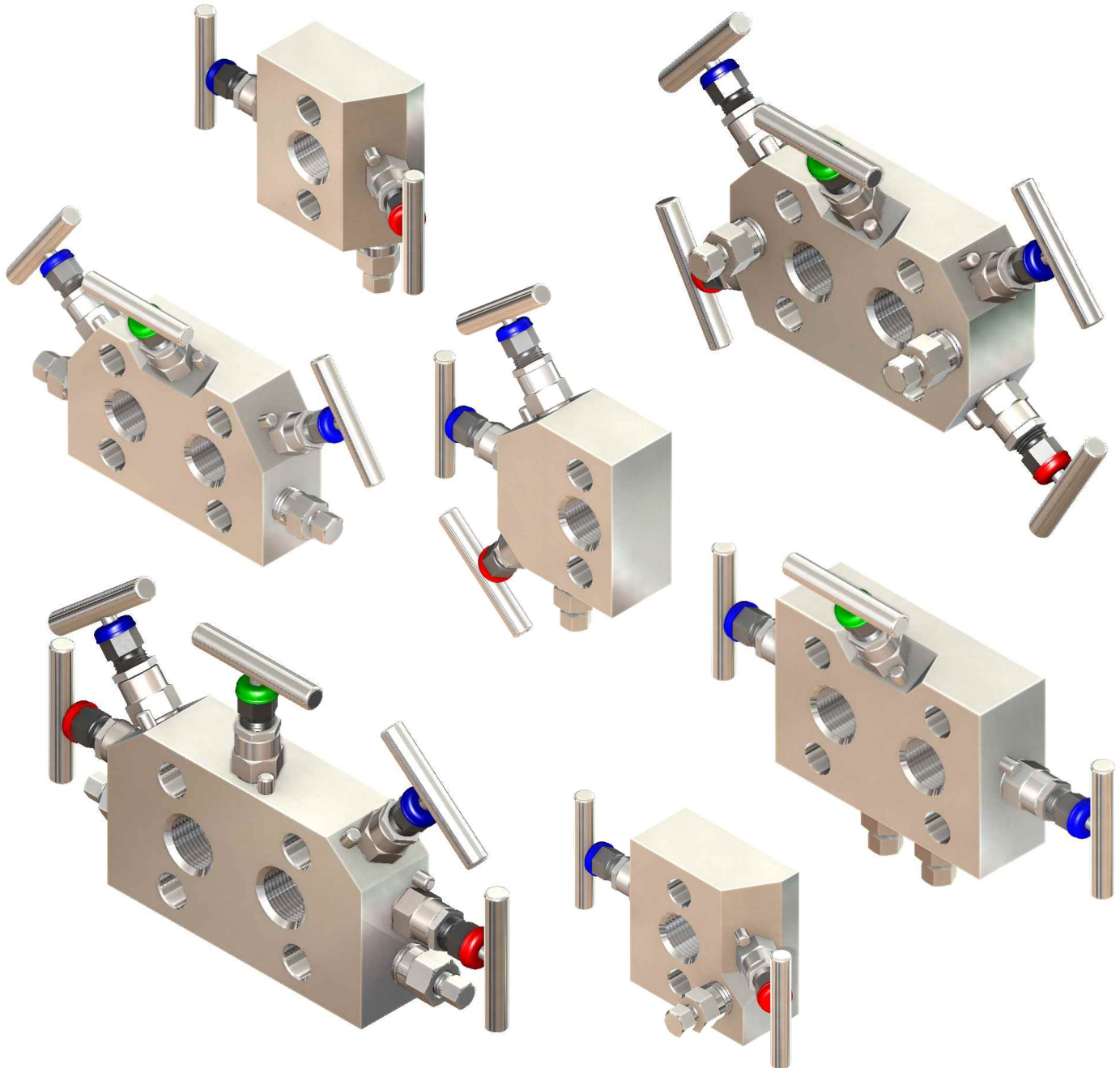


# SUSTECH

## PRECISION

ISO 9001:2008



## Direct Mount Manifolds

L Series

Rated up to 10 000 psi

Compact design

Ease of use

[www.sustech.com](http://www.sustech.com)

[sales@sustech.com](mailto:sales@sustech.com) | +27 11 452-9545

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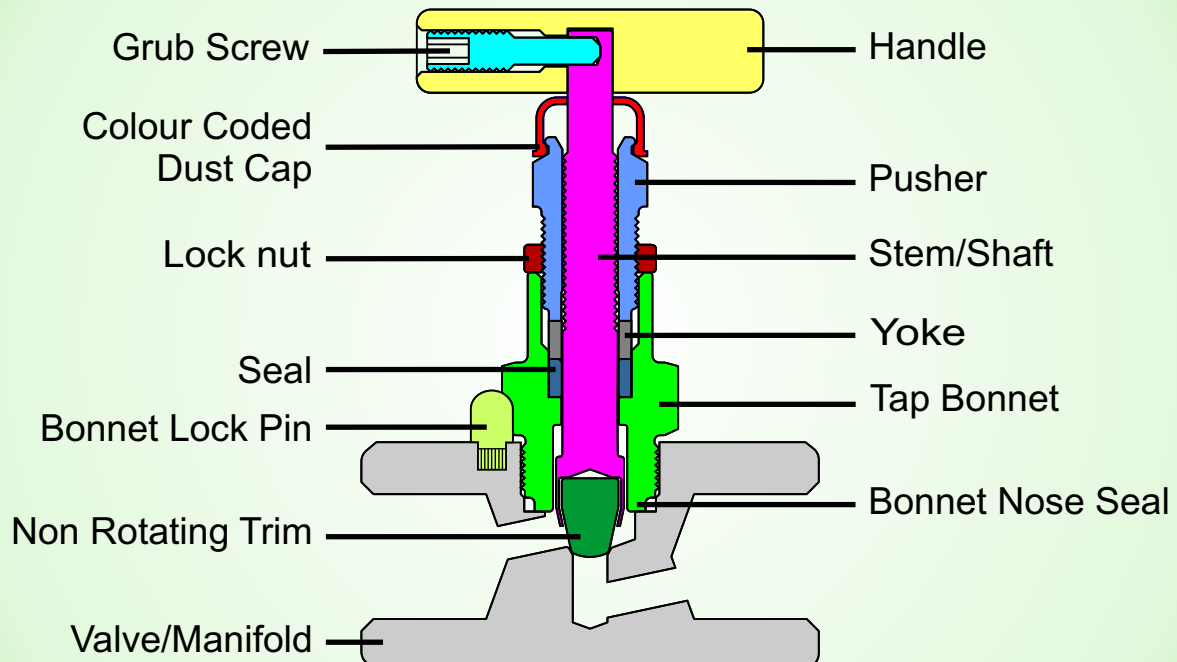
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# L-Series Valve Head



## Features and Benefits

- Low Operating Torque
- Safety Back Seating of Stem
- Anti Blow-Out Shaft
- Stem Seal below the Threads
- Bonnet Seal located below Threads
- Bonnet Lock Pin
- Non-Rotating Ball-Nose Trim
- External adjustment of packing seal
- Stem dust cap
- Colour Coded Valve Function
- Tracker Code
- Hidden Tap Handle Locating Screw
- Full Traceability
- Locknut
- Seal Yoke
- Low Friction Coating on Pusher
- Mirror Finish Burnished Stem Seal Surface
- Single Point Machined Threads
- 2 Times Overpressure Safety Margin
- 100% Pressure Tested
- Anti Tamper Option Available (with removable key)
- Lockable Option Available (with contained key)
- Panel Mount Option Available

# L-Series Valve Head

## Features and Benefits Explained

### Safety Back Seating of Stem

This function prevents accidental removal of the stem while in operation. When the tap is in the fully opened position the stem produces a metal to metal secondary back seal, removing continuous pressure from the packing.

### Anti Blow-Out Shaft

Reduces risk of injury as the shaft will be contained in the unlikely event of a shaft thread failure due to unforeseen circumstances.

### Stem Seal below the Threads

This isolates the stem threads from the process media, preventing thread corrosion and keeps solids from entering the thread area which can cause galling. It also isolates the thread lubricant from the process, preventing process contamination as well as lubricant washout.

### Bonnet Seal located below Threads

A metal to metal seal is utilized to provide a positive seal that also provides a great seal even at high temperatures. This seal is located below the bonnet threads isolating the bonnet threads from the process media.

### Bonnet Lock Pin

All taps are secured by a Bonnet lock pin. These pins are machined from billet rather than using a roll pin. The end result is a shouldered bonnet dwell pin that is knurled on the insertion point.

### Non-Rotating Ball-Nose Trim

This stops galling or damage to the seat face by allowing the trim to not rotate while lift off of, and seating down on, the seating surface. For added security the trim is produced from billet rather than using a sphere (pure ball) as a ball does not have polarity. This ensures the trim can only rotate around the same axis as the stem.

### External adjustment of packing seal

The stem seal can be easily adjusted in position, without any disassembly of the valve or manifold.

### Stem dust cap

Protects stem threads against contaminants in the atmosphere.

### Colour Coded Valve Function

Tap function easily identifiable through colour coded dust caps.

### Tracker Code

All taps are assembled with a tracker code to ensure 100% traceability.

### Full Traceability

All components are fully traceable back to source.

### Locknut

Ensures safe operation under high vibration conditions.

### Seal Yoke

The high precision yoke provides good encapsulation and integrity of the stem seal.

### Low Friction Coating on Pusher

The low friction coating is applied to the pusher so that both the stem threads and seal adjusting threads are protected. This greatly reduces friction, galling and wear of the stem threads increasing valve life. It also supplies protection to the seal adjusting threads.

### Hidden Tap Handle Locating Screw

This improves the feel to the user when operating the tap as there are no sharp edges or protruding bolts.

### Mirror Finish Burnished Stem Seal Surface

The face where the seal contacts the stem is burnished to a mirror like finish. This reduces operating torque and extends the life of the seal.

### Single Point Machined Threads

Produces high accuracy threads as opposed to tapping. This ensures NACE compliance as no cold working operations such as thread rolling are performed on the material.

### 2 Times Overpressure Safety Margin

### 100% Pressure Tested

Each valve is tested with nitrogen gas to a minimum of 1000 psi. Optional 1.5X hydrostatic testing is available on special request.

### Anti Tamper Option Available (with removable key).

### Lockable Option Available (with contained key).

This option has a handle and key which can be disengaged from the stem and locked using a traditional padlock. The main advantage of this option is that the handle and key remain attached to the valve or manifold reducing the possibility of losing the key.

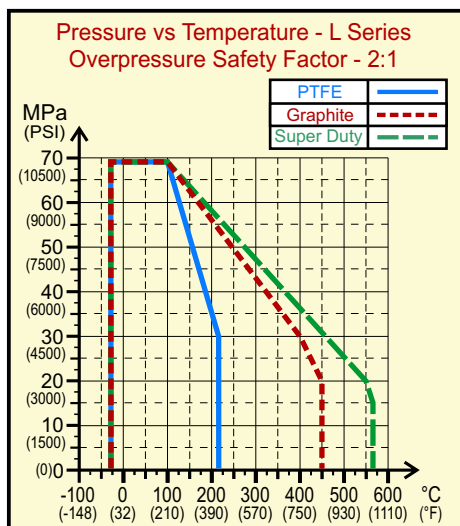
### Panel Mount Option Available

# Valve Head Materials, Pressure/Temperature Ratings

## Standard Materials Makeup

Sustech's L Series valveheads are assembled with the best possible components. All wetted components of the valvehead are produced from the same material grade as the manifold body. When special alloys are used, the non wetted components will be produced from 316L SS. Below is a list of a few common materials to illustrate the list of materials used. Care should be taken to specify the correct material for the process media and conditions.

