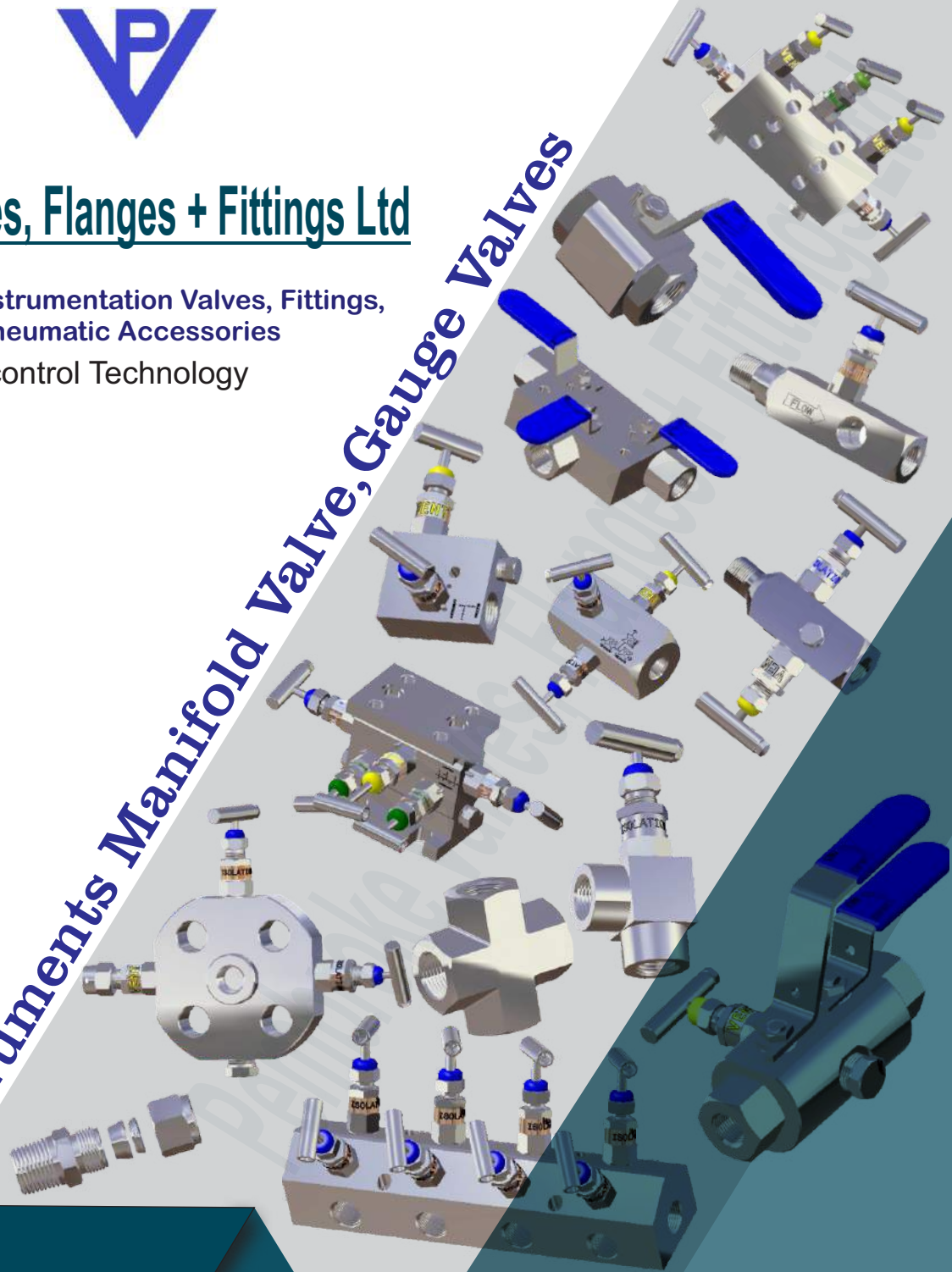




# Pembroke Valves, Flanges + Fittings Ltd

Manufacturer of Instrumentation Valves, Fittings,  
Flanges & Hydro-Pneumatic Accessories  
Fluid control Technology

*Instrumentation Manifold Valve, Gauge Valves*



Broadpiece, Mereside, Soham,  
Cambridgeshire,  
CB7 5EL,  
England, U.K.



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## ADVANCED CONTROL TECHNOLOGY

"Pembroke Valves Flanges + Fittings Ltd" manufacture high technology products for petroleum and process industry applications.

The company aims to be a leading partner to system builders and users of high pressure fittings, valves and components.

The product range includes standardized high pressure ratings up to 30000 PSI, made of stainless steel AISI316 or high graded alloys and special materials.

## Quality Standards

High quality and safety standards are maintained through a Total Quality Management System. We are a Manufacture and Supplier of Instrumentation Valves and Fittings.

Our effectively implemented control systems through the organization ensure that only Quality products are delivered to all our customers.

We have a fully fledged in-house testing facility too.

## INTRODUCTION

"Pembroke Valves Flanges + Fittings Ltd" offers over 450 products for the Oil & Gas, Petrochemicals, Power, Generation Pulp & Paper and other Industrial sectors.

Our manifold valves are available in 2, 3 & 5 valve construction and primary Isolation valves of Mono-Flange and Block and Bleed design.

Separately Mounted Manifolds: Manifolds are mounted away from the instruments and are usually connected by means of tubes/tube fittings, pipes/pipe fittings.

## Materials Standards

The Valve Body can be supplied in different materials as out lined below. The Code No customer has to specify is given in the ordering sheet.

Material	Bar Stock	Forging	UNS
316 St Steel	ASTMA-276	ASTMA-182 F-316	S31600
316LStSteel	ASTMA-276	ASTMA-182 F-316	S31603
Carbon Steel	ASTMA-108	ASTMA-105	
Alloy-20	ASTMB-473	ASTMB-462	No8020
No8020	ASTMB-348	ASTMB-381	R50400
Hastelloy	ASTMB-574	ASTMB-564	N10276
Brass	ASTMB-16 IS-319	ASTMB-283	
Alloy-400	ASTMB-164	ASTMB-564	N04400
Alloy-600	ASTMB-166	ASTMB-564	N06600
Duplex St Steel			S31803



## Material of Construction-Valves Components

Valve Body	Stem / Trim Gland & Gland Washer	Retainer	Handle
316 St Steel	316 St Steel	304 St Steel	304 St Steel
316 St Steel	316 St Steel	304 St Steel	304 St Steel
Titanium	Titanium	304 St Steel	304 St Steel
Alloy-400/600	Alloy-400/600	304 St Steel	304 St Steel
Hastelloy C 276	Hastelloy C 276	304 St Steel	304 St Steel
Duplex St Steel	Duplex St Steel	304 St Steel	304 St Steel
Brass	316 St Steel CS Copper		
CS	316 St Steel CS Copper		

Note: All CS components are Zinc plated.  
Any other combination –optional on request

## Valves for Cryogenic Applications

“Pembroke Valves Flanges + Fittings Ltd” also offers valves for Cryogenic applications. The material standard for all valves are 316L Stainless Steel.

## Thread Specifications

Thread Type	Ref.Specifications
NPT	ASME B1.20.1,SAE AS 71051
ISO/BSP(Parallel)	ISO 228 ,BS 2779, JIS B 0202
ISO/BSP(Tapered)	ISO 7, BS 21, JIS B 0203
ISO/BSP(Gauge)Unified(SAE)	ISO 228, BS 2779 ASME B1.1

A thread sealant or Teflon tape should always be used when assembling tapered threads.

All Pembroke Valves Flanges + Fittings Ltd" Manifold components are cleaned to remove machine oil grease, and loose particles.

### Recommended operating Pressures

SS-316/316L/CS/: 6,000 Psig (414 barg)

Monel/Titanium/ Optional Alloy-20, 400, 600 10,000 Psig (690 barg) Hastelloy-C/ Duplex

### Test Pressures

‘ Pembroke Valves Flanges + Fittings Ltd" Manifolds are tested as per the following standards

#### As per MSS-SP-90

Test pressure at 25°C Room Temperature

**Hydrostatic:** Body 414Kg/cm<sup>2</sup>

Seat 150Kg/cm<sup>2</sup>

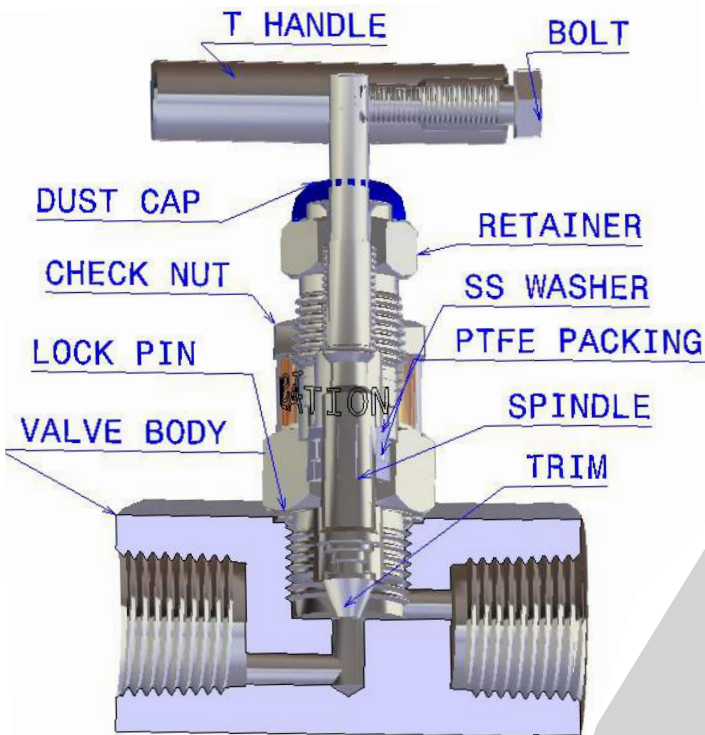
**Pneumatic:** Seat 40Kg/cm<sup>2</sup>

As per **ANSI-B16.5** Test pressure at 25°C Room Temperature

**Hydrostatic:** Body 630Kg/cm<sup>2</sup>

**Pneumatic:** Seat 7Kg/cm<sup>2</sup>

The above figures are for valves with 6,000 psig working pressure. For valves with 10,000 psig multiply the above figure 1.5 times. However pneumatic seat leakage test pressure is at the same values.



## Needle Valve

### Non-rotating Metal Stem Tip / Trim

A non rotating spindle tip/trim is typically used in high cycle applications to extend the service life of the valve. Its purpose is to prevent the galling of the valve seat in contact with the non-rotating stem, which is driven straight into it without rotating.

- Tee bar easy manoeuvrability with minimum effort
- PTFE packing standard, optional Graphite
- Stainless steel construction as standard, optional: carbon steel LF2, Duplex, Super Duplex, Monel 400, Hastelloy C276, etc.
- Color coded functional identification
- Externally adjustable gland
- Variety of end connections
- Dust cap to prevent contaminations on the operating thread.

## Features

"Pembroke Valves Flanges + Fittings Ltd" Forged Valve Manifolds, Bar stock

**Needle Valves** are specially designed **Needle Valves** for operation with most of the Fluids up to 6000 psig (414 barg) and on special request up to 30,000 psig (2068 barg) ratings. These valves are complete with PTFE gland packing or with Graphoil gland packing (For high temperature applications).

Placing the gland packing below the stem thread ensures that the process does not get in contact with the Stem threads. Tightening of the upper gland body ensures perfect sealing of the gland packing and arrests leakage.

## Specifications

- Standard seat diameter 5 mm
- CV: 0.4 Standard
- Maximum standard pressure up to 6,000 psig (414 barg)
- Optional Maximum pressures up to 30,000 psig (2068 barg)
- Temperature Rating - 54°C to + 640°C (-65°F to +1200°F)
- For Manifold sizes and combinations, refer to following pages



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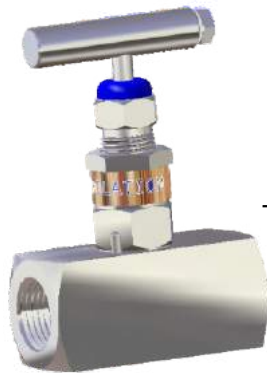
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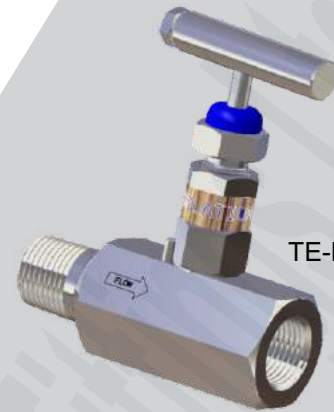
# Pembroke Valves, Flanges + Fittings Ltd



TE-N01



TE-N03



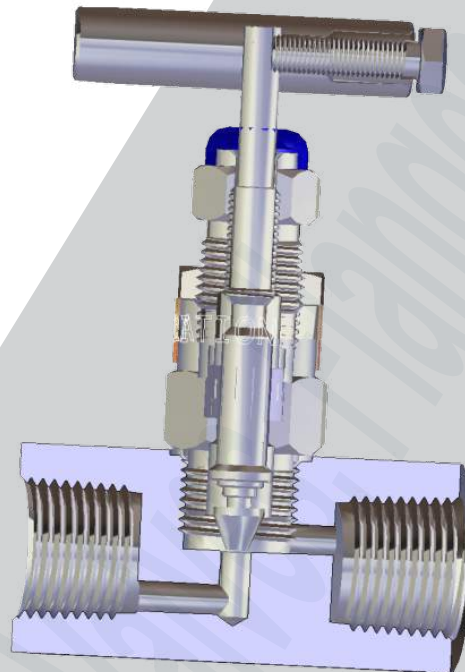
TE-N04

## Needle Valves 6,000 psi & 10,000 PSI

Bar stock **Needle Valves** are designed for operation up to 10,000 psi, With standard PTFE stem packing & self centering non-rotating stem, our **Needle Valves** provide total sealing security and easy manoeuvrability.



