

# TVI

Texas Valve & Instruments, LLC

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Hand Valves

14 Needle Valves

For more information about the complete line of products and services by TVI, visit our web site or contact the sales representative nearest you.

www.TVI-I.com

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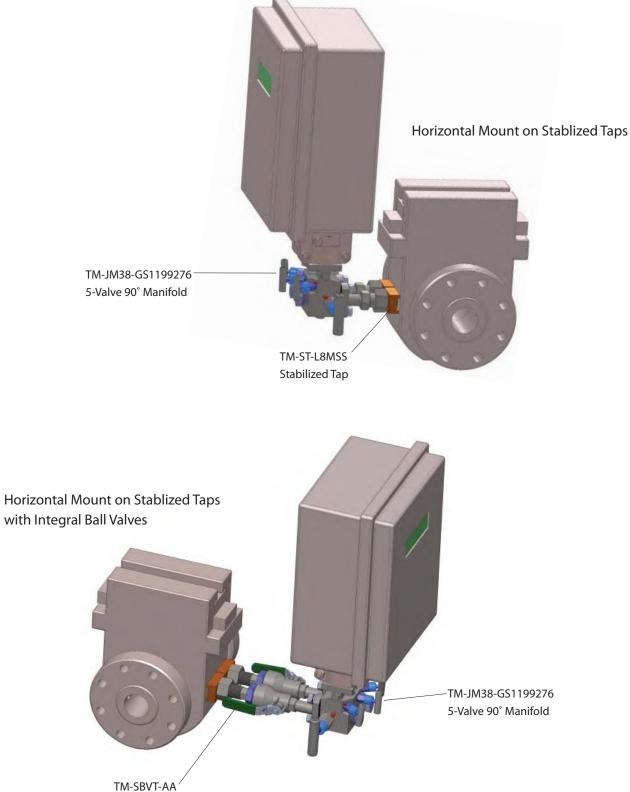
- 28 Sampling Valves
- 30 Constant Pressure Cylinders

It is entirely the responsibility of the user of the equipment (detector tube and pump) to see that the equipment is operated, maintained, and repaired in strict accordance with the manufacturer's instructions provided with the equipment. It is also the sole responsibility of the user to ensure that the tubes are not used beyond their expiration date. The manufacturer and the manufacturer's distributors are not otherwise liable for any incorrect measurement an its consequences or any damages resulting from the user's negligence or otherwise.

