1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change
Model 5 VMH

Directly Mounted, 2 Isolation, 1 Equalizer and 2 Instrument Drain Valves, Flange on both Process and Instrument. Design suitable for direct mounting to differential pressure transmitter having 54mm c/c connection with center line bolting feature it also permits the transmitter, Oval Flange to connect the process line to the manifold directly with either ½” Pipe or Tube Connection. Supplied with 4 nos. Teflon seal for Instrument and Process Flange.

Model 5 VMH-2E

Directly Mounted, 2 Isolation, 2 Equalizer and 1 Drain Valves, Flange on both Process and Instrument. Design suitable for direct mounting to differential pressure transmitter having 54mm c/c connection with center line bolting feature where as double equalizing function is required for metering system or for gas flow measurement. It also permits the transmitter, Oval Flange to connect the process line to the manifold directly with either ½” Pipe or Tube Connection. Supplied with 4 nos. Teflon seal for Instrument and Process Flange.

Note: - 1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change
Model 5 VMH-PD

Directly Mounted, 2 Isolation, 1 Equalizer and 2 Process Drain Valves, Flange on both Process and Instrument. Design suitable for direct mounting to differential pressure transmitter having 54mm c/c connection with center line bolting feature where as process drain function is required. It also permits the transmitter Oval Flange to connect the process line to the manifold directly with either ½” Pipe or Tube connection. Supplied with 4 nos. Teflon seal for Instrument and Process Flange.

Note : 
1) End Connection of different size can be provided on request.
2) Dimension in millimeter are for reference only and are subject to change.