Component	316 SS Manifold	Monel 400 Manifold	Hastelloy C-276 Manifold	ASTM A105 Manifold
Tap Bonnet	316/316L SS	Monel 400	Hastelloy C-276	ASTM A105
Stem				304L SS
Trim				304L SS
Pusher	316/316L SS			ASTM A105
Yoke	316/316L SS			ASTM A105
Handle	316/316L SS			ASTM A105
Grub Screw	316/316L SS			304L SS
Bonnet Lock Pin	316/316L SS			316L SS
Lock Nut	316/316L SS			316L SS
Dust Cap	UV Stabalized Nylon			UV Stabalized Nylon
Packing Seal	PTFE or Graphite			PTFE or Graphite



## Pressure/Temperature Ratings

### 10 000 psi Standard Pressure Version

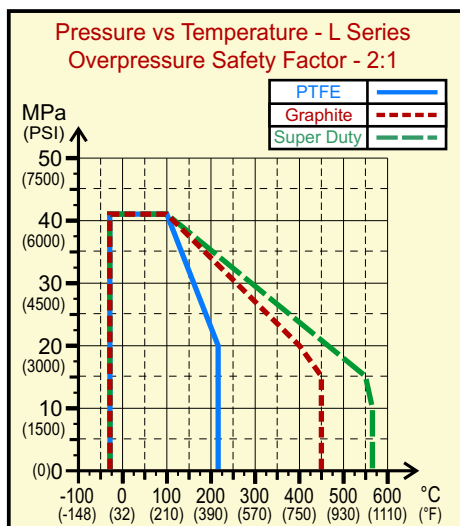
#### PTFE PACKING

Maximum pressure 689 bar (10 000 psi) at -30 to 100° C (212° F)  
Maximum pressure 310 bar ( 4 500 psi) at 215° C (420° F)

#### GRAFOIL® PACKING

Maximum pressure 689 bar (10 000 psi) at -30 to 100° C (212° F)  
Maximum pressure 206 bar ( 3 000 psi) at 450° C (842° F)\*

\* For Super Duty High Temperature Power Valves contact Sustech for information



### 6 000 psi Standard Pressure Version

#### PTFE PACKING

Maximum pressure 413 bar (6 000 psi) at -30 to 100° C (212° F)  
Maximum pressure 206 bar (3 000 psi) at 215° C (420° F)

#### GRAFOIL® PACKING

Maximum pressure 413 bar (6 000 psi) at -30 to 100° C (212° F)  
Maximum pressure 155 bar (2 250 psi) at 450° C (842° F)\*

\* For Super Duty High Temperature Power Valves contact Sustech for information

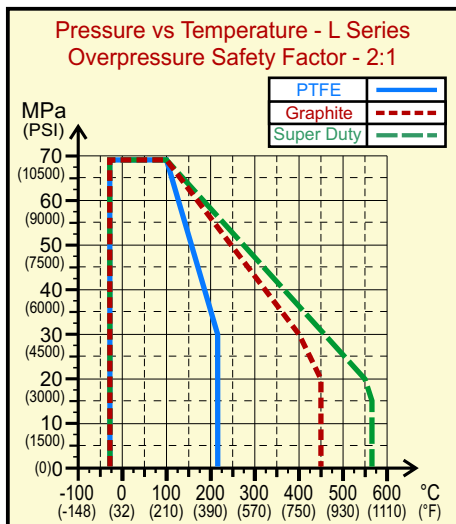


# Valve Head Materials, Pressure/Temperature Ratings

## Materials Makeup of -STC or -STJ Option

Sustech's L Series valveheads are assembled with the best possible components. The Stem and Trim of the valvehead are produced from the specified material grade in the order (-STC for Hastelloy C-276, and -STJ for Monel 400). When special alloys are used, the non wetted components will be produced from 316L SS. Below is a list of a few common materials to illustrate the list of materials used. Care should be taken to specify the correct material for the process media and conditions.

Component	316 SS Standard Manifold	- STJ Monel 400	-STC Hastelloy C-276
Tap Bonnet	316/316L SS		
Stem	316/316L SS	Monel 400	Hastelloy C-276
Trim			
Pusher	316/316L SS		
Yoke	316/316L SS		
Handle	316/316L SS		
Grub Screw	316/316L SS		
Bonnet Lock Pin	316/316L SS		
Lock Nut	316/316L SS		
Dust Cap	UV Stabalized Nylon		
Packing Seal	PTFE or Graphite		



## Pressure/Temperature Ratings

### 10 000 psi Standard Pressure Version

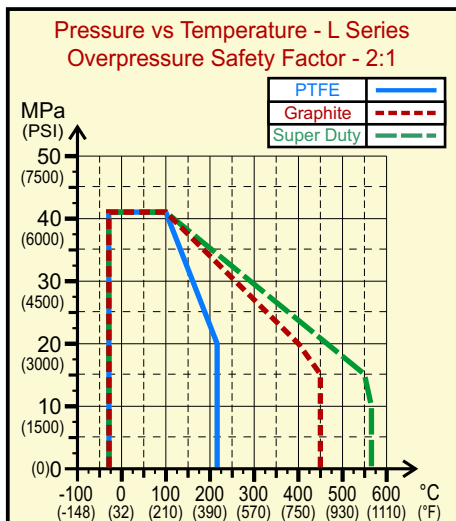
#### PTFE PACKING

Maximum pressure 689 bar (10 000 psi) at -30 to 100° C (212° F)  
Maximum pressure 310 bar ( 4 500 psi) at 215° C (420° F)

#### GRAFOIL® PACKING

Maximum pressure 689 bar (10 000 psi) at -30 to 100° C (212° F)  
Maximum pressure 206 bar ( 3 000 psi) at 450° C (842° F)\*

\* For Super Duty High Temperature Power Valves contact Sustech for information



### 6 000 psi Standard Pressure Version

#### PTFE PACKING

Maximum pressure 413 bar (6 000 psi) at -30 to 100° C (212° F)  
Maximum pressure 206 bar (3 000 psi) at 215° C (420° F)

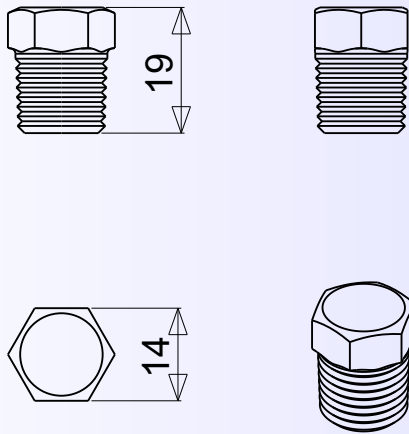
#### GRAFOIL® PACKING

Maximum pressure 413 bar (6 000 psi) at -30 to 100° C (212° F)  
Maximum pressure 155 bar (2 250 psi) at 450° C (842° F)\*

\* For Super Duty High Temperature Power Valves contact Sustech for information

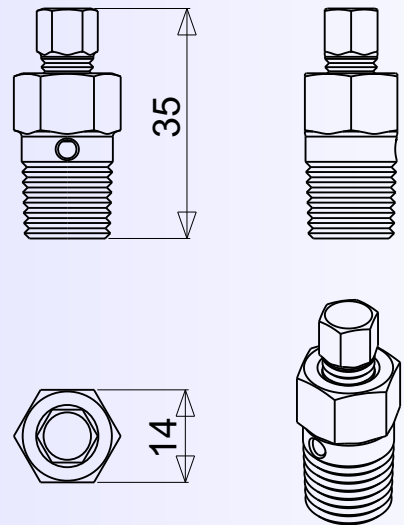
# Accessories

Plug



Specifications subject to change without prior notification

Bleed Plug

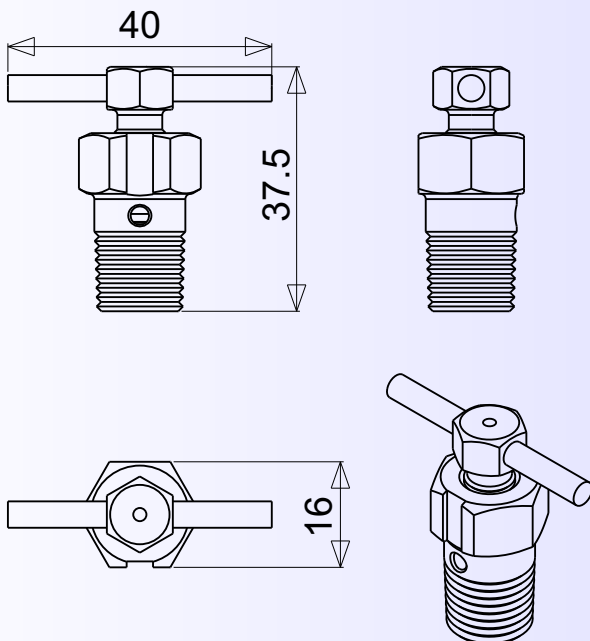


Specifications subject to change without prior notification

The following vent/test port plugging options are available:

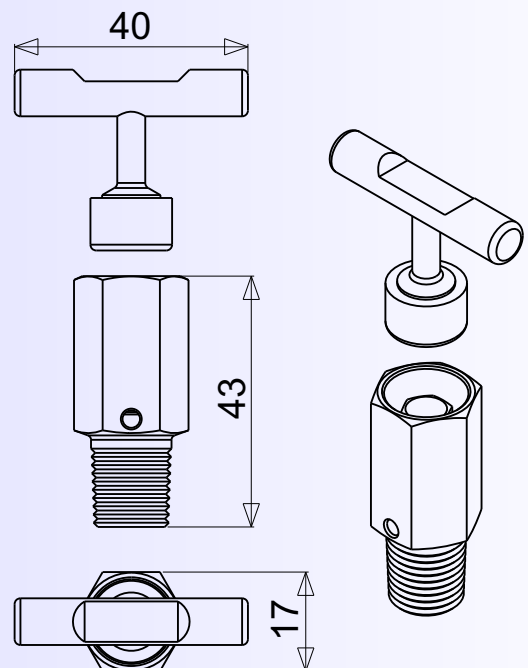
- Plug** - Standard plugging option.
- Bleed Plug** - Versatile option, allowing the user to bleed pressure off without removing the plug from the manifold.
- T Bar Handle Bleed Plug** - Further enhances ease of use by removing the need for tools to operate.
- Anti-Tamper Bleed Plug** - Provides added safety by offering a tamper resistant design. The removable key can be assigned to a designated user.

T Bar Handle Bleed Plug



Specifications subject to change without prior notification

Anti-Tamper Bleed Plug

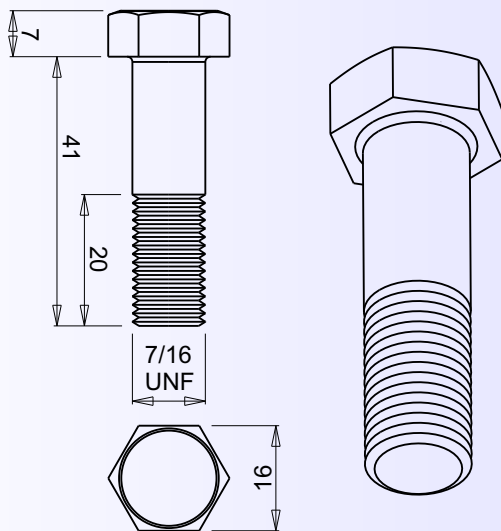


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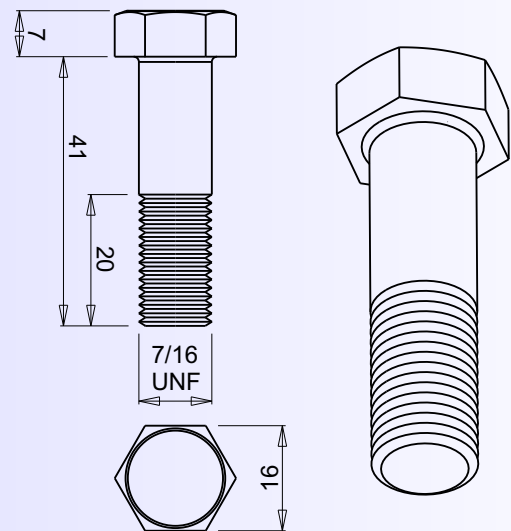
# Accessories

Passivated Carbon Steel Bolt



Specifications subject to change without prior notification

Stainless Steel Bolt

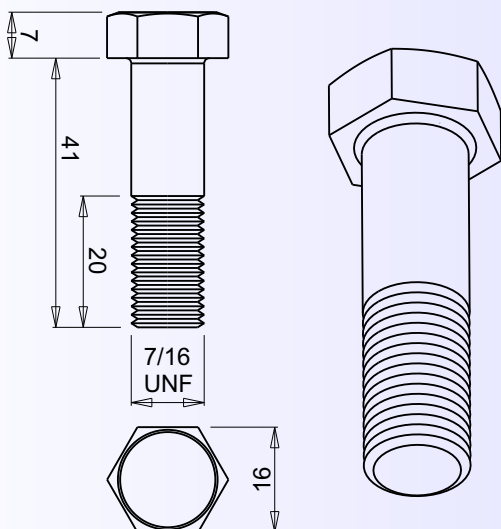


Specifications subject to change without prior notification

The following transmitter bolting options are available:

- Passivated Carbon Steel Bolt** - Standard bolting option. This is also the most cost effective option. The plating gives the bolts a gold appearance.
- Stainless Steel Bolt** - This option provides greater corrosion resistance in more aggressive environments.
- Exotic Material Bolt** - For the most demanding environments. These bolts are normally requested to be the same material as the manifold body.