# **Horizontal Mounts**

# General Arrangements





Stabilized Tap with Integral Ball Valve

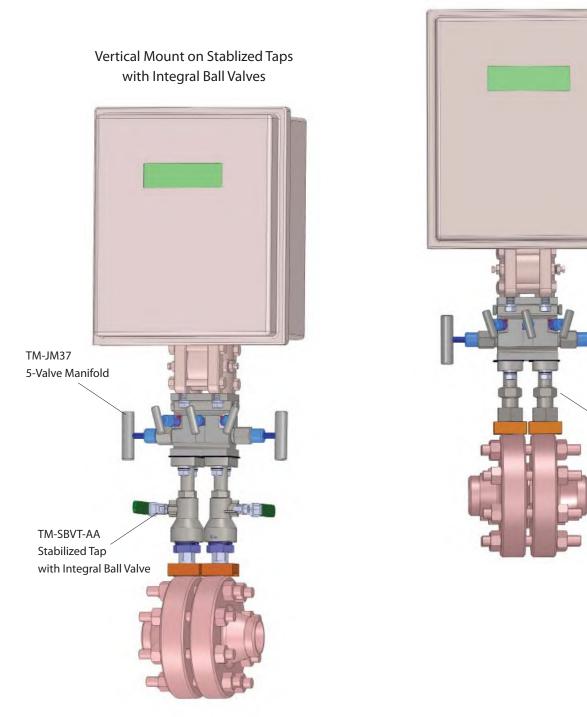
## **Vertical Mounts**

TM-JM37 5-Valve Manifold

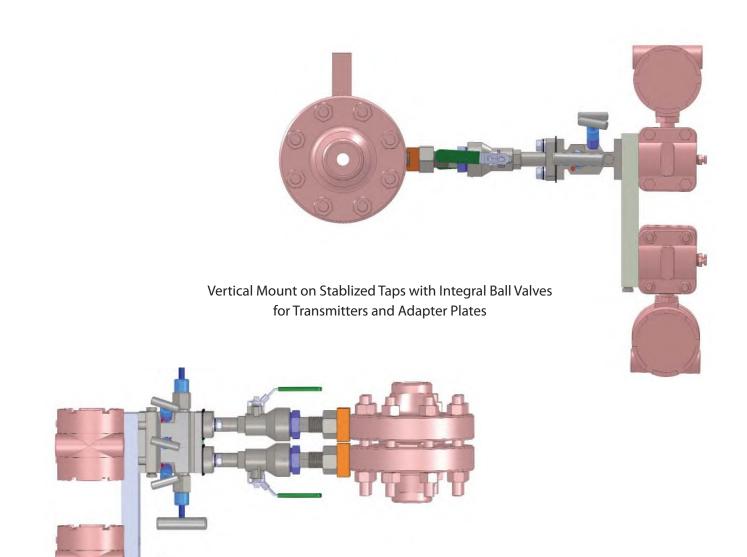
TM-STL8MSS Stabilized Tap

# General Arrangements

## Vertical Mount on Stablized Taps



# Transmitter & Adapter Mounts



# Manifolds

# **Ordering Tree**



# Manifolds & Valves



## Material Selection

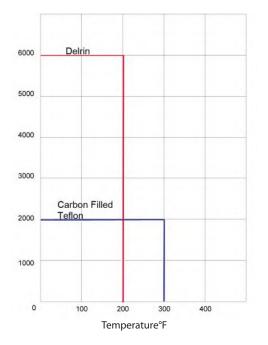
Pressure and temperature ratings are selected from ANSI B16.34 for Standard class valves based on ANSI B16-Class 2500.

Optional sour gas service conforms to NACE STD MR-01-75.

### **Pressure Testing**

Each valve is tested with nitrogen gas at 1500 psi for seat and packing leakage. All valves must be bubble tight.

## Pressure vs. Temperature Ratings (Soft Seat)



Seat Material	Carbon Steel	Stainless Steel	
Delrin	6000 PSI	6000 PSI	
PCTFE	3000 PSI	3000 PSI	



# NEW LIGHT WEIGHT MANIFOLDS 50% REDUCTION IN WEIGHT 3/8" BORE

# LOW TORQUE VALVES



## Characteristics

- 3/8" minimum bore diameter to help ameliorate spiking signals caused by pulsations in the pipeline.
- Very tight, reliable seats and seals to prevent errant measurements cause by small leaks. These seats and seals should be able to stand up to repeated use caused by the calibration verification process.
- Integrated blocking valves to minimize the potential leaks between the tap valves and the equalization valves. These valves can also serve as double equalizing valves to help insure against measurement error.
- Angle pattern equalizer and vent valves

## Features

- 3/8" thru bores
- Delrin seats standard, Carbon filled Teflon seats available
- Viton O-ring seals on the bonnets for zero leakage, yet low torque
- Angle pattern equalizer and vent valves
- Three configurations: Pipe x Flange, Flange x Flange, 90° Flange x Flange