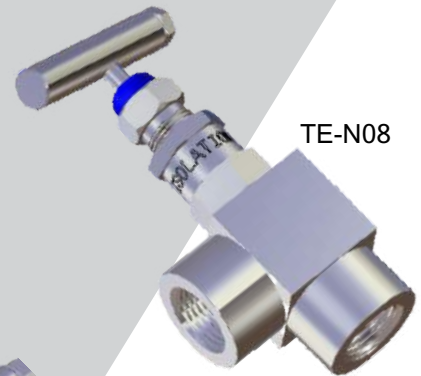
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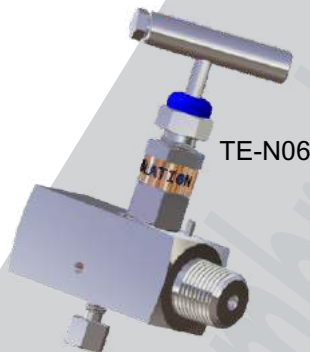
TE-N09



TE-N02



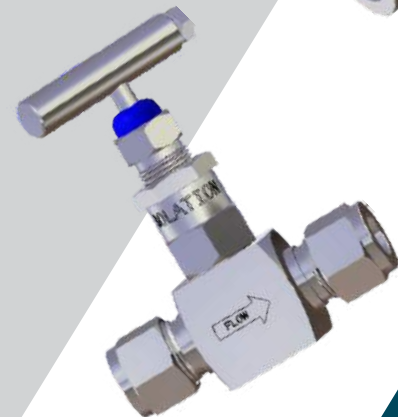
TE-N08



TE-N06



TE-N05



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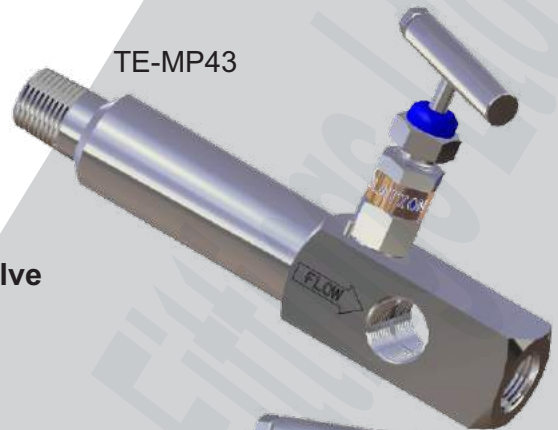


## GAUGE MULTIPORT NEEDLE VALVE

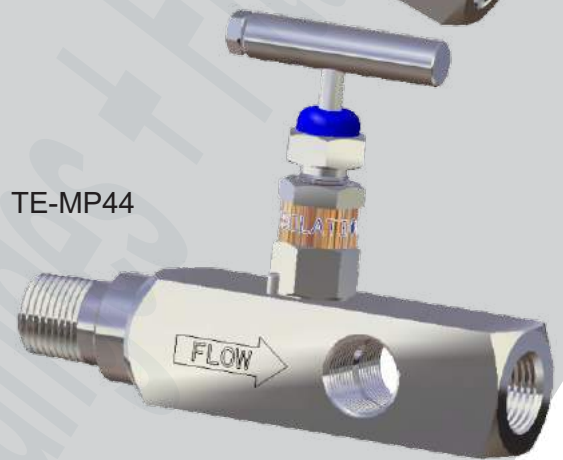
**Strong and Durable, Instrument Grade Multi-Port Gauge Valve Pressures up to 6,000 PSI - 10,000 PSI**

"Pembroke Valves Flanges + Fittings Ltd" **Multiport Hard Seat Needle Valves** allow pressure to be bled off without disturbing the permanent piping installation. Their multiport design reduces the number of gauge and other instrument connections to permanent piping installations and decreases possible leak paths.

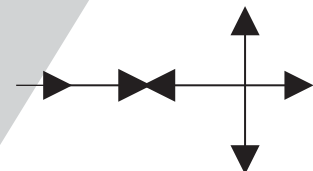
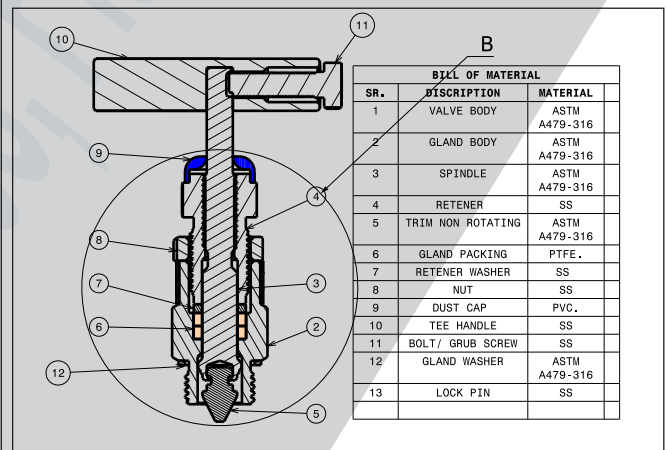
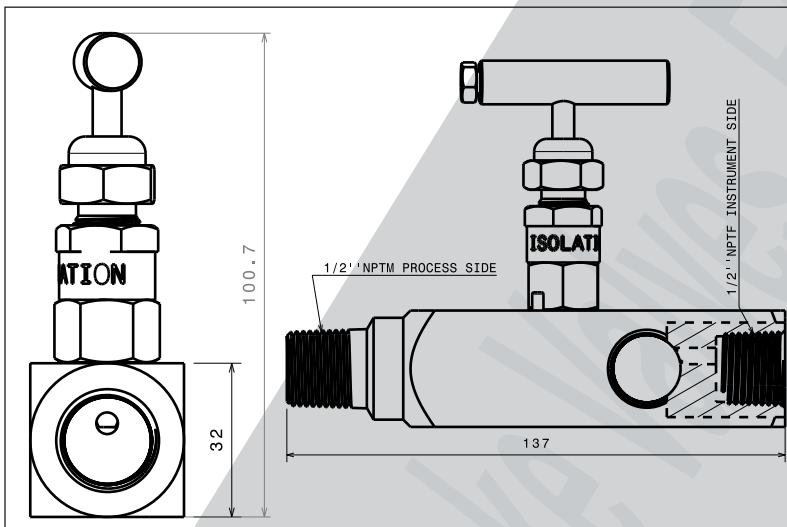
They have a blow-out proof stem that provides a secondary stem seal in the full open position. All stems are 316 stainless steel and all stem threads are rolled for strength and ease of operation.



TE-MP43



TE-MP44



Note: ALL DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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TE-BB23

## BLOCK AND BLEED TWO VALVE

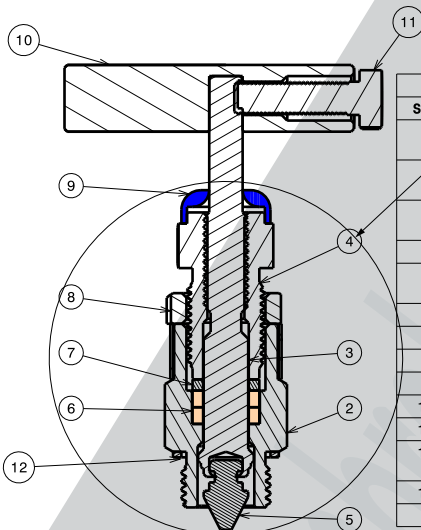
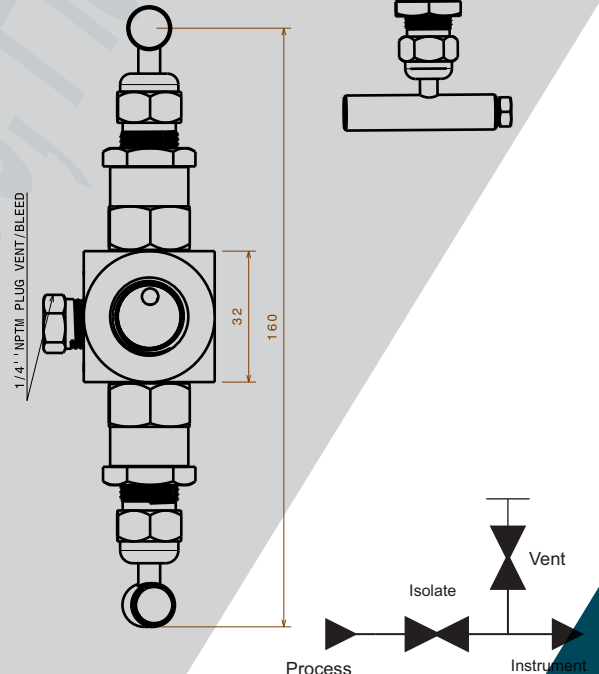
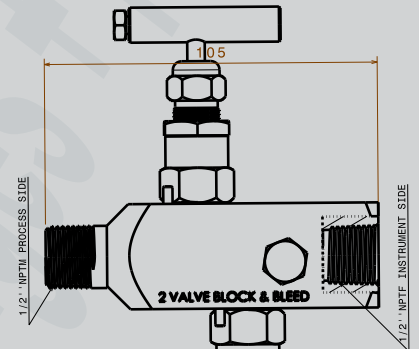
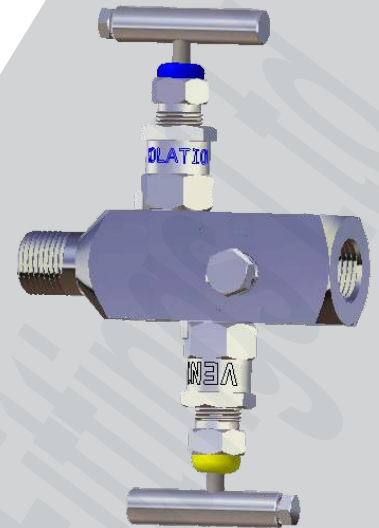
### APPLICATION

#### Using The 2-Valve Manifold Block & Bleed

In normal operation the "isolate" valve is open while the "vent" valve is closed. To remove the instrument, first close the "isolate" valve, then open the "vent" valve to relieve pressure upstream of the "isolate" valve.

#### Calibration Options

By connecting a calibration gauge to the vent port, it is possible to check the calibration of the instrument without removing it from the installation. Also available in a range of other materials and options



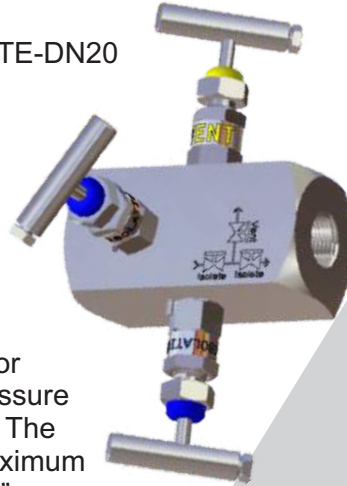
BILL OF MATERIAL		
SR.	DISCRIPTION	MATERIAL
1	VALVE BODY	ASTM A479-316
2	GLAND BODY	ASTM A479-316
3	SPINDLE	ASTM A479-316
4	RETENER	SS
5	TRIM NON ROTATING	ASTM A479-316
6	GLAND PACKING	PTFE.
7	RETENER WASHER	SS
8	NUT	SS
9	DUST CAP	PVC.
10	TEE HANDLE	SS
11	BOLT/ GRUB SCREW	SS
12	GLAND WASHER	ASTM A479-316
13	LOCK PIN	SS

Note: ALL DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

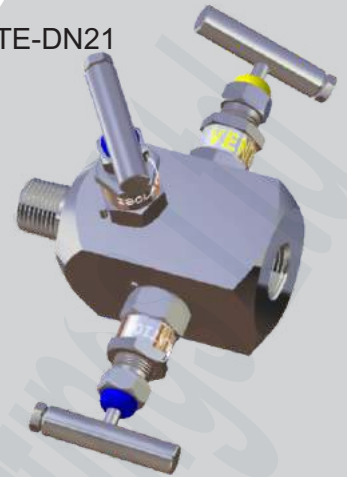




TE-DN20



TE-DN21

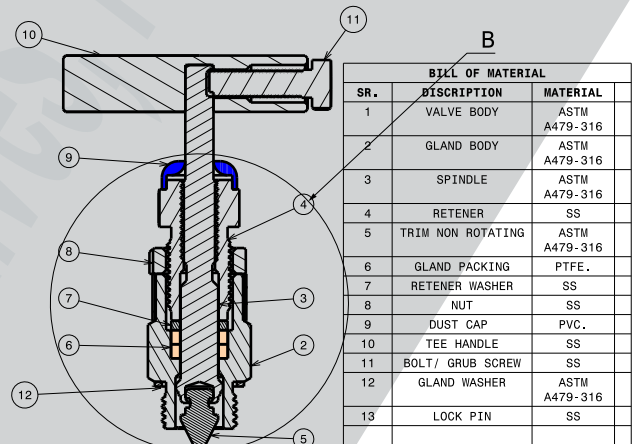
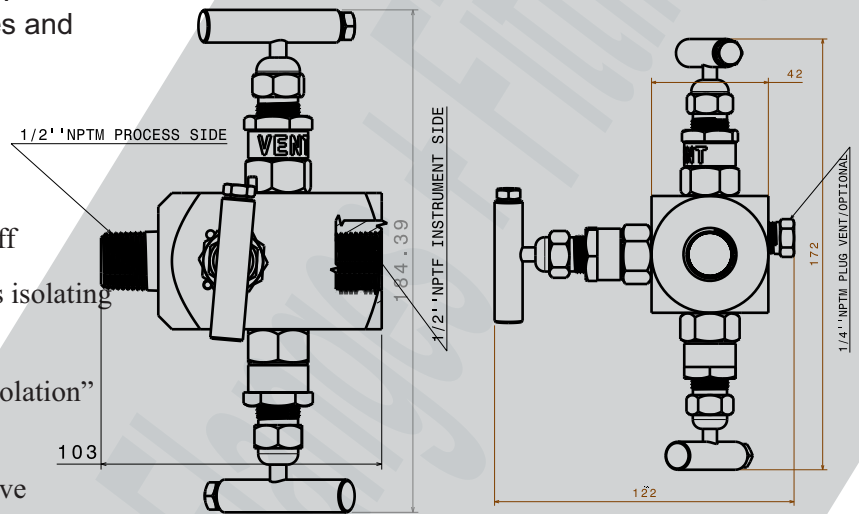


## NEEDLE VALVE 3 Double Block & Bleed,

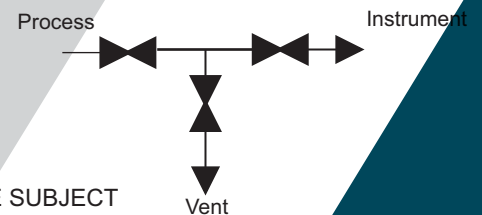
Our **DBB gauge valves** are primarily used for isolation, maintenance and calibration of pressure gauges, switches and pressure transmitters. The Double Block and Bleed design provides maximum safety by ensuring "Positive Energy Isolation". Available in a variety of different shapes, sizes and connection options.