Exotic Material Bolt



Specifications subject to change without prior notification

# Material Certificates, Testing and Traceability

## Material Certificates and Traceability

Each manifold that we assemble is assigned a traceability code which we call our assembly A-Number.

This entails the main body of the manifold being marked with an alpha numeric code. Furthermore, the individual valveheads are pre-assembled and get their own traceability code marked onto them before being installed into the manifold bodies. These codes link each component to manufacturing, assembly and mill test reports (MTR's).

The A-Number is stored in our ISO 9001 quality management system for traceability and future reference. This A-Number corresponds to our Material Certificate Register (MCR).

An MCR is supplied with every order to the customer. This document gives a list of the corresponding material batch numbers and grades for all wetted components used to assemble that specific batch of manifolds. Along with this MCR, mill test reports (MTR's) are also supplied in a mini databook. This can be supplied in either a PDF file or a hard copy format.

All valves/manifolds are marked to a minimum of MSS-SP-25. This will include manufacturers name, material of construction, traceability code (A number), part number, temperature and pressure rating. These markings are permanently marked onto the body by either a pin stamping or laser etching process. The material of construction marking pertains to all the wetted components in the valve/manifold



## Testing and Quality Control

All components undergo 100% size testing during the manufacturing process. From there the components will be assembled into the final product which gets pressure tested to confirm correct operation. To keep to the highest possible standard, 100% of the finished products are tested.

Sustech's standard testing procedure conforms to MSS-SP-99\*. Each manifold is tested in such a way that every valve seat in the manifold, as well as every valvehead's stem packing and bonnet to body seal is checked. This test utilizes pressurized nitrogen gas at a minimum of 1000 psi (MSS-SP-99 only requires 80 psi). Sustech does not permit any leakage at all through the seat or the stem packing during testing.

The results are then recorded and a report compiled.

\* For code applications where a hydrostatic 1.5X over-pressure shell test needs to be performed, Sustech uses the MSS-SP-105 testing procedure. This testing is done on special request.

# Specifications

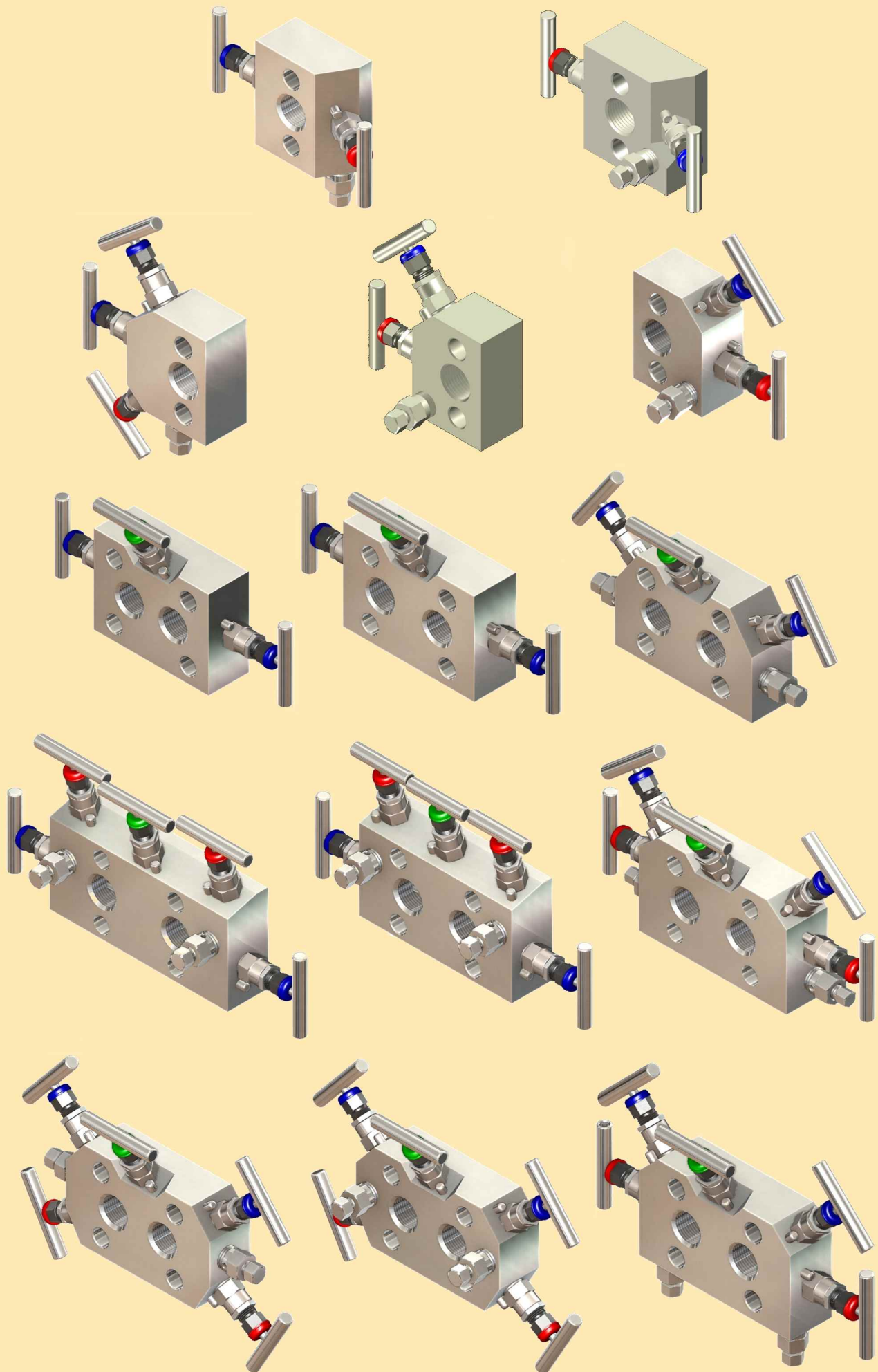
## Manufacturing Standards and Compliances

Sustech products are designed, manufactured and tested to the highest possible standards and can have the following standards and regulations applied as required:

ASME BPVC VIII Div 1	- ASME Boiler Pressure Vessel Code Section 8 Division 1
ASME B31.1	- Power Piping
ASME B31.3	- Process Piping
ASME B16.34	- Valves Flanged, Threaded
ISO 9001:2008	- Certified Quality System
MSS-SP-99	- Instrument Valves
MSS-SP-105	- Instrument valves for code applications
MSS-SP-25	- Standard marking system for valves, fittings, flanges and unions
MSS-SP-61	- Hydrostatic testing of steel valves
NACE	- National Association of Corrosion Engineers
NACE MR0175 / ISO 15156	- Materials for use in H <sub>2</sub> S-containing environments in oil and gas production
NACE MR0103	- Materials Resistant to Sulfide Stress Cracking in Corrosive Petroleum Refining Environments
NORSOK M650	- Qualification of manufacturers of special materials
EN 10204 3.1 or 3.2	- Mill Test Reports
ASME B1.20.1	- General Pipe Threads or high tolerance thread
ASTMA182	- Forged or Rolled Alloy - Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High Temperature Service
ASTMA276	- Standard Specification for Stainless Steel Bars and Shapes
ASTMA479	- Stainless Steel Bars and Shapes for Use in Boilers and other Pressure Vessels
SANS 347	- Categorization and conformity assessment criteria for all pressure equipment
P.E.R	- Pressure Equipment Regulations (South Africa)
P.E.D	- Pressure Equipment Directive (Europe)
CSA	- Canadian Standards Association
CSAB51.03	- Boiler, Pressure Vessel, and Pressure Piping Code
CRN	- Canadian Registration Number
GOST	- State Standard of the Soviet Union

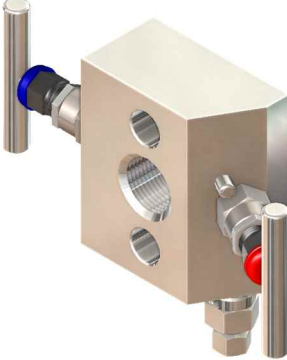
### Pressure Equipment Directive (P.E.D 97/23/EC) (Europe)

Due to internal bore size and internal volumes up to and including 1"/25mm, products offered in this catalogue comply with S.E.P (Sound Engineering Practice) article 3, paragraph 3 of the Pressure Equipment Directive P.E.D 97/23/EC and therefore CE marking is not applicable.

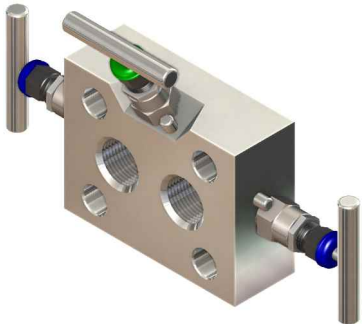


# Direct Mount Manifold

# 2 Way Direct Mount Manifolds

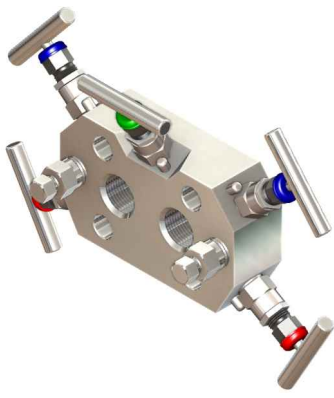
Code		Range	Manifold Body Style	Seals Material Type	Pressure Rating	Material	Tap Options	Transmitter Connection	Options
L2/	L Series 2 Way Manifold	L2/	D	T	E	H	X	X	-OX
D	Angled Vent Tap with Bottom Vent								
F	Angled Vent Tap with Front Vent								
FS	All Taps on One Side								
DF	DBB (Isolate Vent Isolate)								
IF	DIB (Isolate Isolate Vent)								
T	PTFE Seals								
C	PCTFE Seals (KEL-F)								
F	Glass Filled PTFE								
G	Graphite Seals								
Blank	6 000 psi								
E	10 000 psi								
H	See Materials List (Refer to page 16)								
X	All Taps Standard "T" Bar								
A	All Taps Anti-Tamper								
H	All Taps Lockable (Captured)								
K	Vent Taps Lockable (Captured)								
L	Isolate Taps Lockable (Captured)								
V	Vent Taps Anti-Tamper								
Y	Isolate Taps Anti-Tamper								
X	Flanged "O" Ring Transmitter Hook-Up								
-OX	See Options List (Refer to page 17)								