# NEW LIGHT WEIGHT MANIFOLDS • 50% REDUCTION IN WEIGHT • 3/8" BORES

# LOW TORQUE VALVES

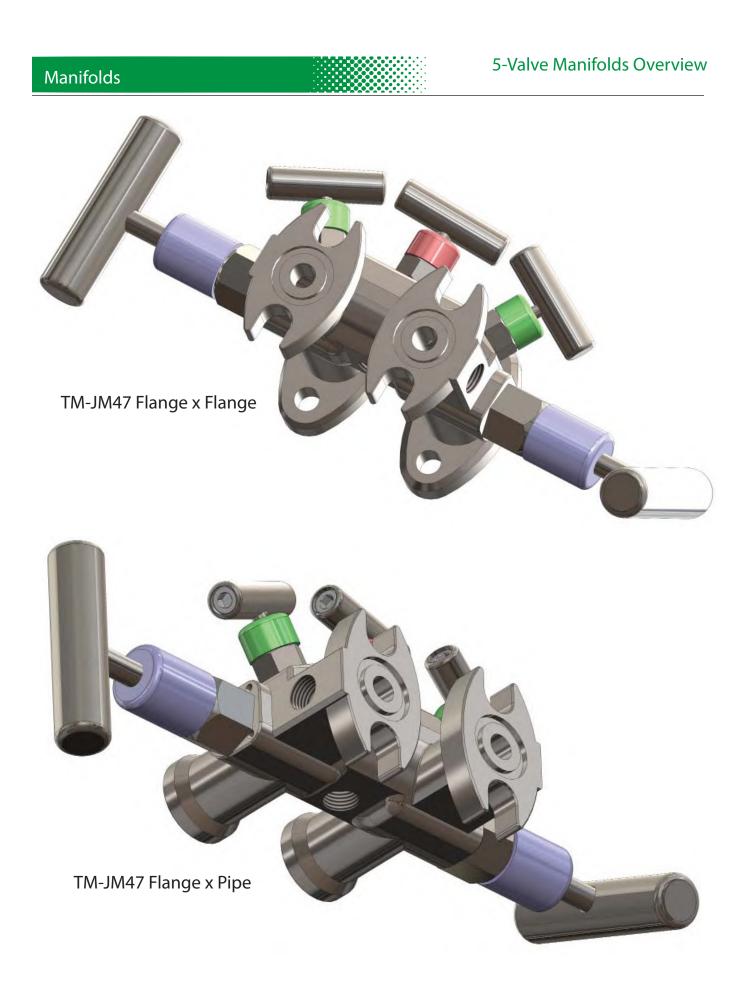


## Characteristics

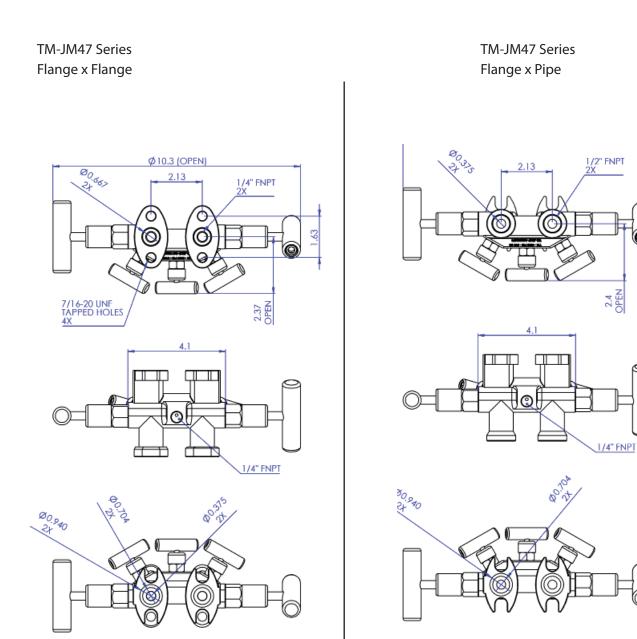
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# 5-Valve Manifolds Dimensions