### Features

- Superior valvehead technology
- Metal to metal seat for bubble tight shutoff
- Bonnet to body seal below bonnet threads isolating them from the process media
- DBB design ensuring "Positive Energy Isolation" of both process and instrument sides
- Reduces cost due to eliminating multi valve systems
- Simplifies Installation
- Reduced leak paths
- Large spacing between the taps reducing the possibility of pinching fingers
- Ergonomic angled tap design allowing the user to access all valveheads from one side of the manifold
- Equipped with a 1/4" NPT vent port between the two isolates
- Many connection options available. Possible connections are male thread, female thread, tube end, butt weld and socket weld
- Full Traceability back to source
- 100% Pressure tested
- 2 Times over-pressure safety margin



BILL OF MATERIAL		
SR.	DESCRIPTION	MATERIAL
1	VALVE BODY	ASTM A479-316
2	GLAND BODY	ASTM A479-316
3	SPINDLE	ASTM A479-316
4	RETENER	SS
5	TRIM NON ROTATING	ASTM A479-316
6	GLAND PACKING	PTFE.
7	RETENER WASHER	SS
8	NUT	SS
9	DUST CAP	PVC.
10	TEE HANDLE	SS
11	BOLT/ GRUB SCREW	SS
12	GLAND WASHER	ASTM A479-316
13	LOCK PIN	SS



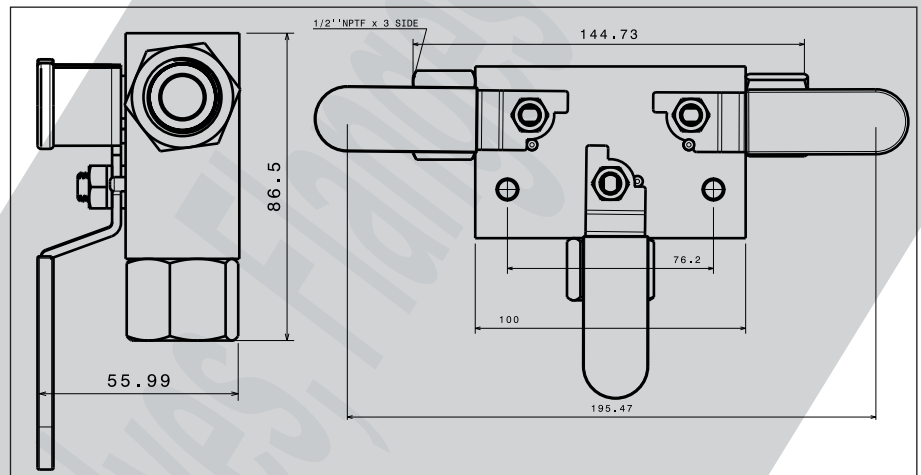
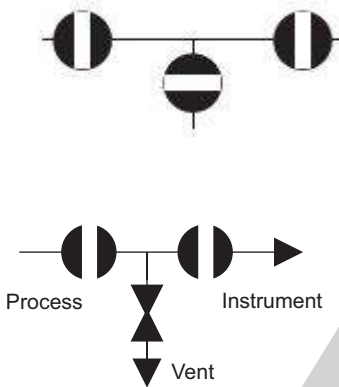
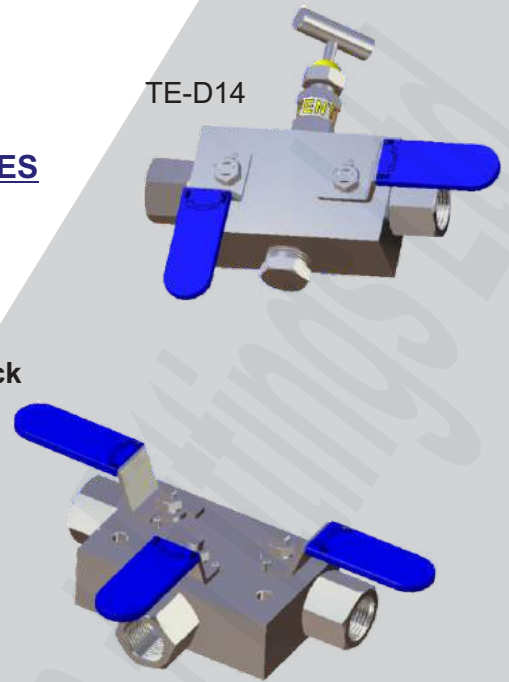
Note: ALL DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



## INSTRUMENT DOUBLE BLOCK & BLEED [DBB] VALVES

Instrument **Double Block and Bleed (DBB) Valves** for the Oil, Gas and Petrochemical industries. Our Instrument **Double Block and Bleed (DBB) Valves** feature either Needle or Ball Valves depending on our customers requirements, and are suitable up to 6,000 PSI. All of our Instrument **Double Block and Bleed (DBB) Valves** are machined from a bar stock body, and are as standard capable of withstanding temperatures up to 200C, however 240C is achievable on customer request.

TE-D14



BILL OF MATERIAL		
SR.	DISCRIPTION	MATERIAL
1	VALVE BODY	ASTM A479-316
2	GLAND BODY	ASTM A479-316
3	SPINDLE	ASTM A479-316
4	RETENER	SS
5	TRIM NON ROTATING	ASTM A479-316
6	GLAND PACKING	PTFE.
7	RETENER WASHER	SS
8	NUT	SS
9	DUST CAP	PVC.
10	TEE HANDLE	SS
11	BOLT/ GRUB SCREW	SS
12	GLAND WASHER	ASTM A479-316
13	LOCK PIN	SS

BILL OF MATERIAL		
S. NO.	DISCRIPTION	MATERIAL
1	VALVE BODY	SS 316
2	BALL SEAT	PTFE./PEEK
3	BALL	ASTM A479-316
4	SPINDLE/STEM	ASTM A479-316
5	SPINDLE PACKING SEAL	PTFE./GRAFILE
6	SPACER	ASTM A479-316
7	SPRING WASHER	SS
8	NUT	SS
9	1/2\"/>	

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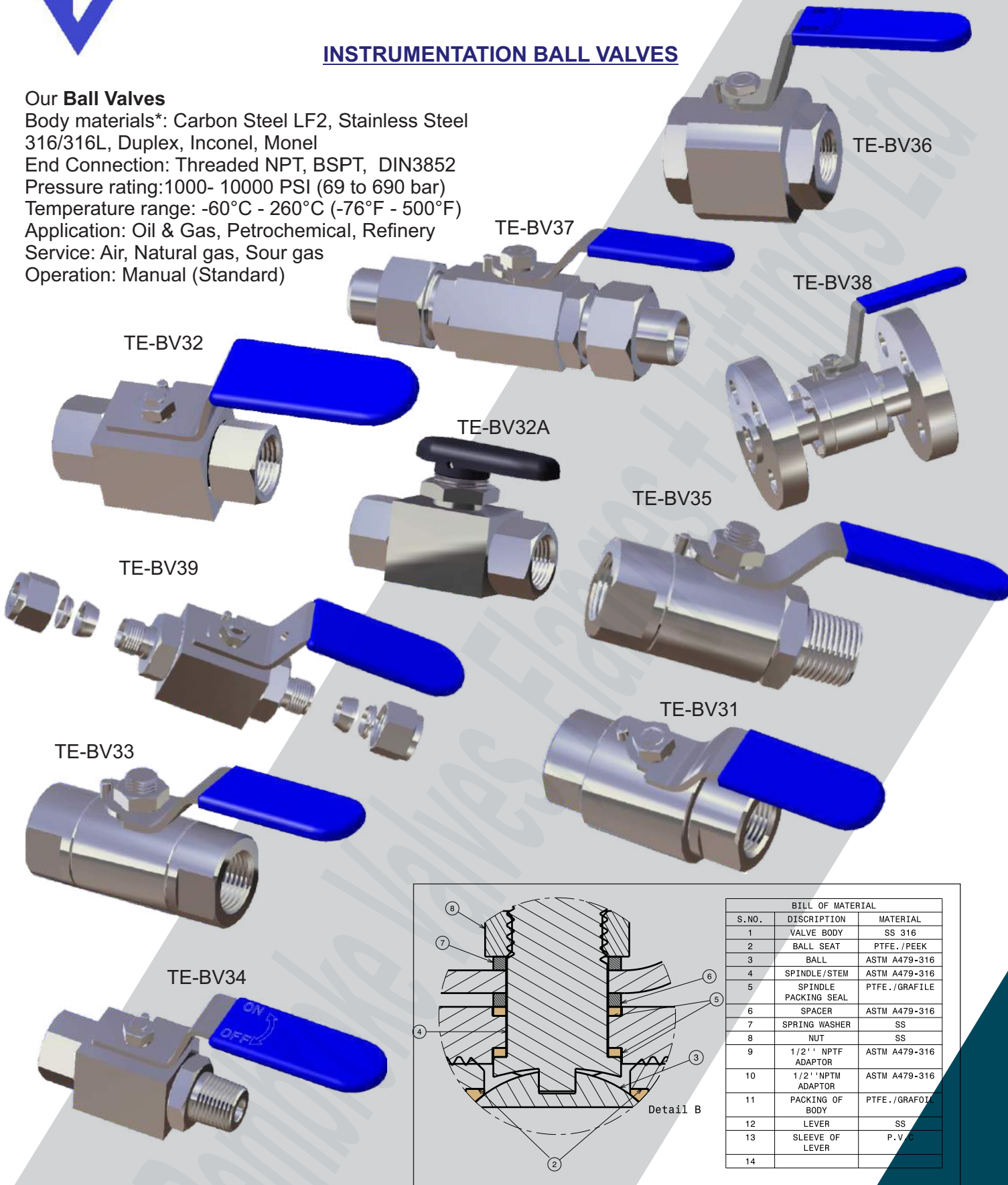
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## INSTRUMENTATION BALL VALVES

### Our Ball Valves

Body materials\*: Carbon Steel LF2, Stainless Steel 316/316L, Duplex, Inconel, Monel  
 End Connection: Threaded NPT, BSPT, DIN3852  
 Pressure rating: 1000- 10000 PSI (69 to 690 bar)  
 Temperature range: -60°C - 260°C (-76°F - 500°F)  
 Application: Oil & Gas, Petrochemical, Refinery  
 Service: Air, Natural gas, Sour gas  
 Operation: Manual (Standard)



BILL OF MATERIAL		
S. NO.	DESCRIPTION	MATERIAL
1	VALVE BODY	SS 316
2	BALL SEAT	PTFE./PEEK
3	BALL	ASTM A479-316
4	SPINDLE/STEM	ASTM A479-316
5	SPINDLE PACKING SEAL	PTFE./GRAFIL
6	SPACER	ASTM A479-316
7	SPRING WASHER	SS
8	NUT	SS
9	1/2" NPTF ADAPTOR	ASTM A479-316
10	1/2" NPTM ADAPTOR	ASTM A479-316
11	PACKING OF BODY	PTFE./GRAFIL
12	LEVER	SS
13	SLEEVE OF LEVER	P.V.C
14		