# 3 Way Direct Mount Manifolds

Code		Range	Manifold Body Style	Seals Material Type	Pressure Rating	Material	Tap Options	Transmitter Connection	Options
L3/	L Series 3 Way Manifold	L3/	D	T	E	H	X	X	-OX
D	Angled Equalize Tap (Compact Design)								
F	Angled Equalize Tap (Wide Body)								
S	Angled Equalize Tap, Side Mounted Vent Ports								
T	PTFE Seals								
C	PCTFE Seals (KEL-F)								
F	Glass Filled PTFE								
G	Graphite Seals								
Blank	6 000 psi								
E	10 000 psi								
H	See Materials List (Refer to page 16)								
X	All Taps Standard "T" Bar								
A	All Taps Anti-Tamper								
H	All Taps Lockable (Captured)								
K	Vent Taps Lockable (Captured)								
L	Isolate Taps Lockable (Captured)								
V	Vent Taps Anti-Tamper								
Y	Isolate Taps Anti-Tamper								
X	Flanged "O" Ring Transmitter Hook-Up								
-OX	See Options List (Refer to page 17)								



# 5 Way Direct Mount Manifolds

Code		Range	Manifold Body Style	Seals Material Type	Pressure Rating	Material	Tap Options	Transmitter Connection	Options
		L5/	B	T	E	H	X	X	-OX
L5/	L Series 5 Way Manifold								
B	Top Mounted Taps, Side Mounted Vent Ports								
D	Side Mounted Vent Ports (Compact Design)								
F	Front Mounted Vent Ports								
FS	Side Mounted Vent Ports								
S	Wide Body with Bottom Vent Ports								
T	PTFE Seals								
C	PCTFE Seals (KEL-F)								
F	Glass Filled PTFE								
G	Graphite Seals								
Blank	6 000 psi								
E	10 000 psi								
H	See Materials List (Refer to page 16)								
X	All Taps Standard "T" Bar								
A	All Taps Anti-Tamper								
H	All Taps Lockable (Captured)								
I	Equalize and Vent Taps Lockable (Captured)								
J	Equalize Tap Lockable (Captured)								
K	Vent Taps Lockable (Captured)								
L	Isolate Taps Lockable (Captured)								
T	Equalise Tap Anti-Tamper								
U	Equalise and Vent Taps Anti-Tamper								
V	Vent Taps Anti-Tamper								
Y	Isolate Taps Anti-Tamper								
X	Flanged "O" Ring Transmitter Hook-Up								
-OX	See Options List (Refer to page 17)								

## Materials

Code	Most Common Materials
H	316
L	316L
LD	316/316L Dual Certified
T	316 Ti
F	Alloy 20
K	ASTM A105
K2	ASTM A350 LF2
S	Duplex Stainless Steel
S2	Super Duplex Stainless Steel
J	Monel 400
C	Hastelloy C-276
C1	Hastelloy C-22
X	Inconel Alloy 625
Y	Inconel Alloy 825
4	304
U	Titanium Grade 5
	*Other materials available on request

## Options

<b>Code</b>	<b>Common Optional Extras</b>
-ARC	Arctic Lube for service down to -57 degrees C
-M	Metering Trim
-OX	Oxygen Cleaning
-P	Plug installed in bleed / vent port
-Q	Bleed plug installed in bleed / vent port
-R	Bottom Mounting
-U	Upstream venting (Certain models only)
-T7	Trim in 17/4 PH Condition H1075
-BSTC	Hastelloy C-276 Bonnet & Shaft & Trim
-STC	Hastelloy C-276 Shaft & Trim
-STJ	Monel 400 Shaft & Trim
-TW	Tungsten carbide ball trim
-ZH	316 SS Transmitter bolting kit included.
-ZK	Carbon steel transmitter bolting kit included
-40	Narrow body (Used for the L5/B)
	*Other options available on request

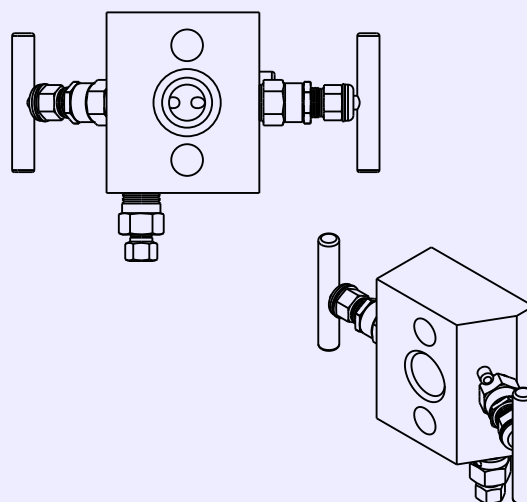
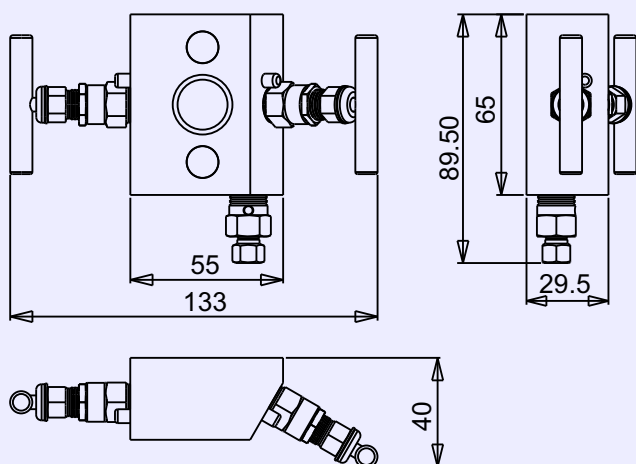
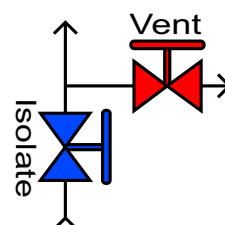
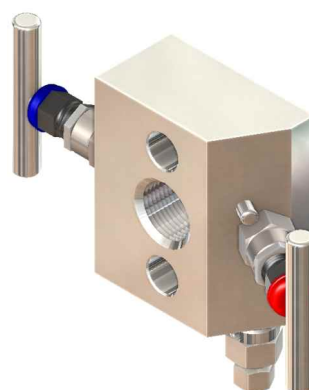
## 2 Way Direct Mount Manifold

The L2/D manifold mounts directly to standard pressure transmitters. It is a small package making it attractive to the space and cost conscious. The angled vent tap design creates sufficient space to be able to operate the valves easily. The vent port is placed on the back face, pointing away from the user. This can be safer when hazardous media is being vented. The manifold is supplied with the transmitter seal as standard, with the bolting kit being included as an option added to the part number.

- **Compact body and Lightweight**
- **Liquid and vapor service**
- **Vent ports face away from user for maximum safety when venting hazardous media**
- **Vent tap steeply angled forwards, maximising clearance between tap handle and transmitter**
- **Allows isolation and removal of transmitter as well as calibration**
- **Full traceability**
- **100% pressure tested**
- **Up-stream venting available**
- **Various bolting kits available**
- **Mounting option available**
- **Available in most exotic materials (Pg 16)**

## Specifications

Type	2 Way Direct Mount Manifold
Pipe to Flange	
Inlets	Female 1/2" NPT
Outlets	Flanged "O" Ring Transmitter Hook-Up
Packing	PTFE
	Graphite
M.C.W.P Pressure	6 000 psi / 10 000 psi
Temperature Range	-30°C (-22°F) to 215°C (420°F) PTFE
	-30°C (-22°F) to 440°C (824°F) Graphite
Weight	0.80kg



Specifications subject to change without prior notification

Bleed Plug shown for illustrative purposes only

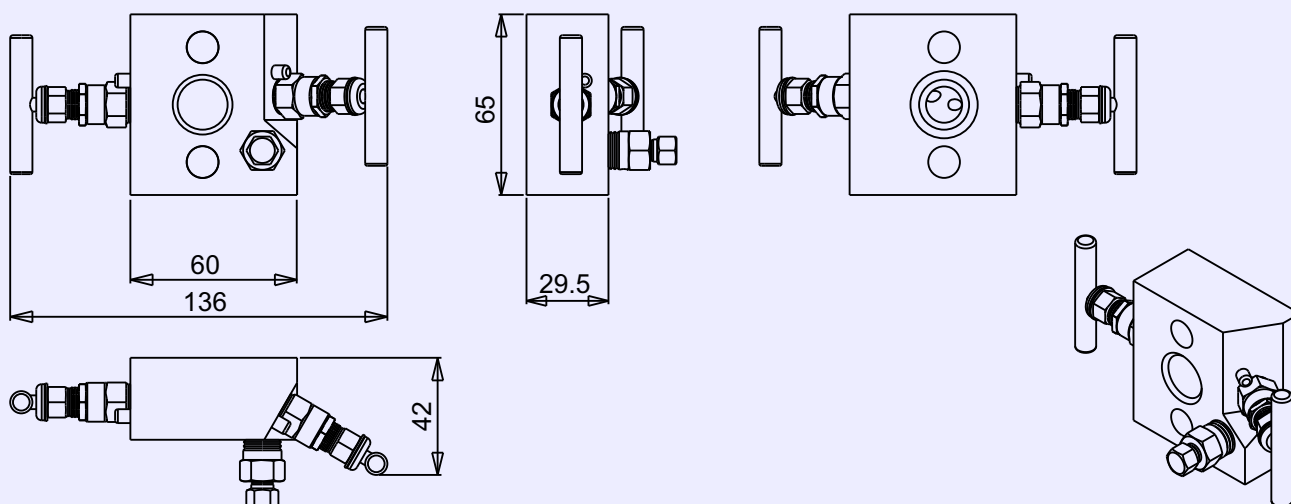
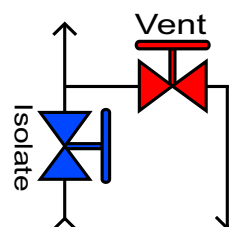
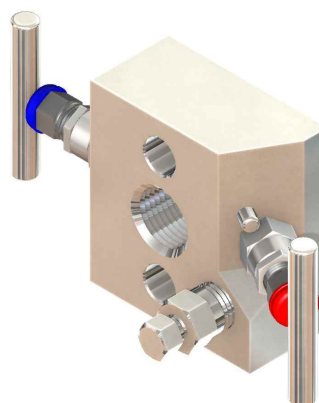
## 2 Way Direct Mount Manifold

The L2/F manifold mounts directly to standard pressure transmitters. It is designed to be the smallest package possible for the space and cost conscious. The angled vent tap design creates a large space for your hand to operate the valves easily. Placement of the vent port is on the process face allowing easy piping away of vented media. The manifold is supplied with the transmitter seal as standard, with the bolting kit being included as an option added to the part number.