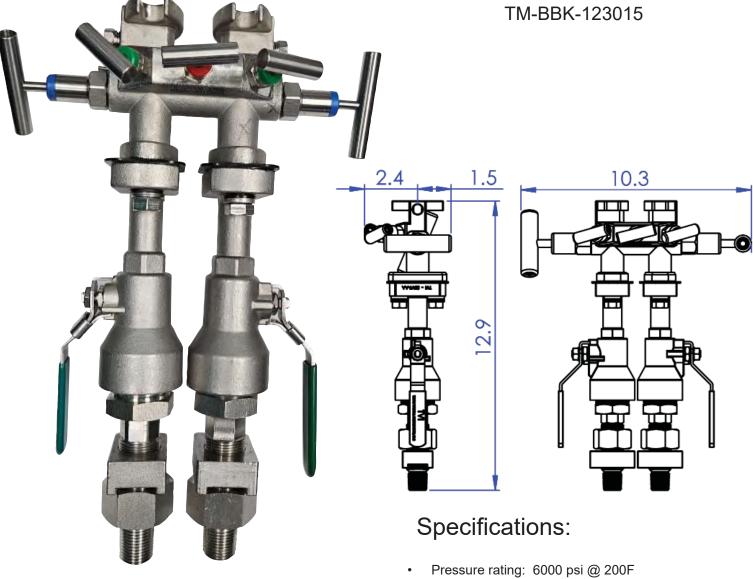




# **Big Bore Measurement Set**

Everything Necessary To Hook Your Flow Computer To An OFU

Part Number:



- 5 valve manifold with 3/8" bores •
- **Dielectric kit**
- Fire safe ball valves with 3/8" bores ۲
- Bolting kit
- Gaskets •
- **Stabilized taps**

- Material: 316 SS
- Seats: Delirin
- Oring: Viton 75
- Mates with all applications on 2.125" centers
- 1/2" MNPT pipe taps
- Dielectric Kit: standard

# Manifolds

# 2-Valve M

## 2-Valve Manifolds Overview

## Characteristics

• Block & Bleed Manifold

#### Features

- Standard Material is 316 SS
- Connections: 1/2"MNPT x 1/2"FNPT
- Orifice size is 3/16" diameter

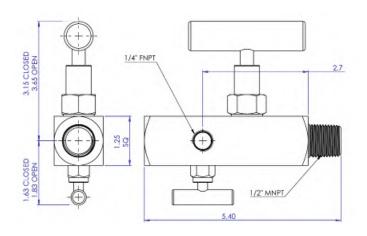
#### Specifications

- Pressure and temperature rating are selected from ANSI B16.34 for Standard class valves based on ANSI B16-Class 2500.
- Optional sour gas service conforms to NACE STD MR-01-75.
- Each valve is tested with nitrogen gas at 1000 psi for seat and packing leakage. All valves must be bubble tight.
- Hydro test performed with pure water at 1 <sup>1</sup>/<sub>2</sub> times of working pressure.
- Other tests like vibration, temperatures, helium, etc. are available upon request.
- Flow coefficient ( $C_v$ ) of up to 0.52

**Dimensions TM-JM32** 



# P/N: TM-JM32-GS3531276



## **Stabilized Taps**

## Accessories

### Characteristics

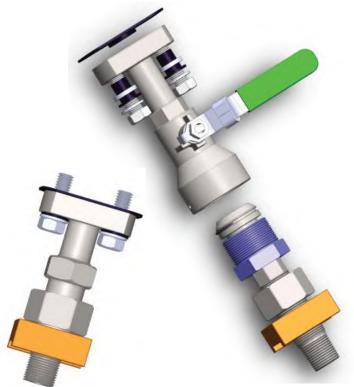
- Stabilized taps provide a means of transferring the radial load away from NPT type threads. This results in a much stronger joint between the pipe thread and the orifice fitting.
- Eliminates the tendency for a leak to occur between the pipe thread and the orifice fitting.
- These taps come with all the parts necessary to fit both orifice fittings and orifice unions.
- The shoe is employed to create a larger flat footprint for the stabilizer nut when used on the curved surface of orifice flange unions.
- A dielectric kit composed of a spacer and bolt bushings is included to provide a non-conductive barrier between a flow computer and meter run.

### Features

- Standard Material is 316 SS
- Stabilized instrument tap
- Designed to provide a rigid mount for transmitters and flow computers
- Fits all applications on 2 1/8" centers
- Can be installed without removing the handles
- Lock-out handles are standard
- Dielectric kits are standard and made
   of Delrin

### Specifications

- Ball valve is rated Fire Safe to API 607
- 3/8" bore for unrestricted passage of process gas
- Can be used as a ¼ turn root valve