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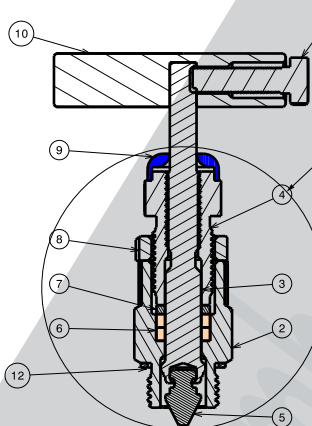
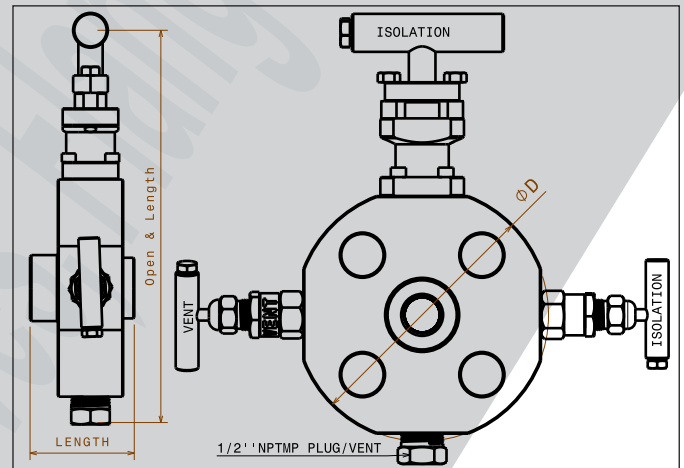
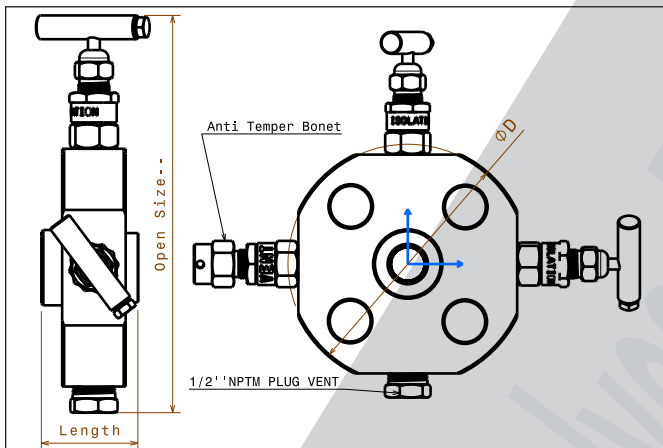
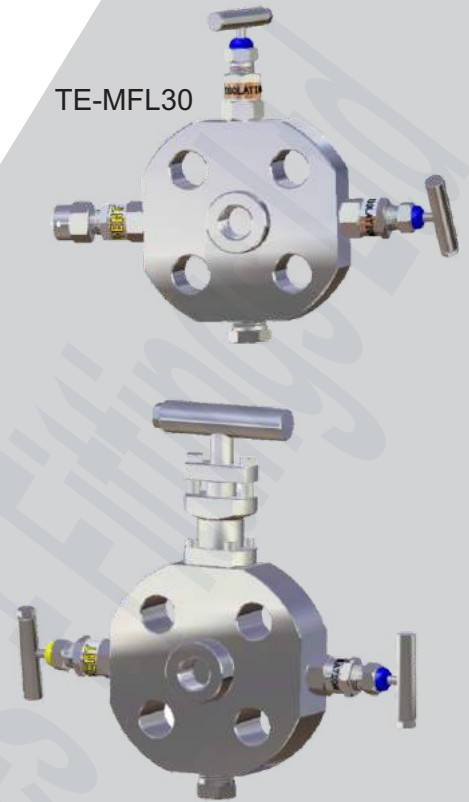




## Double Block & Bleed Monoflange

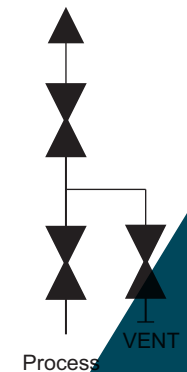
**Monoflange** for use at pressure sensing points on process vessels and pipelines. The valve is mounted directly to the vessel or process pipe, and measurement instruments can be mounted directly to the valve outlet or mounted remotely using sensing lines. The Monoflange valve is available in flange ratings from CLASS 150 to CLASS 2500 in both a raised face design (RF) and a ring type joint design (RTJ), with outside screw and yoke bonnets (OS&Y) or standard packed bonnets. The following configurations are offered: single block, block and bleed, double block and bleed, and single block and bleed with a calibration port.

TE-MFL30



BILL OF MATERIAL		
SR.	DESCRIPTION	MATERIAL
1	VALVE BODY	ASTM A479-316
2	GLAND BODY	ASTM A479-316
3	SPINDLE	ASTM A479-316
4	RETENER	SS
5	TRIM NON ROTATING	ASTM A479-316
6	GLAND PACKING	PTFE.
7	RETENER WASHER	SS
8	NUT	SS
9	DUST CAP	PVC.
10	TEE HANDLE	SS
11	BOLT/ GRUB SCREW	SS
12	GLAND WASHER	ASTM A479-316
13	LOCK PIN	SS

Instrument



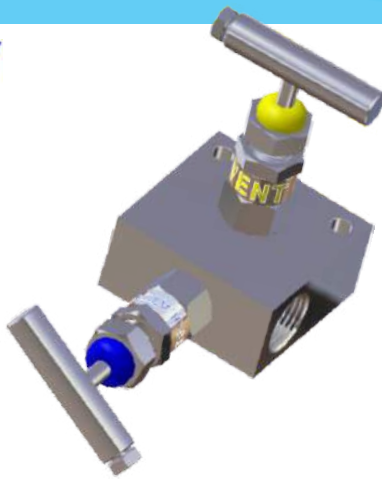
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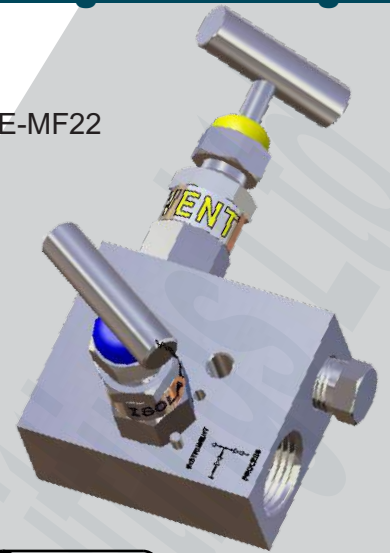
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 Fax: +44 (0) 1353 722 534  
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# Pembroke Valves, Flanges + Fittings Ltd



TE-MF23



TE-MF22

## 2 Way Manifold Valve

**2 valve Manifold** Pipe to Pipe Design For Separate Mounting.  
Connecting System Impulse Lines & Transmitters, Having Simple Two valve

Configuration which Allows For Easy Block, Bleed and Calibration of a Static Pressure Transmitter or Gauge

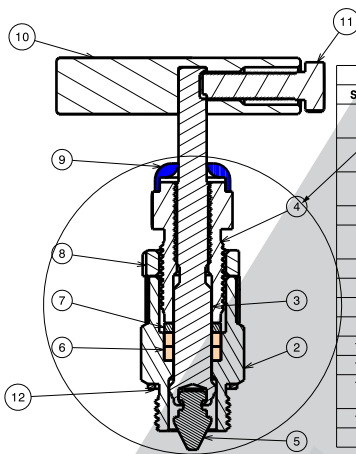
Features:

316SS Body Construction For Superior Corrosion Resistance.

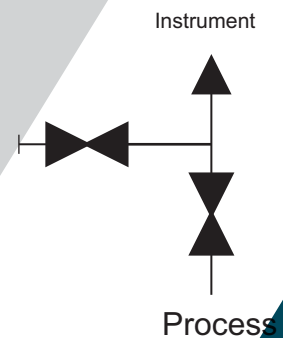
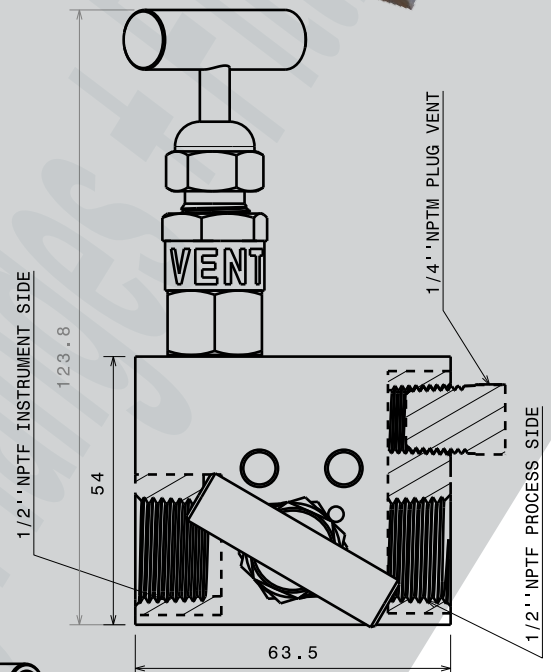
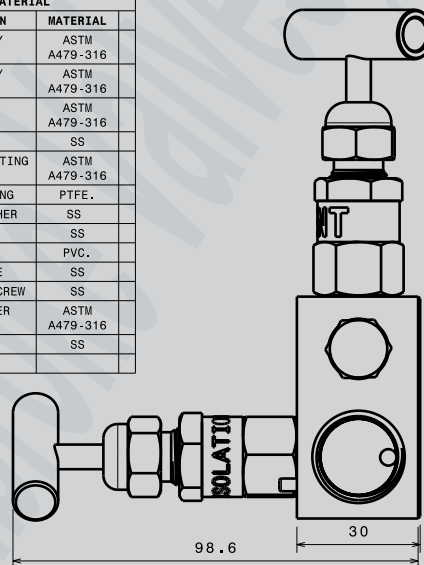
Non Rotating Trim Prevents Galling and Promotes Repetitive Shut-off Optional Grafoil Packing Material is Available For High Temperature Rating 1000°F @6000 PSI Testing:

**Pneumatic Test:-** Each Valve is Tested With Nitrogen at 100 PSI in Accordance With MSS-SP-61 For Seat & Packing Leakage.

**Hydro Test:-** Performed With Pure Water in Accordance With MSS-SP-61. Body Tested at 1.5 Times & Seat Leakage Tested at 1.1 Time of the Working Pressure.



BILL OF MATERIAL		
SR.	DISCRIPTION	MATERIAL
1	VALVE BODY	ASTM A479-316
2	GLAND BODY	ASTM A479-316
3	SPINDLE	ASTM A479-316
4	RETENER	SS
5	TRIM NON ROTATING	ASTM A479-316
6	GLAND PACKING	PTFE.
7	RETENER WASHER	SS
8	NUT	SS
9	DUST CAP	PVC.
10	TEE HANDLE	SS
11	BOLT/ GRUB SCREW	SS
12	GLAND WASHER	ASTM A479-316
13	LOCK PIN	SS



Note: ALL DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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Fax: +44 (0) 1353 722 534  
sales@pvff.co.uk



TE-MF24

## 3 VALVE MANIFOLD REMOTE MOUNT

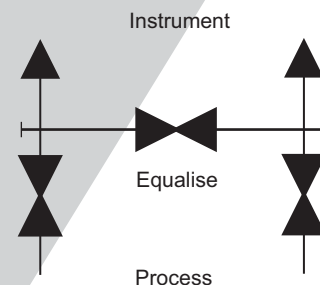
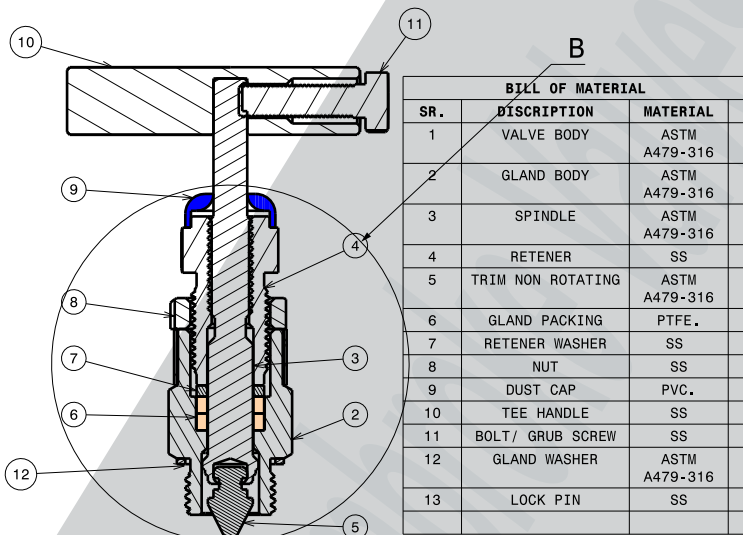
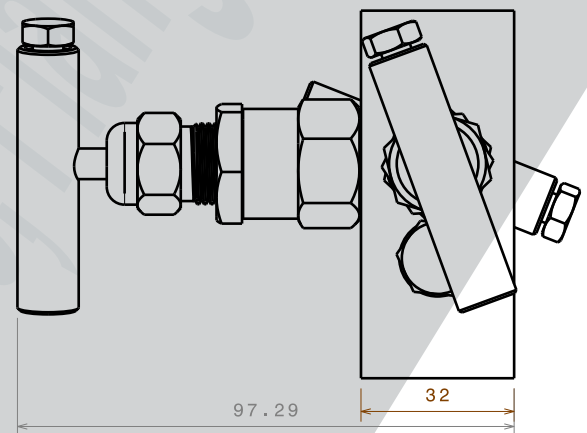
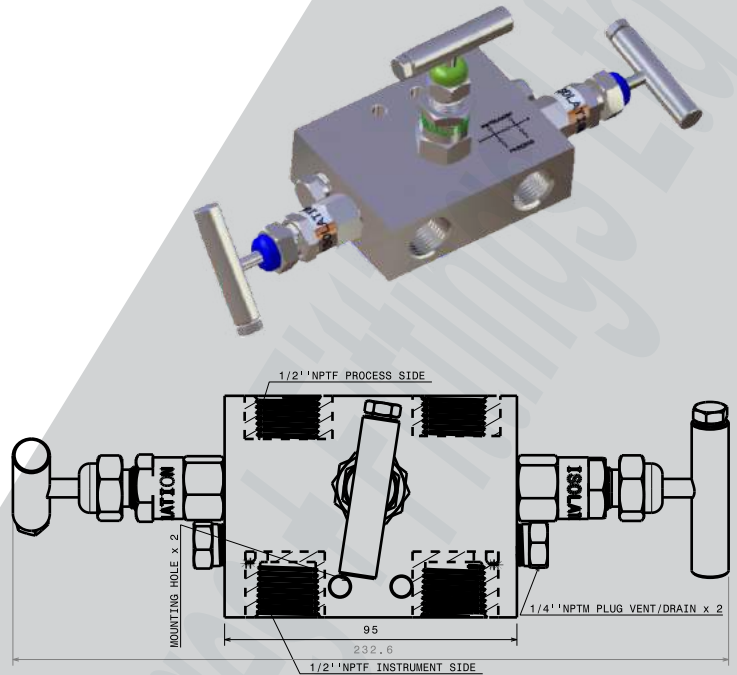
Differential pressure transmitters are used in level measurement and flow measurement. For ensuring the protection of pressure transmitter or for isolating the transmitter from the process loop, manifolds are used.