- Liquid and vapor service
- Vent tap steeply angled forwards, maximising clearance between tap handle and transmitter
- Vent port on process face for easy piping away of vented media
- Allows isolation and removal of transmitter as well as calibration
- Full traceability
- 100% Pressure tested
- Up-Stream Venting available
- Various bolting kits available
- Mounting option available
- Available in most exotic materials (Pg 16)

## Specifications

Type	2 Way Direct Mount Manifold
Pipe to Flange	
Inlets	Female 1/2" NPT
Outlets	Flanged "O" Ring Transmitter Hook-Up
Packing	PTFE
	Graphite
M.C.W.P Pressure	6 000 psi / 10 000 psi
Temperature Range	-30°C (-22°F) to 215°C (420°F) PTFE
	-30°C (-22°F) to 440°C (824°F) Graphite
Weight	0.89kg



Specifications subject to change without prior notification

Bleed Plug shown for illustrative purposes only

# L2/FS

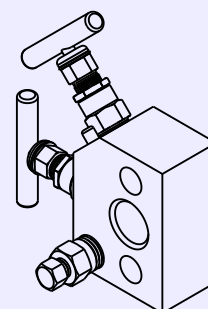
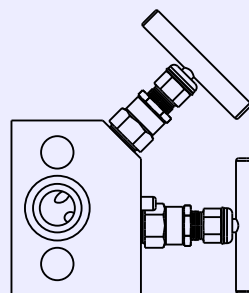
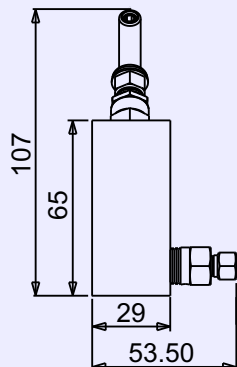
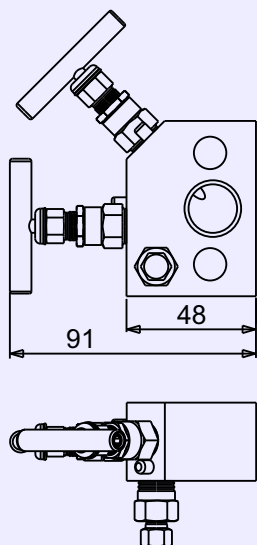
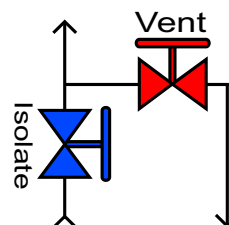
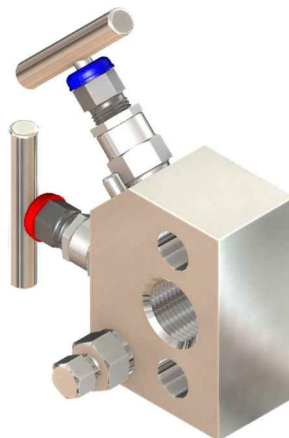
## 2 Way Direct Mount Manifold

The L2/FS manifold mounts directly to standard pressure transmitters. Both valves are on the same side of the manifold, placing both valves away from the transmitter. This compact design also has the vent/test port on the process connection face to allow neat and easy piping away of vented process media. The manifold is supplied with the transmitter seal as standard, with the bolting kit being included as an option added to the part number.

### Specifications

Type	2 Way Direct Mount Manifold
Pipe to Flange	
Inlets	Female 1/2" NPT
Outlets	Flanged "O" Ring Transmitter Hook-Up
Packing	PTFE
	Graphite
M.C.W.P Pressure	6 000 psi / 10 000 psi
Temperature Range	-30°C (-22°F) to 215°C (420°F) PTFE
	-30°C (-22°F) to 440°C (824°F) Graphite
Weight	0.73kg

- Compact body and lightweight
- Both tap handles can be operated from one side
- Reversible design for transmitters where the pressure connection is situated on the right hand side
- Liquid and vapor service
- Allows isolation and removal of transmitter as well as calibration
- Full traceability
- 100% Pressure tested
- Up-Stream Venting available
- Various bolting kits available
- Mounting option available
- Available in most exotic materials (Pg 16)



Specifications subject to change without prior notification

Bleed Plug shown for illustrative purposes only



# L2/DF

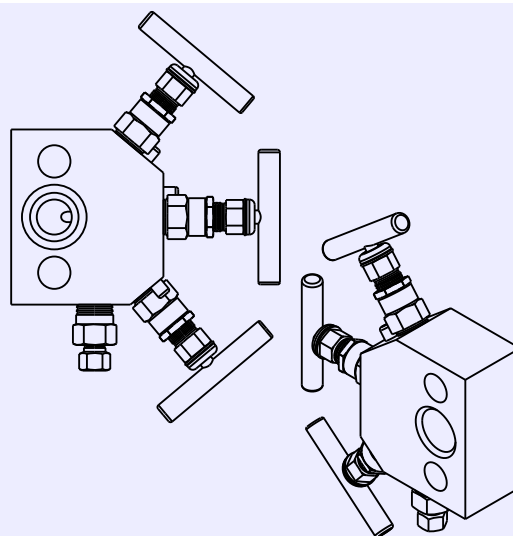
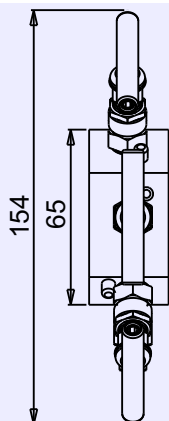
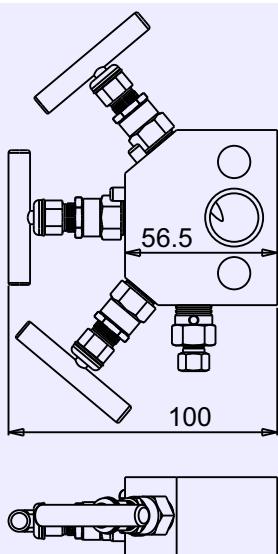
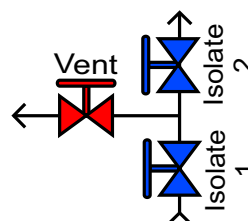
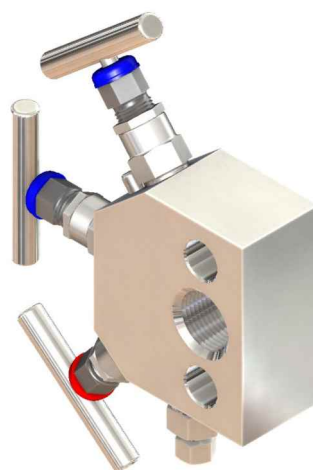
## 2 Way Direct Mount DBB Manifold

The L2/DF manifold mounts directly to standard pressure transmitters. It utilizes the industry know Isolate Vent Isolate pattern. This provides "Positive Energy Isolation" where maximum safety is needed during maintenance. Great cost benefits are achieved due to the elimination of multi valve systems. The manifold is supplied with the transmitter seal as standard, with the bolting kit being included as an option added to the part number.

- **Compact body**
- **DBB design ensuring "Positive Energy Isolation" of both process and instrument sides**
- **Reduces cost due to eliminating multi valve systems**
- **Simplifies Installation**
- **Liquid and vapor service**
- **Large clearance between tap handles**
- **Allows isolation and removal of transmitter as well as calibration**
- **Full traceability**
- **100% Pressure tested**
- **Various bolting kits available**
- **Mounting option available**
- **Available in most exotic materials (Pg 16)**

## Specifications

Type	DBB Direct Mount DP Manifold
Inlets	Pipe to Flange (Isolate Vent Isolate)
Outlets	Flanged "O" Ring Transmitter Hook-Up
Packing	PTFE Graphite
M.C.W.P Pressure	6 000 psi / 10 000 psi
Temperature Range	-30°C (-22°F) to 215°C (420°F) PTFE -30°C (-22°F) to 440°C (824°F) Graphite
Weight	0.89kg



Specifications subject to change without prior notification

Bleed Plug shown for illustrative purposes only

# L2/IF

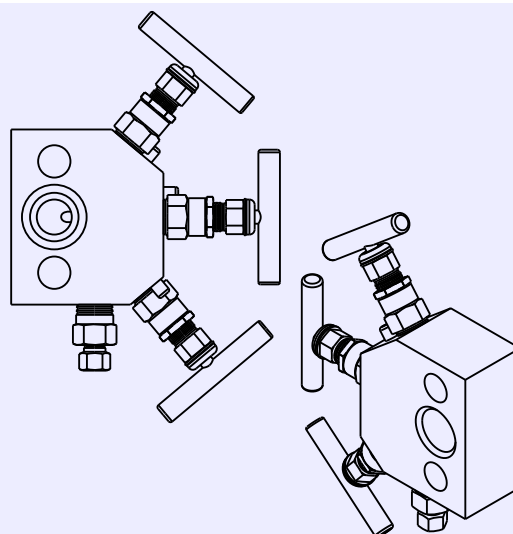
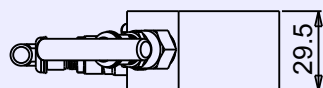
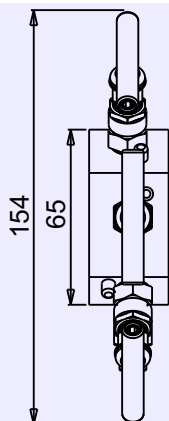
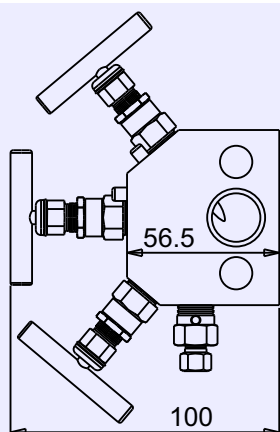
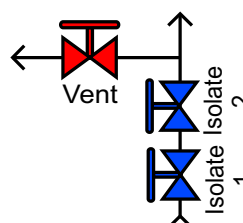
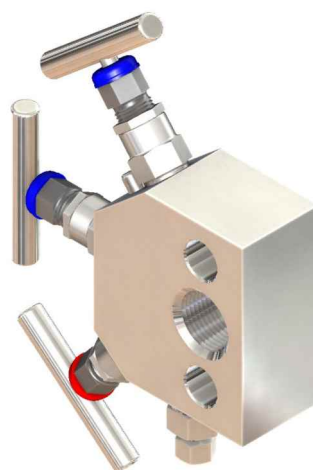
## 2 Way Direct Mount DIB Manifold

The L2/IF manifold mounts directly to standard pressure transmitters. It utilizes an Isolate Isolate Vent pattern which allows double isolation of the process side. Great cost benefits are achieved due to the elimination of multi valve systems. The manifold is supplied with the transmitter seal as standard, with the bolting kit being included as an option added to the part number.

- Allows double isolation of the process side for added safety
- Liquid and vapor service
- Large clearance between tap handles
- Allows isolation and removal of transmitter as well as zeroing and calibration
- Full traceability
- 100% Pressure tested
- Up-Stream Venting available
- Various bolting kits available
- Mounting option available
- Available in most exotic materials (Pg 16)

## Specifications

Type	DIB Direct Mount DP Manifold
Inlets	Pipe to Flange (Isolate Isolate Vent)
Outlets	Flanged "O" Ring Transmitter Hook-Up
Packing	PTFE Graphite
M.C.W.P Pressure	6 000 psi / 10 000 psi
Temperature Range	-30°C (-22°F) to 215°C (420°F) PTFE -30°C (-22°F) to 440°C (824°F) Graphite
Weight	0.89kg



Specifications subject to change without prior notification

Bleed Plug shown for illustrative purposes only

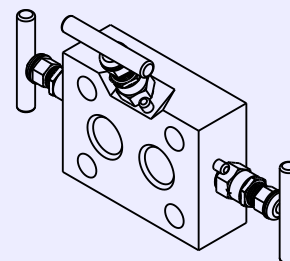
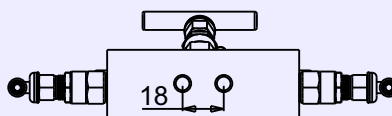
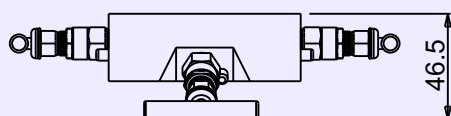
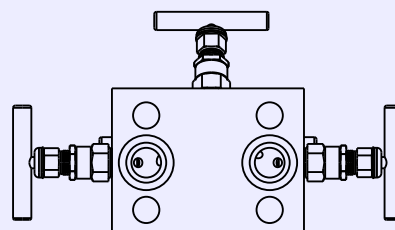
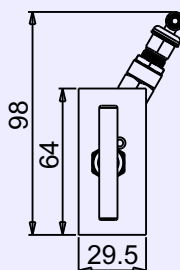
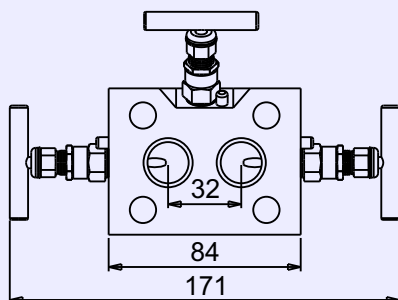
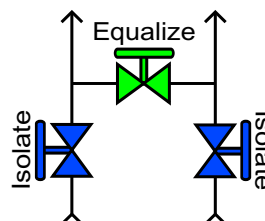
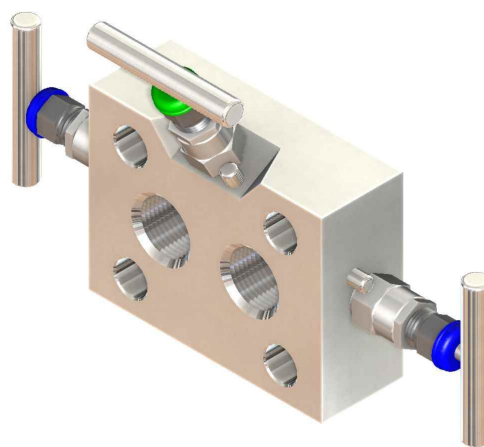
## 3 Way Direct Mount (Compact Design)

The L3/D manifold mounts directly to standard differential pressure transmitters. It is designed to be the smallest package possible for the space and cost conscious. Shipping costs can even be reduced due to its small size and super light weight. Placement of transmitter and manifold are made easier due to its compact design. The manifold is supplied with the transmitter seals as standard, with the bolting kit being included as an option added to the part number.