TM-SBVT-AA-Exploded Rendering

TM-ST-L8MSS Rendering

Sold in Pairs

Sold in Pairs





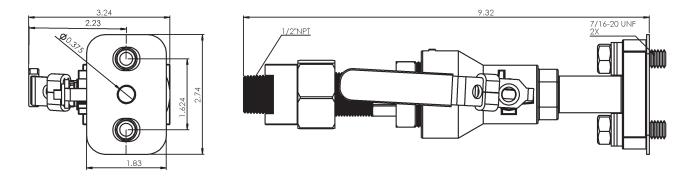
## Stabilized Ball Valve Tap Options

Part Number	Metal Components Materials	Dielectric Material
TM-SBVT-AA	316SS CF8M	Delrin
TM-SBVT-AB 1045CS ASTM216 WCB – Yellow Cadmium Plate		Delrin

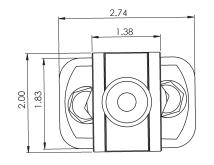
# Stabilized Tap Options

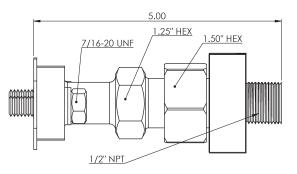
Part Number	Metal Components Materials	Dielectric Material
TM-ST-L8MSS	316SS CF8M	Delrin
TM-ST-L8MCS 1045CS ASTM216 WCB – Yellow Cadmium Plate		Delrin

## TM-SBVT-AA Stabilized Taps with Integral Ball Valve



## TM-ST-L8MSS Stabilized Taps







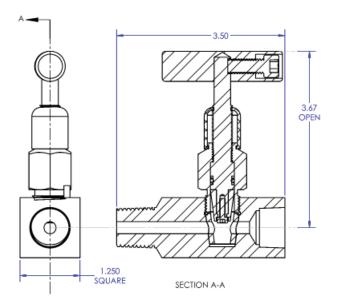


- Replaceable Soft Seat allows replacement of the soft seat insert without removing the valve from service. Provides bubble tight shut off in dirty service
- Straight Thru Bore 1/4" orifice straight thru bore give higher C<sub>V</sub> than angle pattern. Straight thru pattern makes the valve inherently roddable.
- Viton o-ring stem seal for high temperature-corrosive service
- Dust Cover Keeps dirt, rain, etc from entering the bonnet stem assembly and prevents lubricant washout
- O-ring packing is below the threads to prevent process from reaching the threads and causing galling and corrosion
- Back Seating of the Stem Prevents the stem from accidentally being backout and seats metal to metal in the full open position
- Stem is Nickel Plated Prevent galling prevalent in similar metals
- Mirror Bonnet Finish Bonnet bore is polished to 16 RMS. This greatly extends to life of the Viton oring.

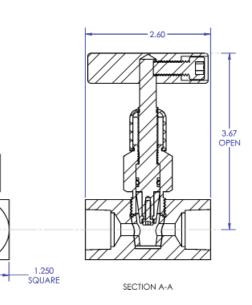
# **ORDERING INFORMATION**

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Part Number	316SS	CS	CONFIGURATION
TV-HV-GS4M4F276	Х		1/4" MALE X 1/4" FEMALE
TV-HV-GS4F4F276	Х		1/4" FEMALE X 1/4" FEMALE
TV-HV-GS8M8F276	Х		1/2" MALE X 1/2" FEMALE
TV-HV-GS8F8F276	Х		1/2' FEMALE X 1/2" FEMALE
TV-HV-GS12M12F276	Х		3/4" MALE X 3/4" FEMALE
TV-HV-GS12F12F276	Х		3/4" FEMALE X 3/4" FEMALE
TV-HV-CS4M4F276		Х	1/4" MALE X 1/4" FEMALE
TV-HV-GC4F4F276		Х	1/4" FEMALE X 1/4" FEMALE
TV-HV-GC8M8F276		Х	1/2" MALE X 1/2" FEMALE
TV-HV-GC8F8F276		Х	1/2' FEMALE X 1/2" FEMALE
TV-HV-GC12M12F276		Х	3/4" MALE X 3/4" FEMALE
TV-HV-GC12F12F276		Х	3/4" FEMALE X 3/4" FEMALE

## MALE X FEMALE



## FEMALE X FEMALE



TVI · Gas Measurement Products

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