**Three valve manifolds** system used for differential pressure transmitter is shown here

A three-valve manifold system consists of an equalising valve and two blocking valves. One blocking valve at the high-pressure side other at the low-pressure side.

The two block valves are opened and the equalizing valve is closed during normal operation.

When the transmitter is removed from the system, the manifold must be operated such that the high pressure is never applied to the single side of the transmitter.



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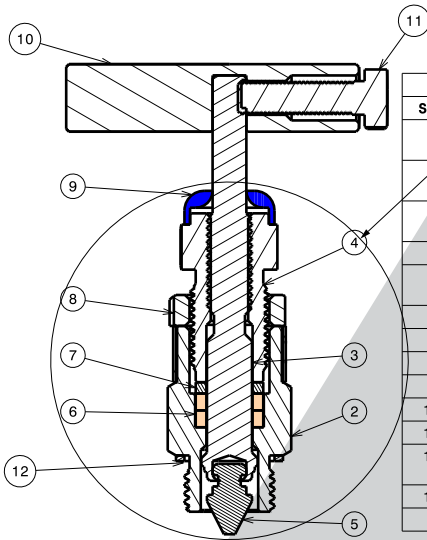
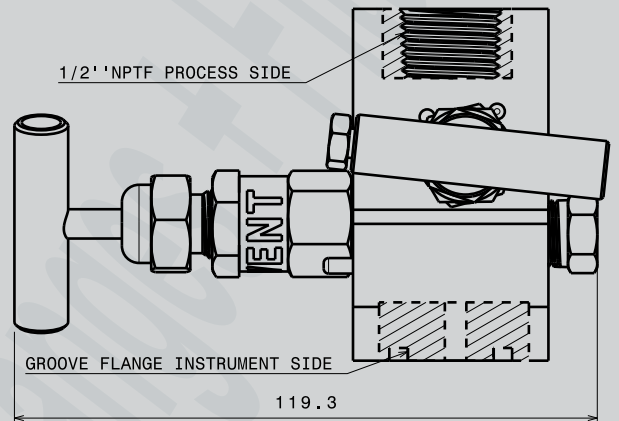
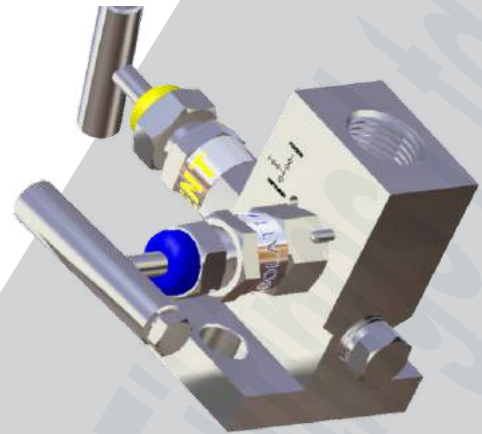


TE-MT25

## 2 VALVE MANIFOLD T TYPE

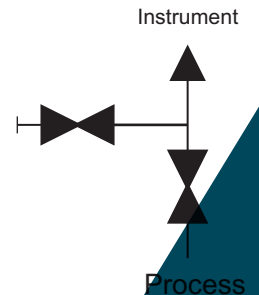
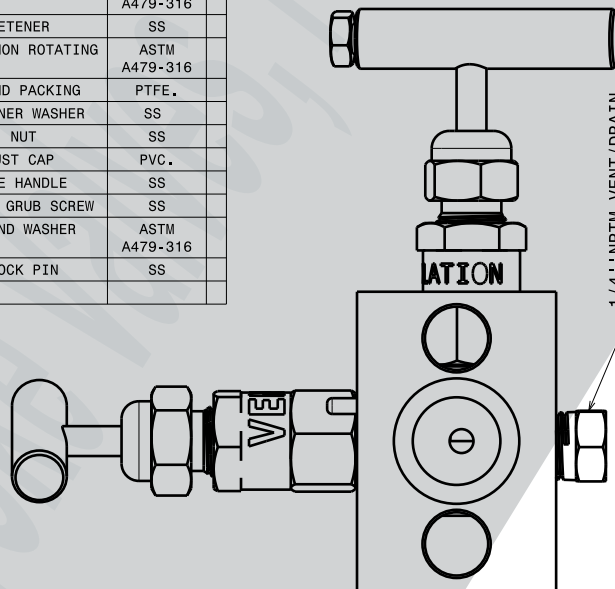
**T` type 2-Valve Manifold** is a pipe to flange mounting manifold designed for connecting system impulse line & transmitters. The 2-Valve Manifold consists of two valve configuration which allows for easy isolation, calibration, block and bleed for gauges, pressure switches and static pressure transmitting instruments.

The **2-Valve Manifold** is rugged in construction to withstand high pressures and temperatures. The `T` type 2-Valve Manifold is capable of working under pressures as high as 6000 PSI at 200° F or 4000 PSI at 500 ° F.



**B**

BILL OF MATERIAL		
SR.	DISCRIPTION	MATERIAL
1	VALVE BODY	ASTM A479-316
2	GLAND BODY	ASTM A479-316
3	SPINDLE	ASTM A479-316
4	RETENER	SS
5	TRIM NON ROTATING	ASTM A479-316
6	GLAND PACKING	PTFE.
7	RETENER WASHER	SS
8	NUT	SS
9	DUST CAP	PVC.
10	TEE HANDLE	SS
11	BOLT/ GRUB SCREW	SS
12	GLAND WASHER	ASTM A479-316
13	LOCK PIN	SS



Note: ALL DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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[sales@pvff.co.uk](mailto:sales@pvff.co.uk)





TE-MA15

## Remote Mount Coplanar (Angled Bonnet Pipe to Pipe) Five Valve Manifold 413 bar (6000 psi)

### Using the 5-valve manifold

In normal operation the "isolate" valves are open while the "equalise" and "vent" valves are closed. This provides a differential pressure reading to the pressure gauge or transmitter.

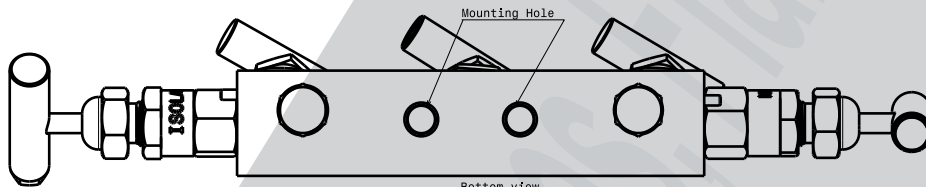
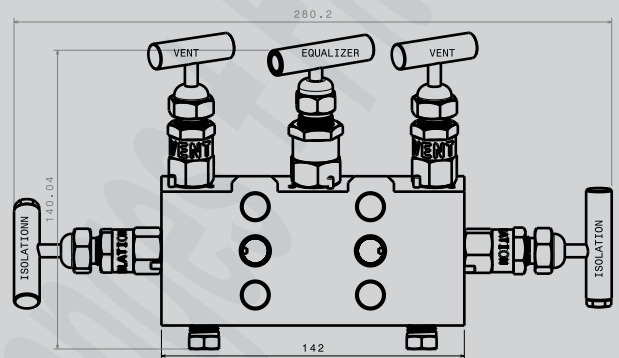
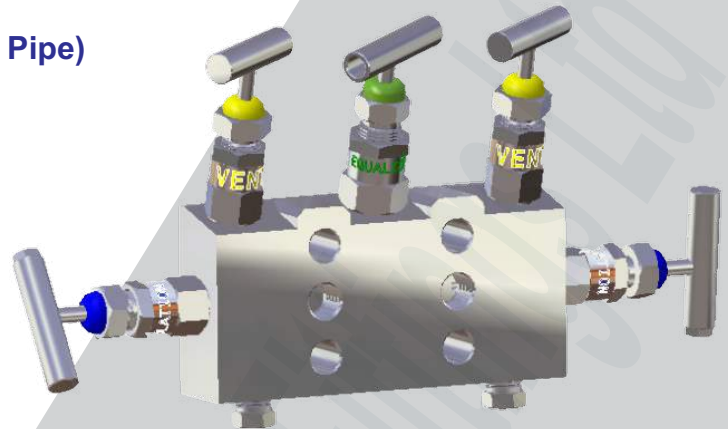
To zero the instrument, first close both "vent" valves and the downstream "isolate" valve. Then open the "equalise" valve and adjust the zero setting on the instrument.

To remove the instrument, first close both "isolate" valves, then open the "equalise" valves to relieve pressure between the manifold and the instrument.

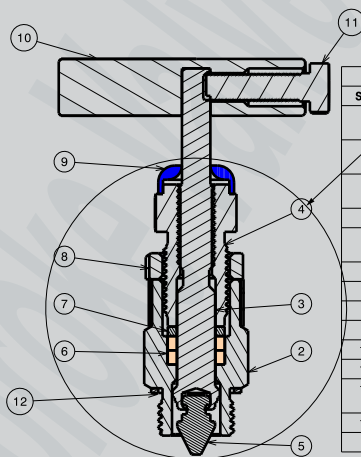
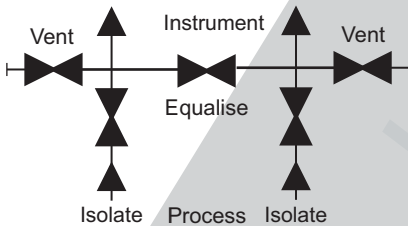
### Calibration options

An option provided by 5-valve manifolds which is not available on 3-valve types is connecting the "vent" port to known pressure sources to check the calibration of the instrument.

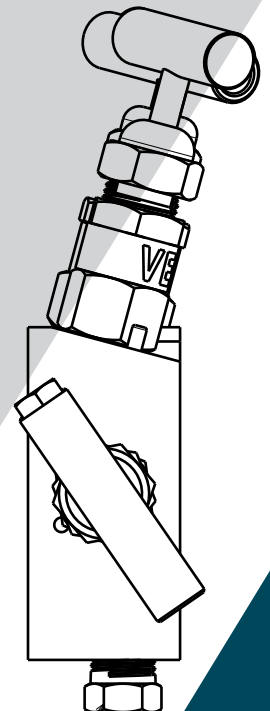
Also available in a range of other materials and options



Bottom view  
Scale: 1:1



B		
SR.	DISCRIPTION	MATERIAL
1	VALVE BODY	ASTM A479-316
2	GLAND BODY	ASTM A479-316
3	SPINDLE	ASTM A479-316
4	RETENER	SS
5	TRIM NON ROTATING	ASTM A479-316
6	GLAND PACKING	PTFE.
7	RETENER WASHER	SS
8	NUT	SS
9	DUST CAP	PVC.
10	TEE HANDLE	SS
11	BOLT/ GRUB SCREW	SS
12	GLAND WASHER	ASTM A479-316
13	LOCK PIN	SS



Left view  
Scale: 1:1

Drain 1/4" NPTM Plug

Note: ALL DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



## Remote Mount (Angled Bonnet Pipe to Pipe) Five Valve Manifold 413 bar (6000 psi)

### Using The 5-Valve Manifold

In normal operation the "isolate" valves are open while the "equalise" and "vent" valves are closed. This provides a differential pressure reading to the pressure gauge or transmitter.