### Specifications

Type	3 Way Direct Mount DP Manifold
Inlets	Pipe to Flange
Outlets	Flanged "O" Ring Transmitter Hook-Up
Packing	PTFE Graphite
M.C.W.P Pressure	6 000 psi / 10 000 psi
Temperature Range	-30°C (-22°F) to 215°C (420°F) PTFE -30°C (-22°F) to 440°C (824°F) Graphite
Weight	1.21kg

- Ultra compact body and super lightweight
- Maximum cost effectiveness and reduced shipping costs
- Liquid and vapor service
- Equalize tap steeply angled forwards, maximising clearance between tap handle and transmitter
- Allows isolation and removal of transmitter as well as zeroing and calibration
- Full traceability
- 100% Pressure tested
- Various bolting kits available
- Mounting option available
- Available in most exotic materials (Pg 16)



Specifications subject to change without prior notification

# L3/F

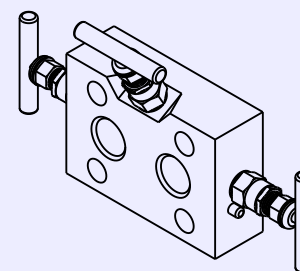
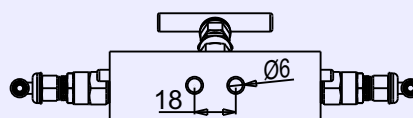
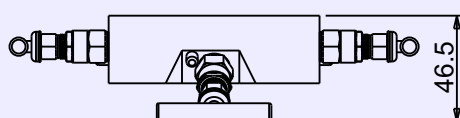
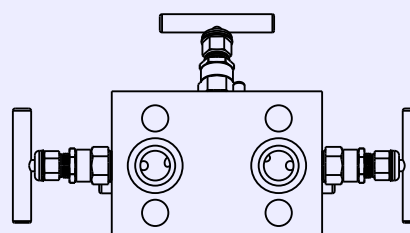
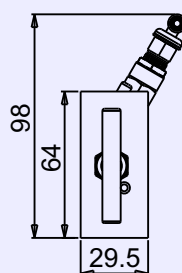
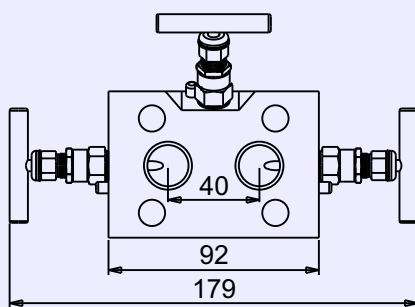
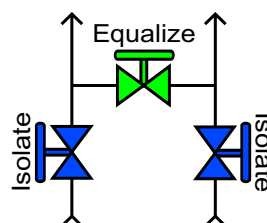
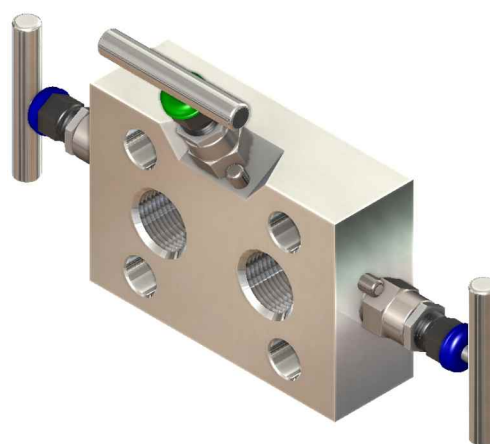
## 3 Way Direct Mount Manifold

The L3/F manifold is designed to mount directly to standard differential pressure transmitters. This body style allows for a wider spacing between the two impulse lines, making installation simpler. Placement of transmitter and manifold are made easier due to its compact design. The manifold is supplied with the transmitter seals as standard, with the bolting kit being included as an option added to the part number.

### Specifications

Type	3 Way Direct Mount DP Manifold
Inlets	Pipe to Flange
Outlets	Female 1/2" NPT
Packing	PTFE
	Graphite
M.C.W.P Pressure	6 000 psi / 10 000 psi
Temperature Range	-30°C (-22°F) to 215°C (420°F) PTFE
	-30°C (-22°F) to 440°C (824°F) Graphite
Weight	1.33kg

- **Equalize tap steeply angled forwards, maximising clearance between tap handle and transmitter**
- **Liquid and vapor service**
- **Versatile mounting options**
- **Allows isolation and removal of transmitter as well as zeroing and calibration**
- **Full traceability**
- **100% Pressure tested**
- **Various bolting kits available**
- **Mounting option available**
- **Available in most exotic materials (Pg 16)**



Specifications subject to change without prior notification

# L3/S

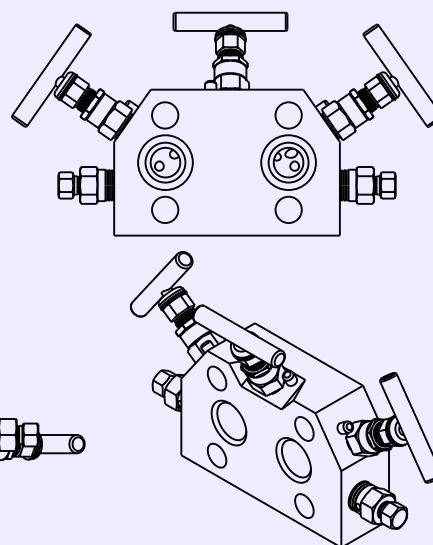
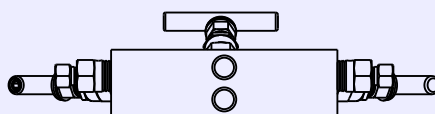
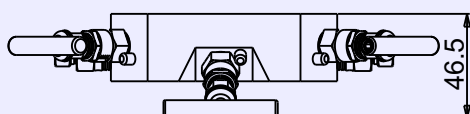
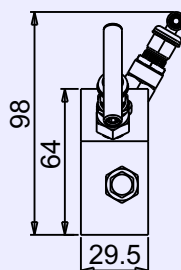
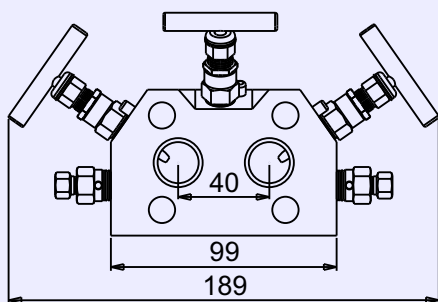
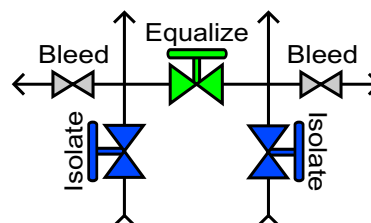
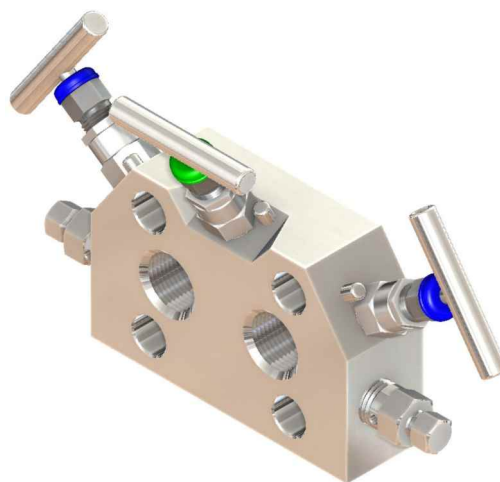
## 3 Way Direct Mount Manifold with Side Mounted Vent Ports

The L3/S manifold is designed to mount directly to standard differential pressure transmitters. This wide body style allows for a wider spacing between the two impulse lines, making installation simpler. This 3 way design includes bleed/test ports for calibration and venting. The manifold is supplied with the transmitter seals as standard, with the bolting kit being included as an option added to the part number.

- Wide body design with wider process line PCD
- Vent/test ports included
- Allows isolation and removal of transmitter as well as zeroing and calibration
- Equalize tap steeply angled forwards, maximising clearance between tap handle and transmitter
- Liquid and vapor service
- Full traceability
- 100% Pressure tested
- Bleed/Venting ports optional
- Various bolting kits available
- Mounting option available
- Available in most exotic materials (Pg 16)

### Specifications

Type	3 Way Direct Mount DP Manifold
Inlets	Pipe to Flange
Outlets	Female 1/2" NPT
Packing	PTFE Graphite
M.C.W.P Pressure	6 000 psi / 10 000 psi
Temperature Range	-30°C (-22°F) to 215°C (420°F) PTFE -30°C (-22°F) to 440°C (824°F) Graphite
Weight	1.37kg



Specifications subject to change without prior notification

Bleed Plugs shown for illustrative purposes only

# L5/B

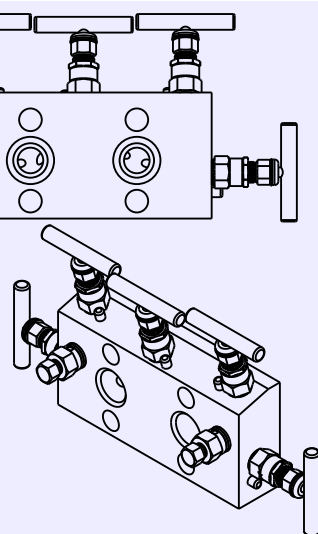
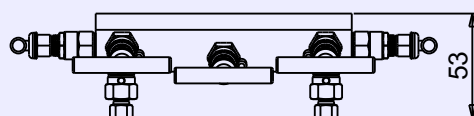
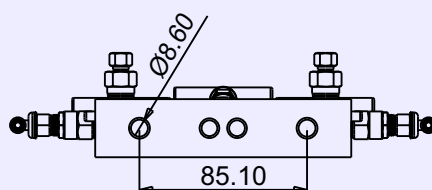
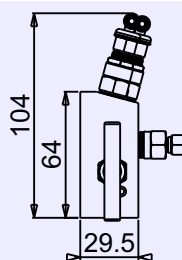
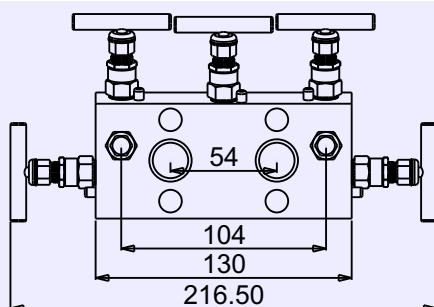
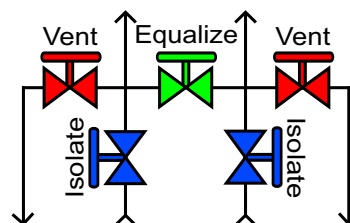
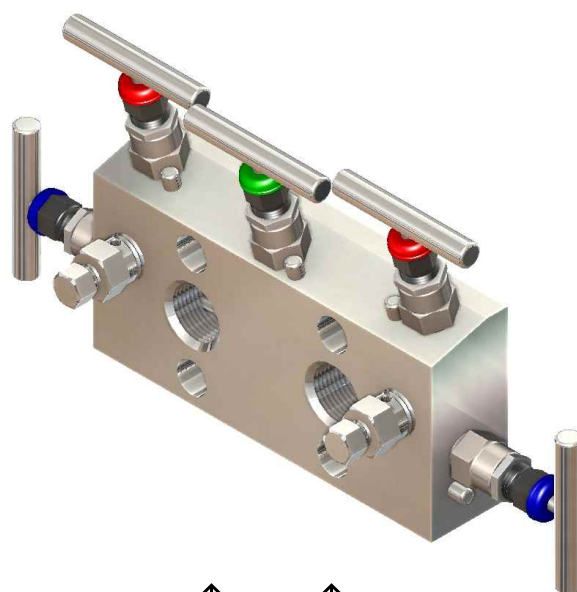
## 5 Way Direct Mount Manifold with Top Mounted Taps, Front Entry Process Connections

The L5/B manifold is designed to mount directly to standard differential pressure transmitters. This body style places most of the taps on top of the manifold. The wide body design allows for 54mm centers on the impulse lines, matching standard transmitters centers. The manifold is supplied with the transmitter seals as standard, with the bolting kit being included as an option added to the part number.

- Wide body with 54mm process connection centers
- "Taps on top" for ease of operation
- Liquid and vapor service
- Taps on top design
- Allows isolation and removal of transmitter as well as zeroing and calibration
- Reduced leak paths than conventional transmitter/flange/manifold arrangement
- Full traceability
- 100% Pressure tested
- Up-Stream Venting available
- Various bolting kits available
- Mounting option available
- Available in most exotic materials (Pg 16)

### Specifications

Type	5 Way Direct Mount DP Manifold
Inlets	Pipe to Flange
Outlets	Female 1/2" NPT
Packing	PTFE
	Graphite
M.C.W.P Pressure	6 000 psi / 10 000 psi
Temperature Range	-30°C (-22°F) to 215°C (420°F) PTFE -30°C (-22°F) to 440°C (824°F) Graphite
Weight	1.95kg



Specifications subject to change without prior notification

Bleed Plugs shown for illustrative purposes only



# L5/B-40

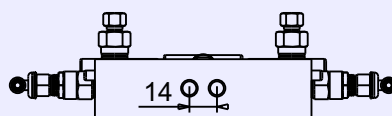
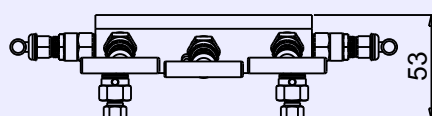
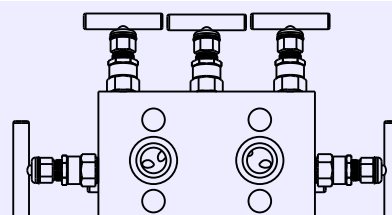
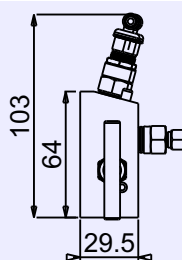
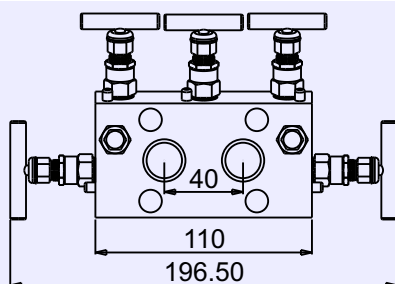
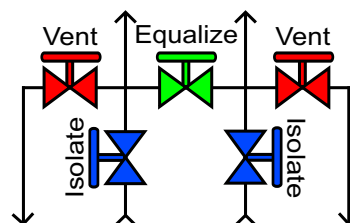
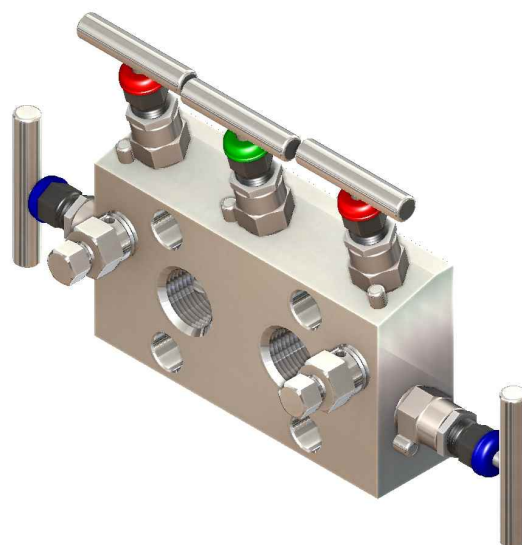
## 5 Way Direct Mount Manifold with Top Mounted Taps, (Compact Design)

The L5/B-40 manifold mounts directly to standard differential pressure transmitters. This body style is a compact version of the L5/B with most of the taps on top of the manifold. The wide body design allows for wide impulse line spacings, matching standard transmitters centers. It is supplied with transmitter seals as standard, with the bolting kit being included as an option added to the part number.

- "Taps on top" for ease of operation
- Liquid and vapor service
- Taps on top design
- Allows isolation and removal of transmitter as well as zeroing and calibration
- Reduced leak paths than conventional transmitter/flange/manifold arrangement
- Full traceability
- 100% Pressure tested
- Up-Stream Venting available
- Various bolting kits available
- Mounting option available
- Available in most exotic materials (Pg 16)

### Specifications

Type	5 Way Direct Mount DP Manifold Pipe to Flange
Inlets	Female 1/2" NPT
Outlets	Flanged "O" Ring Transmitter Hook-Up
Packing	PTFE Graphite
M.C.W.P Pressure	6 000 psi / 10 000 psi
Temperature Range	-30°C (-22°F) to 215°C (420°F) PTFE -30°C (-22°F) to 440°C (824°F) Graphite
Weight	1.67kg



Specifications subject to change without prior notification

Bleed Plugs shown for illustrative purposes only

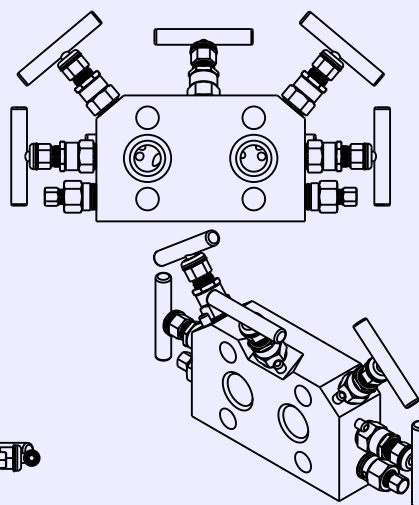
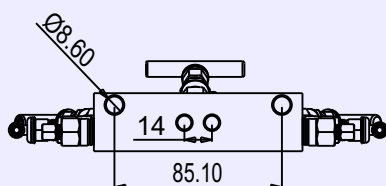
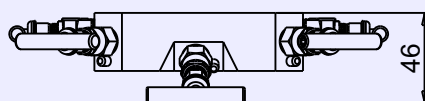
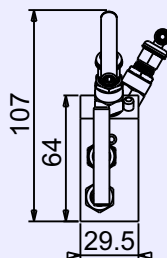
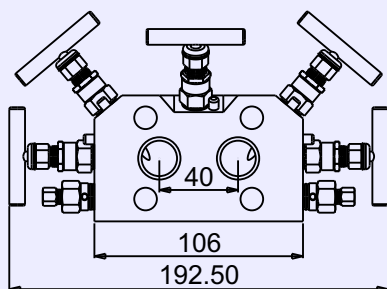
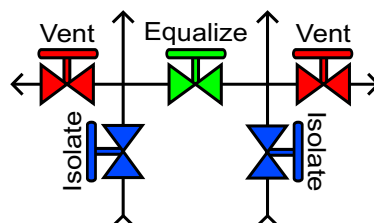
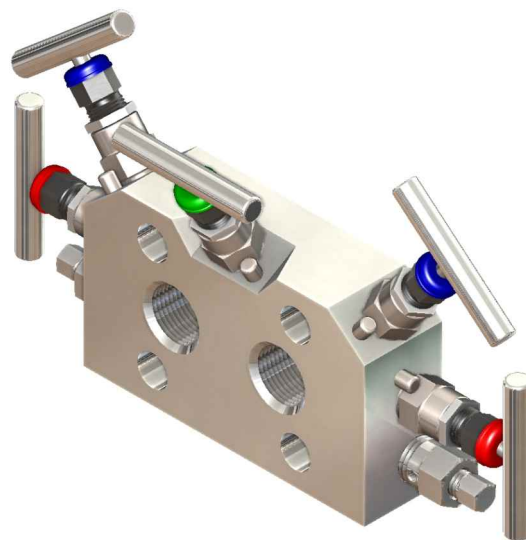
## 5 Way Direct Mount Manifold (Compact Design)

The L5/D manifold is designed to mount directly to standard differential pressure transmitters. This body style allows for a wider spacing between the two impulse lines, making installation simpler. Placement of transmitter and manifold are made easier due to its compact design. The manifold is supplied with the transmitter seals as standard, with the bolting kit being included as an option added to the part number.

- Compact body
- Liquid and vapor service
- Equalize tap steeply angled forwards, maximising clearance between tap handle and transmitter
- Versatile mounting options
- Allows isolation and removal of transmitter as well as zeroing and calibration
- Full traceability
- 100% Pressure tested
- Up-Stream Venting available
- Various bolting kits available
- Mounting option available
- Available in most exotic materials (Pg 16)

### Specifications

Type	5 Way Direct Mount DP Manifold
Inlets	Pipe to Flange
Outlets	Female 1/2" NPT
Packing	PTFE Graphite
M.C.W.P Pressure	6 000 psi / 10 000 psi
Temperature Range	-30°C (-22°F) to 215°C (420°F) PTFE -30°C (-22°F) to 440°C (824°F) Graphite
Weight	1.61kg