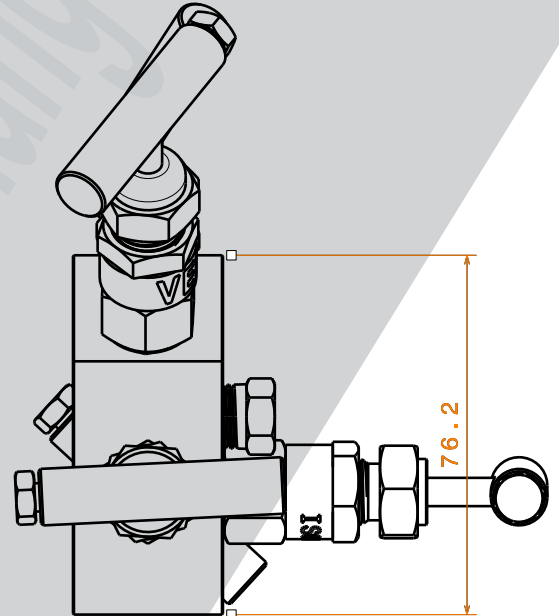
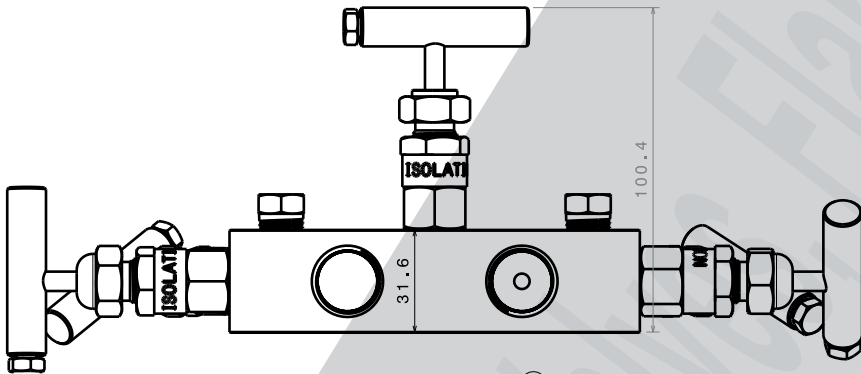
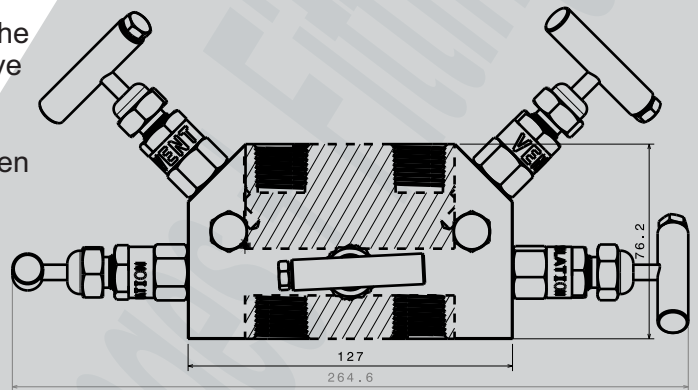
To zero the instrument, first close both "vent" valves and the downstream "isolate" valve. Then open the "equalise" valve and adjust the zero setting on the instrument.

To remove the instrument, first close both "isolate" valves, then open the "equalise" valves to relieve pressure between the manifold and the instrument.

### Calibration Options

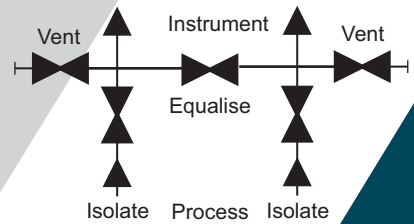
An option provided by **5-valve manifolds** which is not available on 3-valve types is connecting the "vent" port to known pressure sources to check the calibration of the instrument.

Also available in a range of other materials and options



B

BILL OF MATERIAL		
SR.	DESCRIPTION	MATERIAL
1	VALVE BODY	ASTM A479-316
2	GLAND BODY	ASTM A479-316
3	SPINDLE	ASTM A479-316
4	RETENER	SS
5	TRIM NON ROTATING	ASTM A479-316
6	GLAND PACKING	PTFE.
7	RETENER WASHER	SS
8	NUT	SS
9	DUST CAP	PVC.
10	TEE HANDLE	SS
11	BOLT/ GRUB SCREW	SS
12	GLAND WASHER	ASTM A479-316
13	LOCK PIN	SS



Note: ALL DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



TE-MH16

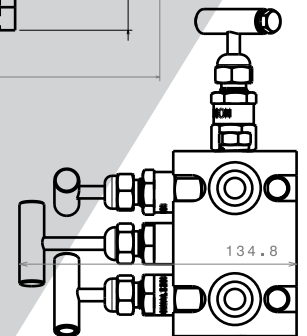
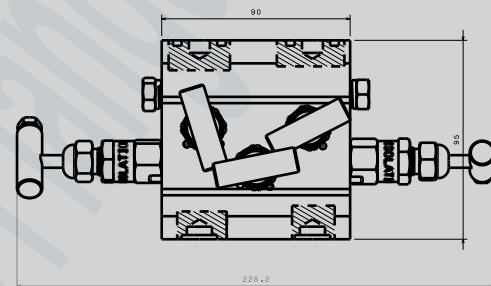
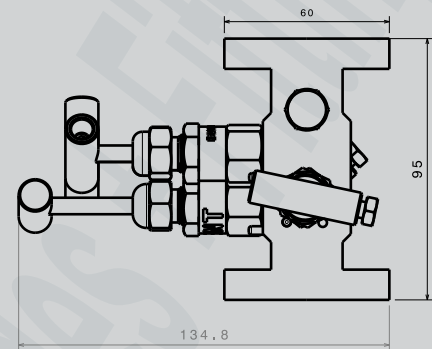
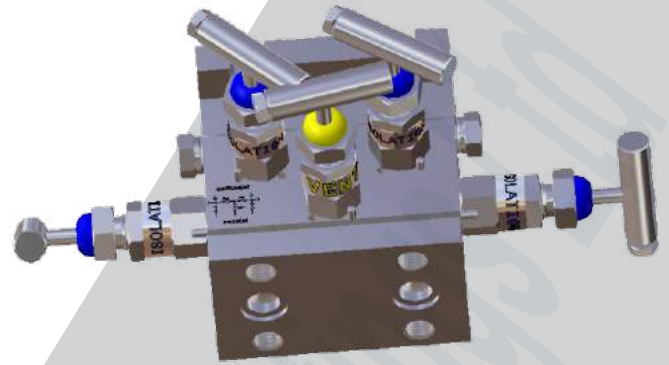
## 5 way Manifold Valve H Type

### Typical Applications:

1. Testing Panels
2. Differential pressure Transmitters
3. Gas Distribution Systems
4. Refineries and Petrochemical Industries

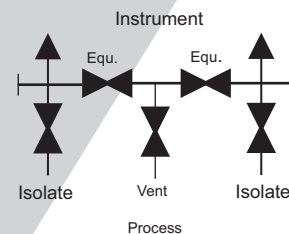
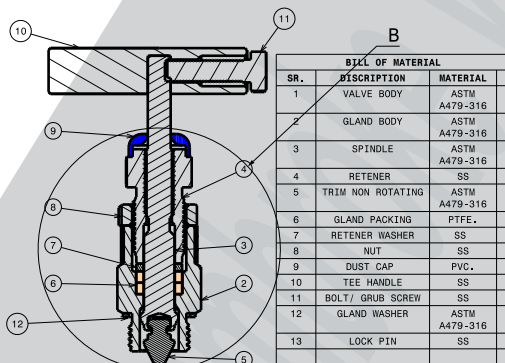
### Features:

Two Isolation valves and Two Equalizing valve and One Vent valve  
 Pressure rating up to 6000 psig at 370C  
 Temperature rating from -540C to 2320C with PTFE packing  
 Screwed double bonnet assembly with metal to metal body to bonnet seal  
 Non Rotating Hardened metal Stem tip design to ensure positive sealing  
 Variety of MOC options SS 316, Monel 400 and Duplex Material  
 Grafoil Stem Packing option is available to meet high temperature applications  
 Port sizes available from 1/4" Size to 3/4"  
 Stainless Steel Bar handle, Handle Options are available.  
 Locking pin to avoid accidental removal in service  
 Standard mounting holes provides flexibility for wall / bracket mounting installations  
 Optionally available with NACE MR-01-75 compliance  
 Variety of end connections include Tube fitting end, Male/Female NPT and ISO threads  
 Dust and Thread caps provided for ingress dust protection



### Testing:

Each Manifold Valve is factory tested with nitrogen gas at 1000psig (69 Bar) for leakage at seal & seat. Other optional tests like hydrostatic (1.5 times of the working pressure)



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 Fax: +44 (0) 1353 722 534  
[sales@pvff.co.uk](mailto:sales@pvff.co.uk)



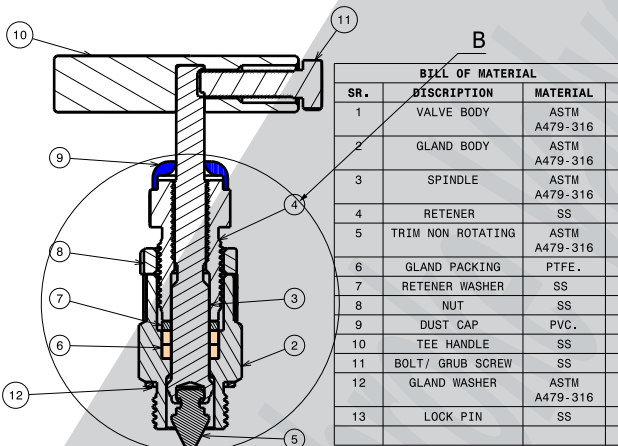
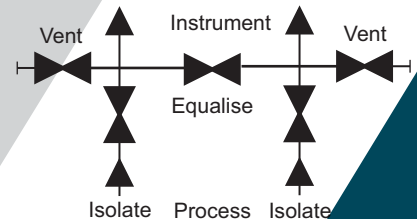
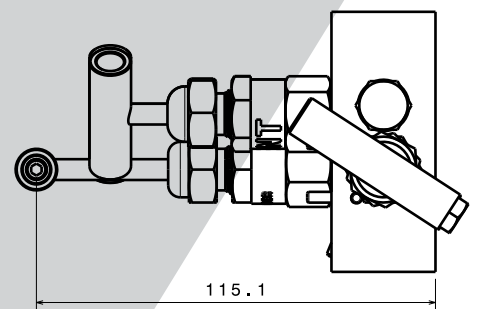
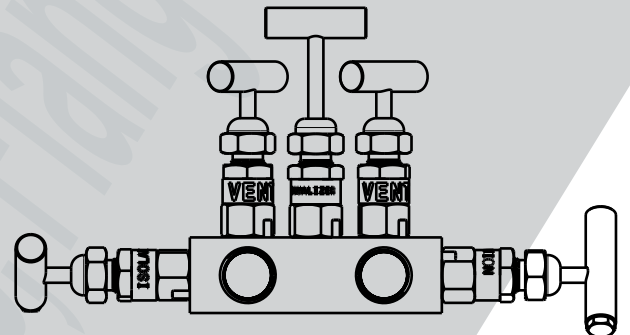
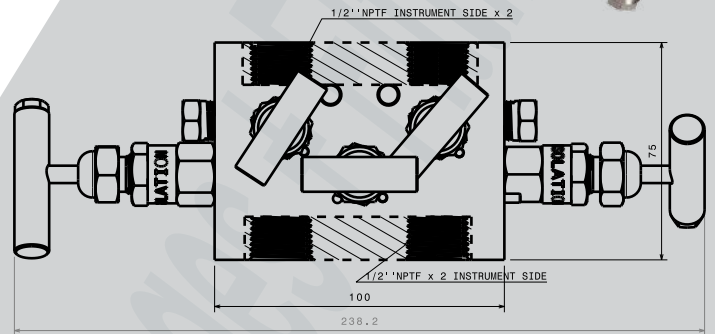
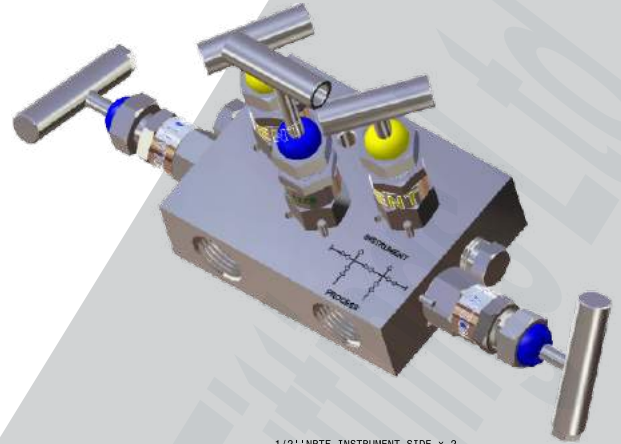
TE-MF18

## 5 Valve Manifold Separately Mount Type

**Five Valve Manifold** incorporate two process isolation valves, one equalizer valve and two drain/vent valves with separate connections in a compact manifold block. The designed for remote mounting away from the differential pressure instrument and joined by tube or pipe impulse lines. They have threaded connections of which the most popular are detailed below but also available to suit other sizes and standards.

Dimensions shown are for the standard 54 mm or 2 1/8 inch instrument connection. Centre distance found in majority of instruments.

The **manifold** is also available for instruments with other centre distances for instrument connections (as 55 mm, 56 mm and 57 mm) but dimensions shown will vary. Please consult us for these dimensions.



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 Fax: +44 (0) 1353 722 534  
[sales@pvff.co.uk](mailto:sales@pvff.co.uk)



TE-MT17

## 5 Valve Manifold Direct Mounting 'T' Type

**DESCRIPTION :** Five Valve Manifold 'T' type is designed for direct mounting on differential pressure Instruments. This manifold incorporate two process valves one, equalizer valve and two drains / vent valves in a compact block. The process connection is threaded for Connection by tube or pipe fittings. Dimensions shown are for the standard 54mm or 2 1/8 inch centres on request. Thread details shown are for standard popular sizes and available to Suit other thread Standards.