Specifications subject to change without prior notification

Bleed Plugs shown for illustrative purposes only

# L5/F

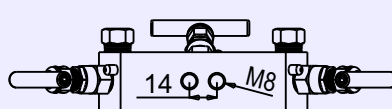
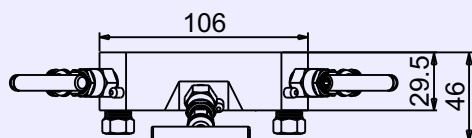
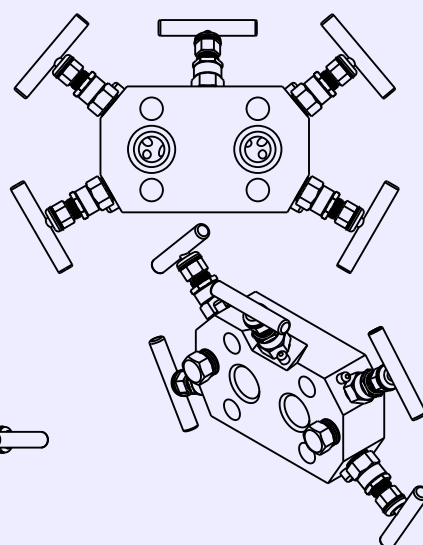
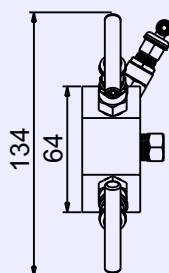
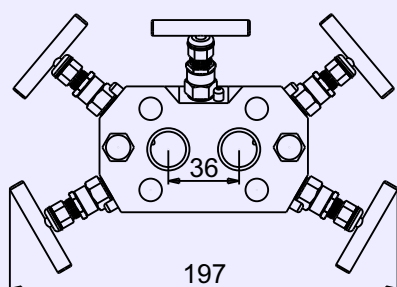
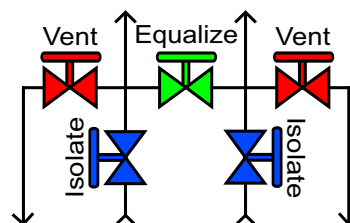
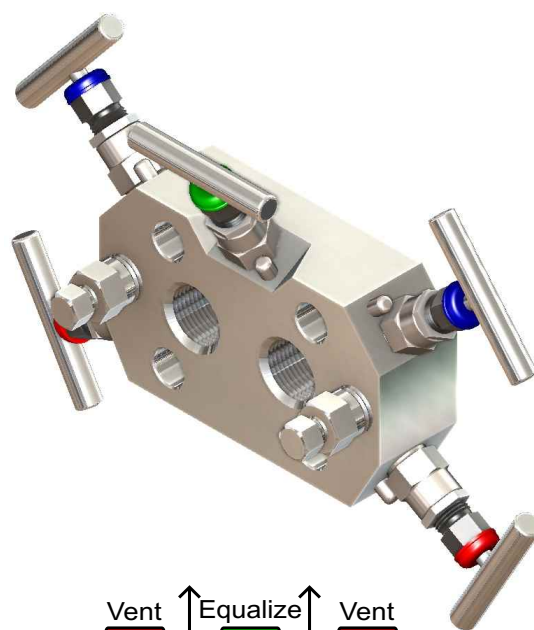
## 5 Way Direct Mount Manifold

The L5/F manifold is designed to mount directly to standard differential pressure transmitters. This body style allows for a wider spacing between the two impulse lines, making piping away of vented media simpler. Placement of transmitter and manifold are made easier due to its compact design. The manifold is supplied with the transmitter seals as standard, with the bolting kit being included as an option added to the part number.

- Wide spacing between all tap handles for ease of use
- Vent ports on process face for easy piping away of hazardous media
- Liquid and vapor service
- Equalize tap steeply angled forwards, maximising clearance between tap handle and transmitter
- Allows isolation and removal of transmitter as well as zeroing and calibration through the vent ports
- Full traceability
- 100% Pressure tested
- Up-Stream Venting available
- Various bolting kits available
- Mounting option available
- Available in most exotic materials (Pg 16)

## Specifications

Type	5 Way Direct Mount DP Manifold Pipe to Flange
Inlets	Female 1/2" NPT
Outlets	Flanged "O" Ring Transmitter Hook-Up
Packing	PTFE Graphite
M.C.W.P Pressure	6 000 psi / 10 000 psi
Temperature Range	-30°C (-22°F) to 215°C (420°F) PTFE -30°C (-22°F) to 440°C (824°F) Graphite
Weight	1.57kg



Specifications subject to change without prior notification

Plugs shown for illustrative purposes only

# L5/FS

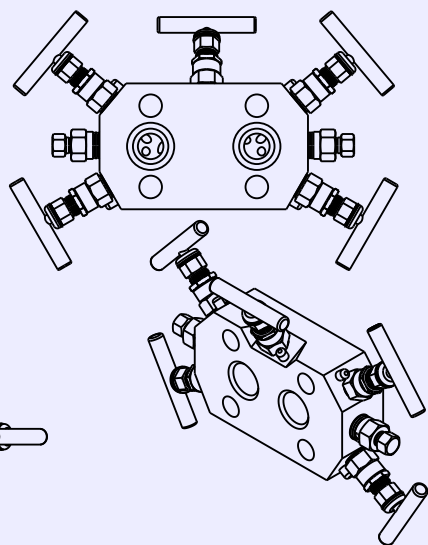
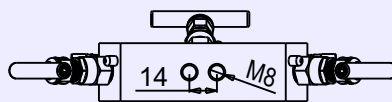
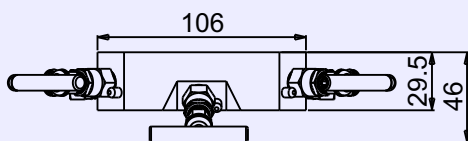
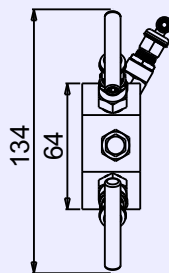
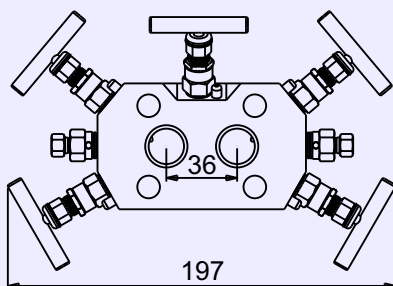
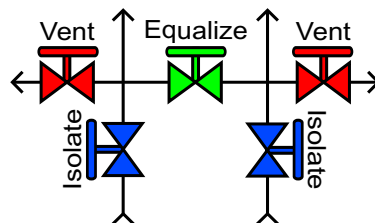
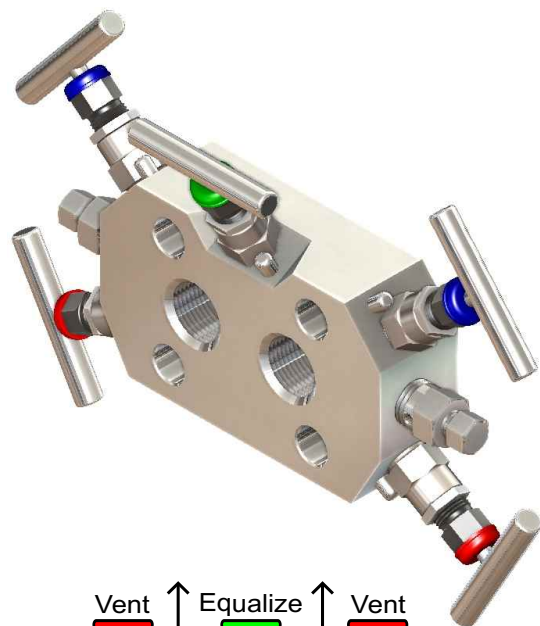
## 5 Way Direct Mount Manifold

The L5/FS manifold is designed to mount directly to standard differential pressure transmitters. This body style allows for a wider spacing between the two impulse lines, making installation simpler. Placement of transmitter and manifold are made easier due to its compact design. The manifold is supplied with the transmitter seals as standard, with the bolting kit being included as an option added to the part number.

- Wide spacing between all tap handles for ease of use
- Compact body design
- Liquid and vapor service
- Equalize tap steeply angled forwards, maximising clearance between tap handle and transmitter
- Allows isolation and removal of transmitter as well as zeroing and calibration through the vent ports
- Full traceability
- 100% Pressure tested
- Up-Stream Venting available
- Various bolting kits available
- Mounting option available
- Available in most exotic materials (Pg 16)

## Specifications

Type	5 Way Direct Mount DP Manifold Pipe to Flange
Inlets	Female 1/2" NPT
Outlets	Flanged "O" Ring Transmitter Hook-Up
Packing	PTFE Graphite
M.C.W.P Pressure	6 000 psi / 10 000 psi
Temperature Range	-30°C (-22°F) to 215°C (420°F) PTFE -30°C (-22°F) to 440°C (824°F) Graphite
Weight	1.58kg



Specifications subject to change without prior notification

Bleed Plugs shown for illustrative purposes only

# L5/S

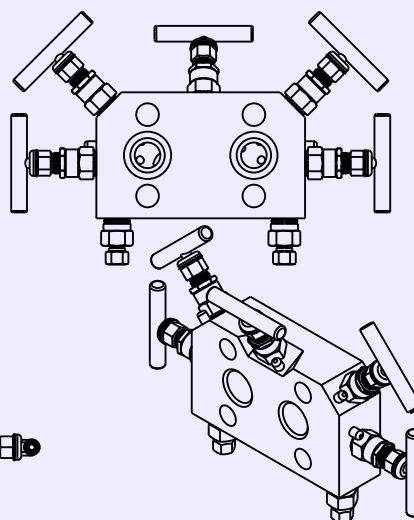
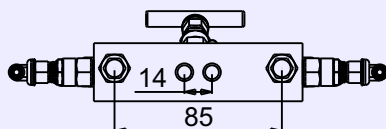
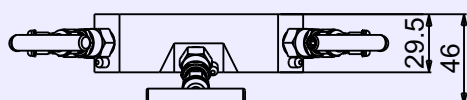
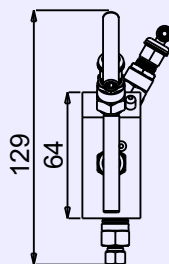
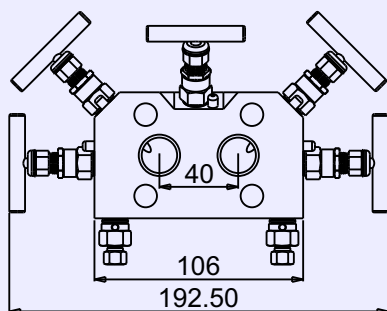
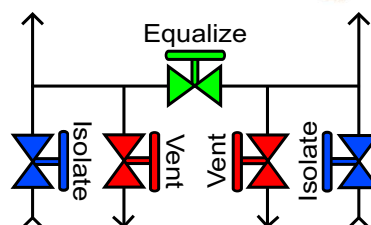
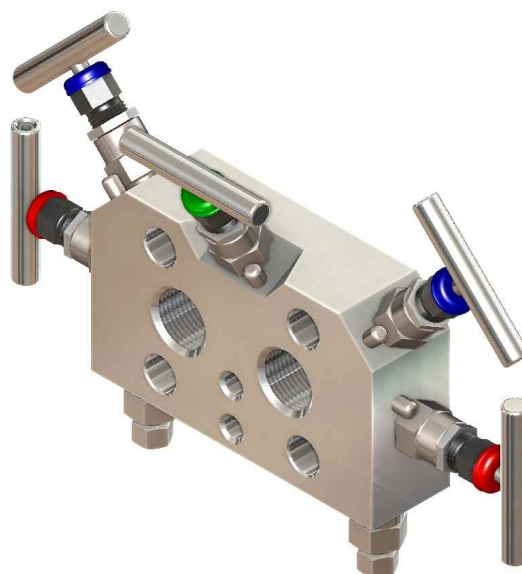
## 5 Way Direct Mount Manifold with Bottom Mounted Vent Ports

The L5/S manifold is designed to mount directly to standard differential pressure transmitters. This body style places the vent ports at the bottom of the manifold, facing away from the person operating the manifold, providing maximum safety when venting hazardous process media. The manifold is supplied with the transmitter seals as standard, with the bolting kit being included as an option added to the part number.

- **Compact body**
- **Liquid and vapor service**
- **Vent ports face away from user for maximum safety when venting hazardous media**
- **Equalize tap steeply angled forwards, maximizing clearance between tap handle and transmitter. This allows the manifold to be mounted with the equalize facing up and still being able to service the transmitter.**
- **Allows isolation and removal of transmitter as well as zeroing and calibration**
- **Full traceability**
- **100% Pressure tested**
- **Up-Stream Venting available**
- **Various bolting kits available**
- **Mounting option available**
- **Available in most exotic materials (Pg 16)**

### Specifications

Type	5 Way Direct Mount DP Manifold
Inlets	Pipe to Flange
Outlets	Female 1/2" NPT
Packing	PTFE
	Graphite
M.C.W.P Pressure	6 000 psi / 10 000 psi
Temperature Range	-30°C (-22°F) to 215°C (420°F) PTFE
	-30°C (-22°F) to 440°C (824°F) Graphite
Weight	1.64kg



Specifications subject to change without prior notification

Bleed Plugs shown for illustrative purposes only

# Contact Details

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Business reg. no: 1990/004585/07  
B-BBEE status: Level 2 contributor (South Africa)

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