**CONNECTION :**  
 Process : 1/2"NPT(F)  
 Instrument : Flanged  
 Drain/vent : 1/4"NPT(F)

**TEST PRESSURE :**  
 @ 25°c' Room temperature

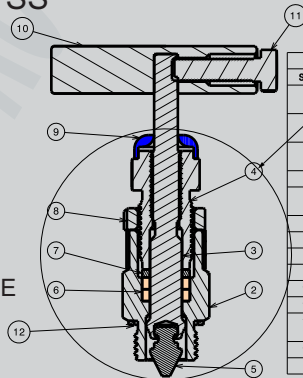
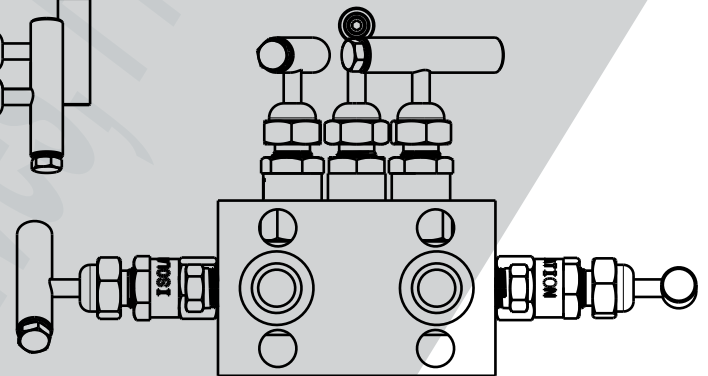
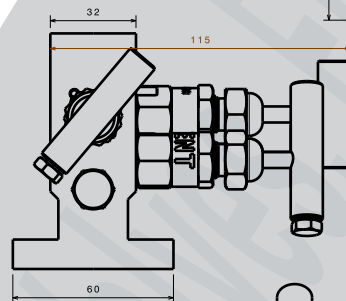
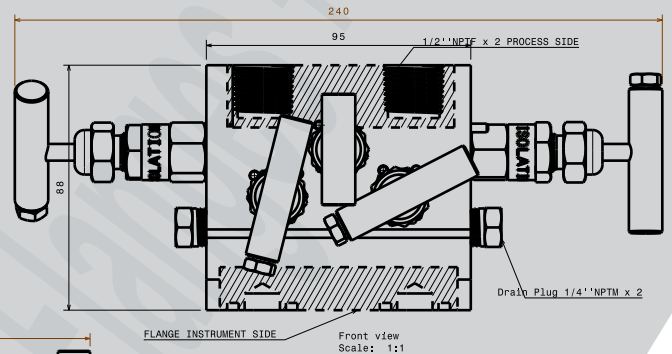
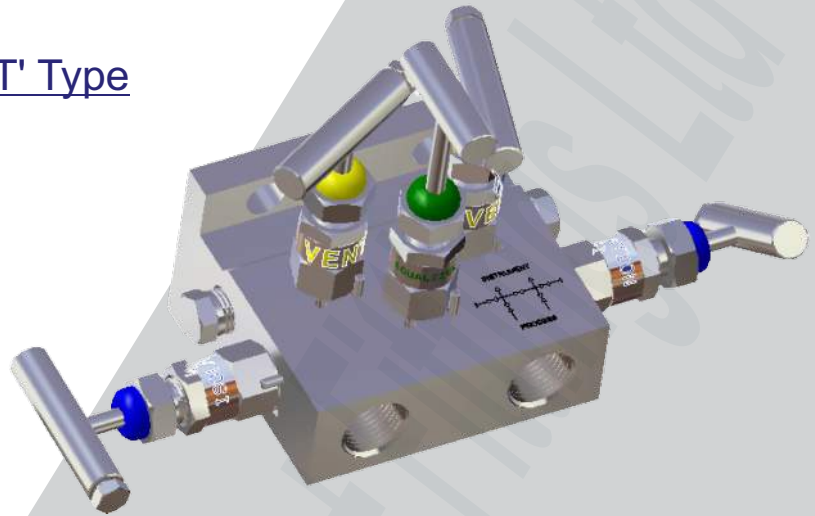
Hydrostatic : Body : 620kg/cm2g  
 Seat : 413kg/cm2  
 Pneumatic : Seat : 40kg/cm2

**GLAND PACKING :**  
 PTFE : Standard  
 GRAPHOIL : Temperature above 180°c

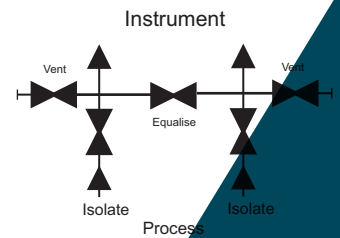
**MATERIAL :**  
 A105, A182 Gr F 304 SS, A182 Gr F 316 SS  
 Monel, Hastalloy.

**FINISH :**  
 CS :Zinc plated and dichromate  
 SS :Natural

Note : ALL DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

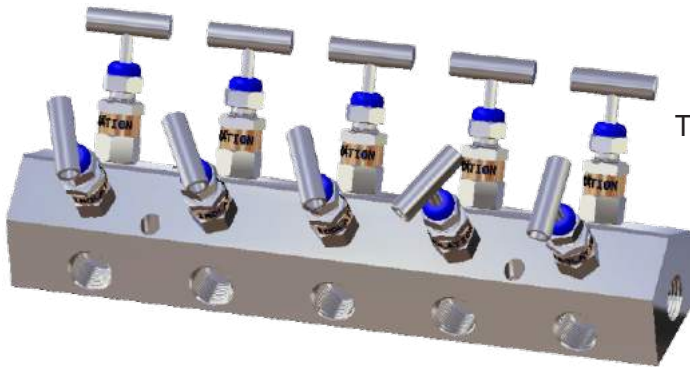


BILL OF MATERIAL		
SR.	DESCRIPTION	MATERIAL
1	VALVE BODY	ASTM A479-316
2	GLAND BODY	ASTM A479-316
3	SPINDLE	ASTM A479-316
4	RETENER	SS
5	TRIM NON ROTATING	ASTM A479-316
6	GLAND PACKING	PTFE.
7	RETENER WASHER	SS
8	NUT	SS
9	DUST CAP	PVC.
10	TEE HANDLE	SS
11	BOLT / GRUB SCREW	SS
12	GLAND WASHER	ASTM A479-316
13	LOCK PIN	SS

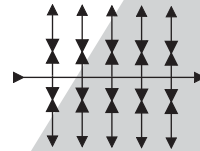




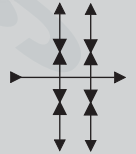
## Bar Stock Air Distributor [MANIFOLD]



TE-AD26

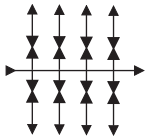


TE-AD28

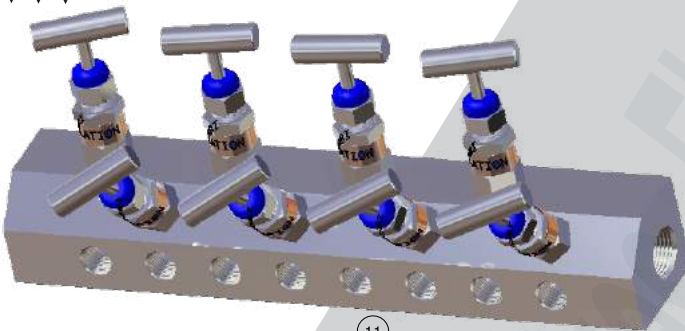


Number of Outlet Valves and Outlets  
Specify a number from 4 to 18.  
Example: 10 = 10 valves and outlets

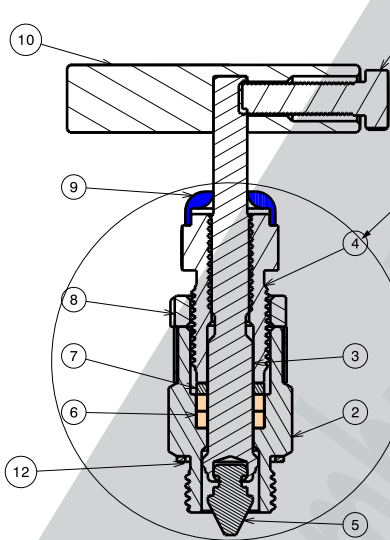
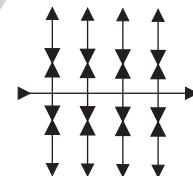
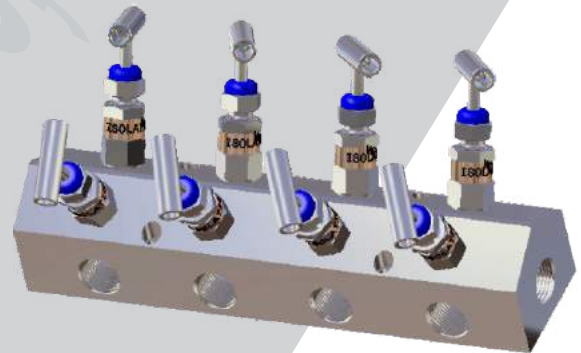
- Extruded stainless steel body rated for 6000 psig (413 bar) working pressure
- Compact, versatile manifold for gas and liquid applications
- Fewer potential leak points than conventional distribution manifolds
- Four to eighteen needle valves and outlet connections
- Mounting holes through the manifold to reduce stress on the piping system



TE-AD29



TE-AD27



**B**

BILL OF MATERIAL		
SR.	DISCRIPTION	MATERIAL
1	VALVE BODY	ASTM A479-316
2	GLAND BODY	ASTM A479-316
3	SPINDLE	ASTM A479-316
4	RETENER	SS
5	TRIM NON ROTATING	ASTM A479-316
6	GLAND PACKING	PTFE.
7	RETENER WASHER	SS
8	NUT	SS
9	DUST CAP	PVC.
10	TEE HANDLE	SS
11	BOLT/ GRUB SCREW	SS
12	GLAND WASHER	ASTM A479-316
13	LOCK PIN	SS

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 Fax: +44 (0) 1353 722 534  
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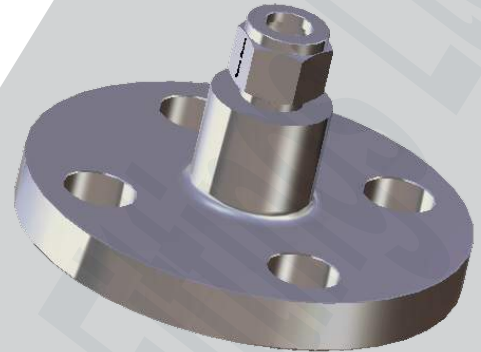
## Kidney Flanges Flange Connector Oval Adapter

"Pembroke Valves Flanges + Fittings Ltd" flange connectors are for use at the primary isolation point of piping systems. Designed for ease of use, flange fittings easily connect process piping to instrumentation tubing. The flange adapter (kidney type) provides a direct connection of tube OD compression couplings for instrument transmitters. Quality engineered for instrumentation and process applications. Working pressure in accordance with piping code ANSI B31.1 and refinery piping code NASI B31.3.

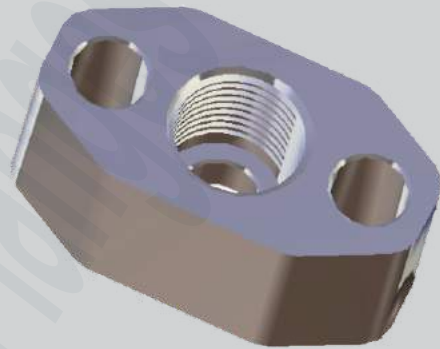
### **Kidney Flanges and adaptors**

**Kidney flanges** and various flange adapters threaded or with twin ferrule compression tube fitting / adapters / weld fittings / extenders / converters available in Stainless Steel, Monel 400, Duplex and other super alloys.

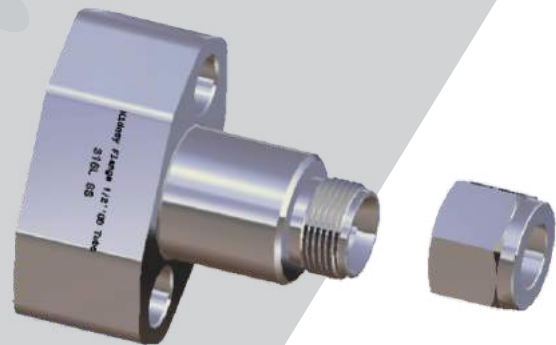
TE-FODT40



TE-KF41



TE-KFODT42



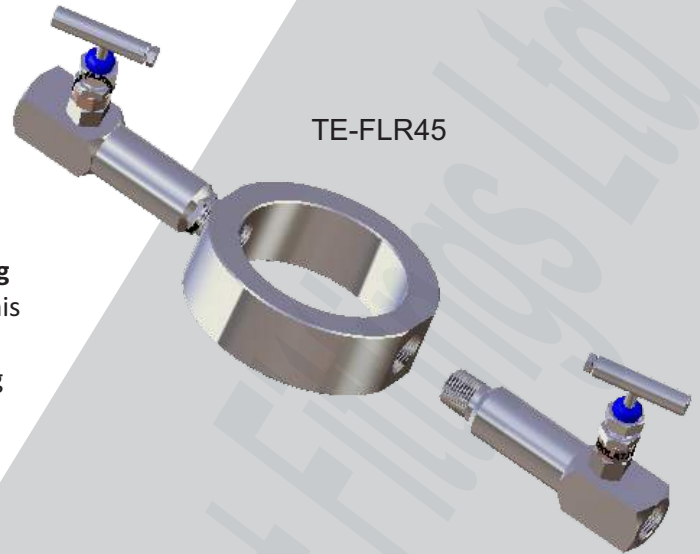
**Note:** This catalogue indicates the general specifications used for most of the process applications. Any other specification not appearing here also can be provided as per customer requirement.



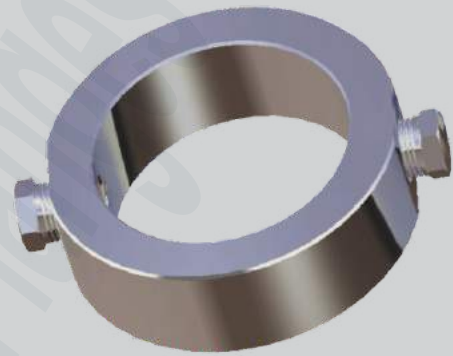
## Flushing Rings Units

The "Pembroke Valves Flanges + Fittings Ltd" **Flushing ring** is a solution for the cleaning of flanged diaphragm seal. This enables consistent readings from sensing instruments, and serves to extend service life. An ideal solution for satisfying applications with challenging requirements.

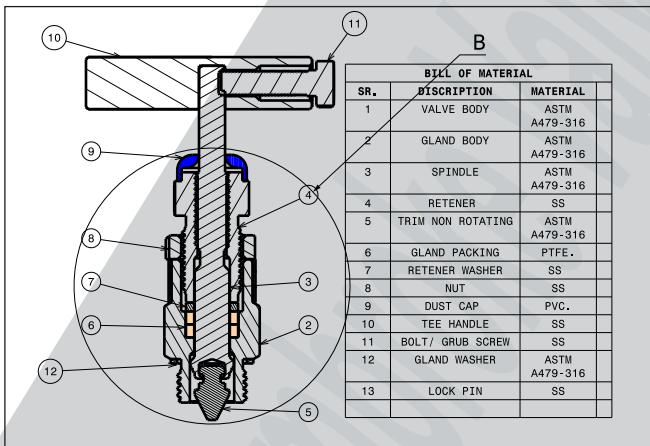
- Key Features:**  
 Two flushing ports  
 Machined from bar stock  
 Optional with pipe plugs



TE-FLR45



TE-FLR46



**Specifications:**

Standard according to ASME B16.5 or EN 1092-1  
 Size 1" to 4" or DN25 to DN100  
 Material stainless steel 316L, Duplex, Monel, Hastelloy C or Inconel  
 Pressure Ratings: 2.500 lbs or PN400

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## Condensate Posts & Fab. Air Distributors



### TECHNICAL DATA

Function: **Condensate pot** or chambers are used in measurement of steam or other vapors which condensate to liquid state at ambient temperature

Process: The condensate is drained from the bottom valve connection and are suitable for use with our range of ball valves

Material: The Condensate pots or chambers are available in a range of materials and have been designed accordance with ASME VIII Div

### DESCRIPTION

"Pembroke Valves Flanges + Fittings Ltd" **Condensate Pots** are specially designed to catch hold condensate and damage material, this preventing damage to the metering system and /or manifold. These are custom manufactured to suit client and project applications "Pembroke Valves Flanges + Fittings Ltd" **Condensate Pots** are available in a variety of material and finishes. Standard pipe sizes are 2" to 6" and a variety of connections fittings can be provided.

Material Type :Carbon Steel to A 10Gr. B SS 304 to Grade A 312 TP  
SS 316 to Grade A 312 TP SS 304L to Grade A 312  
TP SS 316L to Grade A 312 TPA335 Cr P11  
A335 Gr P22  
API SL Gr B  
A333 Gr B  
A333 Gr 6

Also available with dual certification. Optional sour gas service material is also available conforming to NACE std MR-01-03

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TE-CP49



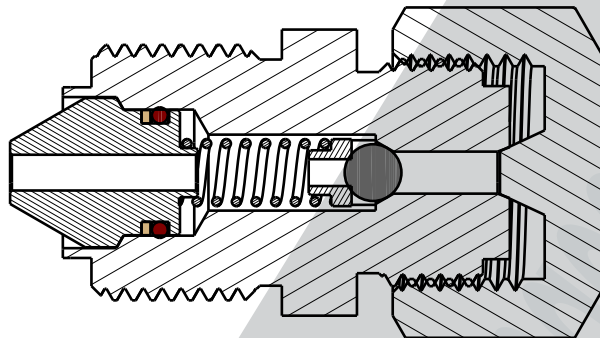


## Lubricating Grease Fittings 20.000 PSI

TE-GF48



High Pressure Grease Fittings featuring Blowdown, Lubricant (Sealant) Autoclave style threads for 20,000 psi service



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 Broadpiece, Mereside, Soham, Cambridgeshire, CB7 5EL, England, U.K.

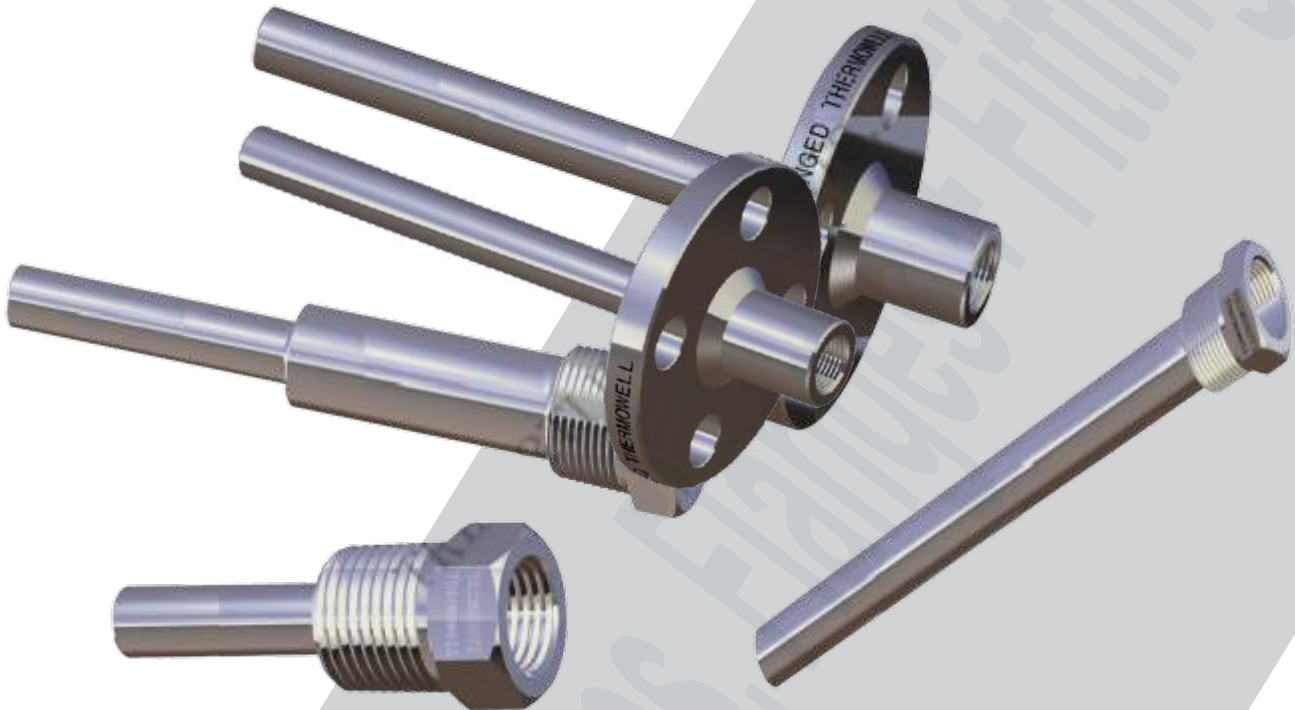
 Tel: +44 (0) 1353 725 541  
 Fax: +44 (0) 1353 722 534  
 [sales@pvff.co.uk](mailto:sales@pvff.co.uk)



## Thermowells and Thermocouple

Thread, Flanged, Welded Etc.

TE-TRW47



**Thermowells** are used to provide an isolation between a temperature sensor and the environment, either liquid, gas or slurry. A **thermowell** allows the temperature sensor to be removed and replaced without compromising either the ambient region or the process.

Care must be taken in determining the material used for the **thermowell** as well as other factors. Thermo Sensors offers design assistance that includes pressure, temperature and or corrosion as well as vibration effects of the fluids. This vibration can cause well stem failure.

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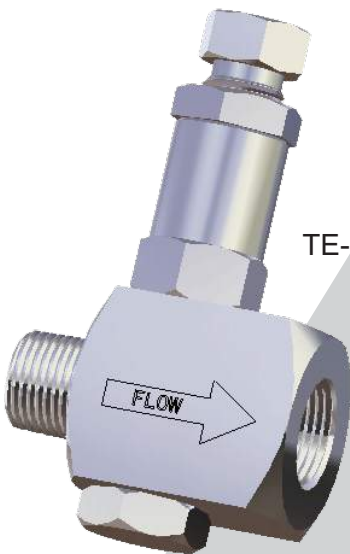
## Gauge Accessories

TE-SN50



**Pressure Snubber: Gauge Snubber** fittings protect pressure gauges and instruments from system pressure surges and shock. Pressure damping (snubbing) is accomplished through the use of a porous sintered SS 316 element. When snubber is installed upstream from a pressure instrument, the response rate of the instrument is reduced and generally varies with the initial pressure drop across the porous metal element, and allows the instrument to smoothly come to line pressure.

TE-GS51



**Overload protector/gauge saver:** are used to protect pressure-sensing instruments against damage, loss of accuracy, and/or rupture in the event of excessive system pressure. The piston assembly works against an adjustable spring. The piston assembly contains a sealing mechanism to isolate system pressure from the instrument.

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## Gauge Siphons

Suitable to mount gauges and pressure sensors on a steam system to protect from live steam.

TE-QS53



TE-QS54

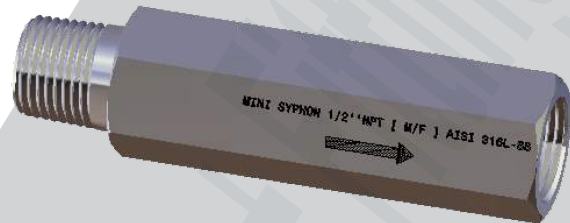


TE-QS55



TE-MS52

MINI SIPHON



The pig tails and coil **siphons** are used for measurement of pressure with vapour and are mounted between the instrument (pressure gauge, pressure switch, pressure transmitter) and the process. A part of the pipe remain always filled of condensation and this avoid the direct contact between the high temperature vapour and the instrument. Another use of these accessories is the heating dispersion, this avoid also to the instrument to work at dangerous temperature.

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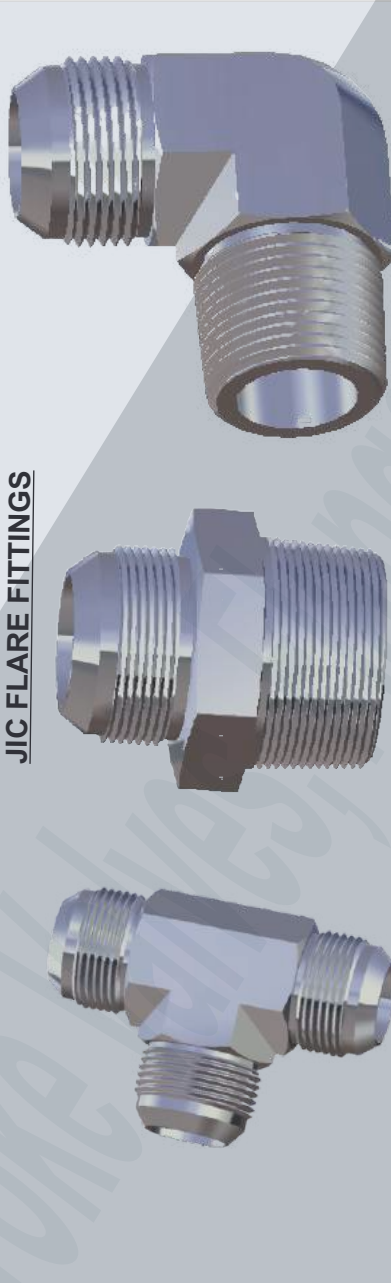


## COMPRESSION TUBE, PRECISION PIPE, AND JIC FLARE FITTINGS.

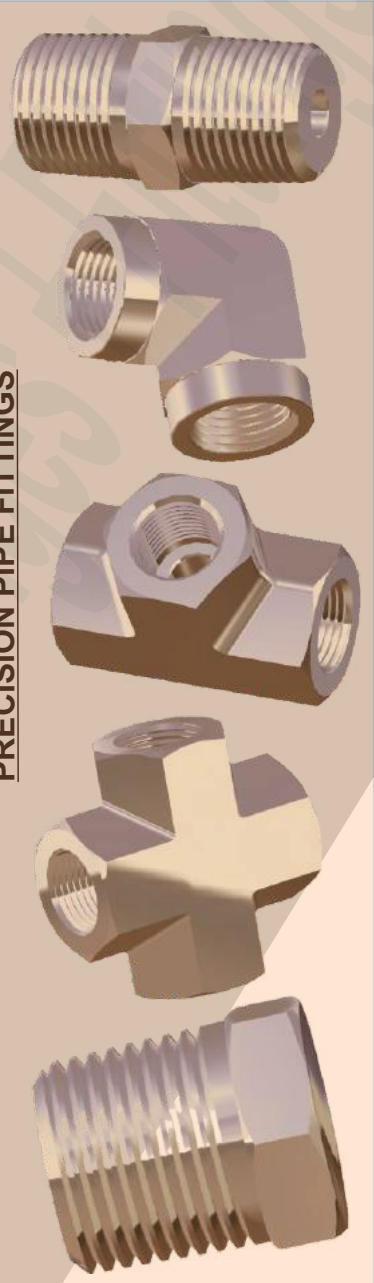
**COMPRESSION TWIN FERULE FITTINGS**



**JIC FLARE FITTINGS**



**PRECISION PIPE FITTINGS**



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