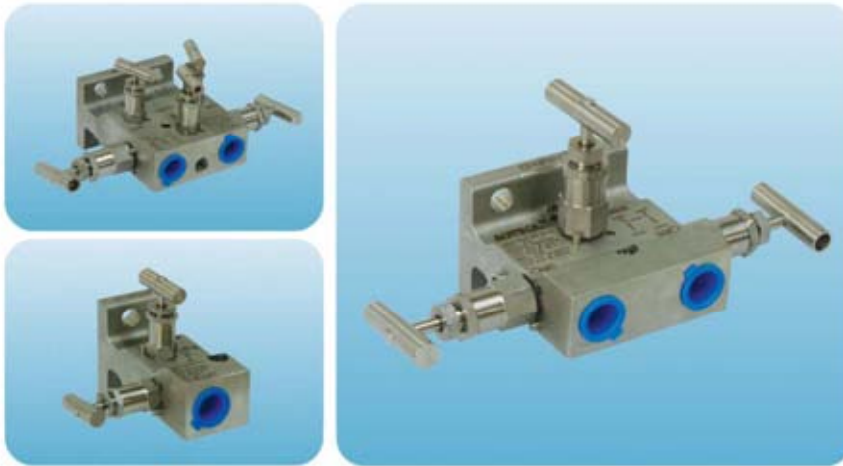


FLANGED / REMOTE TYPE

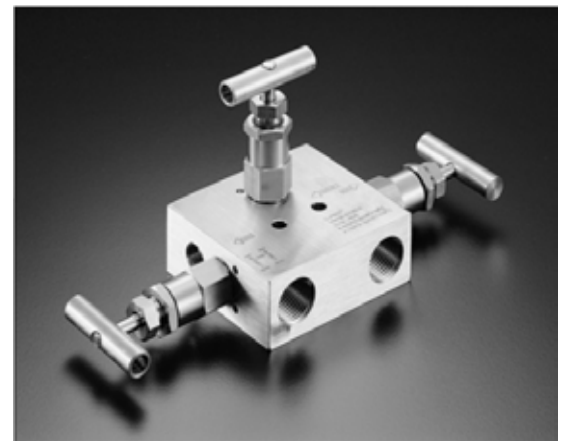
For AAI Differential/Gauge/Absolute/High Pressure Transmitters

46 / 56 Series



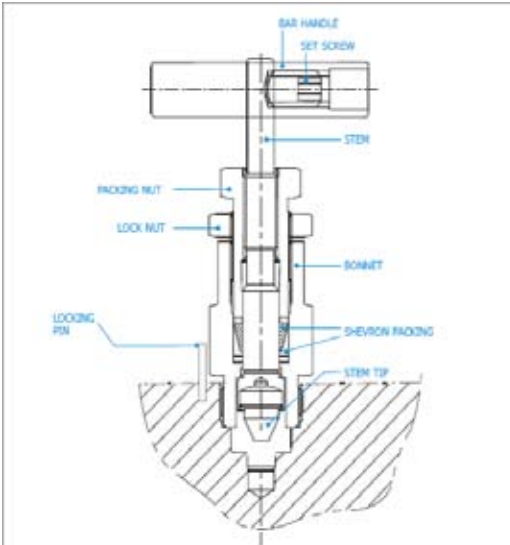
46 Series Gauge Root Value
56 Series Instrument Manifolds

Pressure Ratings up to 6000 psig



Autrol America Inc,
10 N. Martingale Rd, Suite 400.
Schaumburg, IL 60173. United States
T: 847-779-5000
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Email: info@autroltransmitters.com

Valve Features



Valves for Manifolds and Gauge Root Valves

Bleed, Block and Equalizer value for V56 series Manifolds & V46 Gauge Root Values

- **Non-rotating** stem tip at closure for long-life and leak-tight shutoff. Blunt VEE tip.
- Exclusive **4-piece chevron PTFE packing** design provides far improved sealing integrity. Optional Grafoil packing.
- **Isolated Threads : Packing** located below threads prevents media contamination and thread lubricant washout.
- Stem is mechanically **ENGAGED** with the bonnet as well as threaded with the packing nut for max. safety.
- **Safety Locking Pin** ensures the valve fastened to the body when excessive opening torque is applied, and is vibration tested to MIL-STD-167-1(SHIPS)
- Sturdy T-Bar handle:
 - A.
 - B.

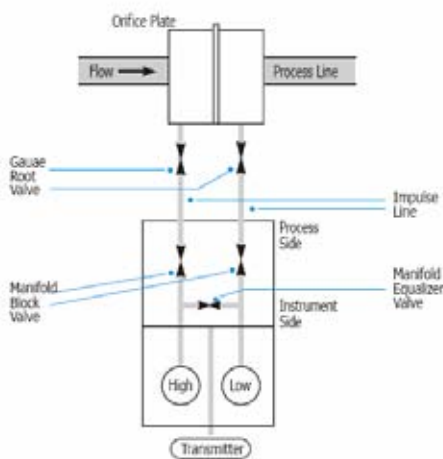
VBR56 Manifolds Features

- Simple to install
- Bur-free internal surface
- S316 construction
- Operating at 6000 psig(413 bar)
- Standard PTFE and optional *Grafoil packing
- Every value is factory tested with nitrogen 1000 psig(68 bar)



- **VBR56-2V-8N**
Block and Bleed
2 valve Remote Mount Manifold
Pipe to pipe female NPT
Bleed port female NPT

Flow measurement diagram



- **VBR56-3V-8N**
Block and Equalizer
3 valve Remote Mount Manifold
Pipe to pipe female NPT
Bleed port female NPT

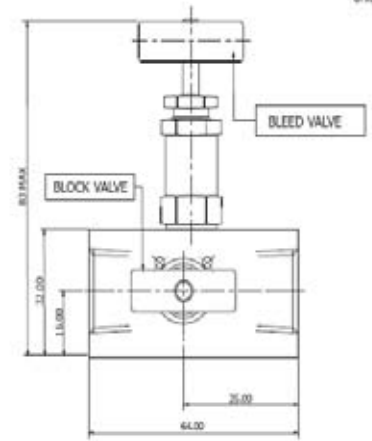
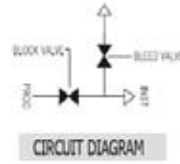
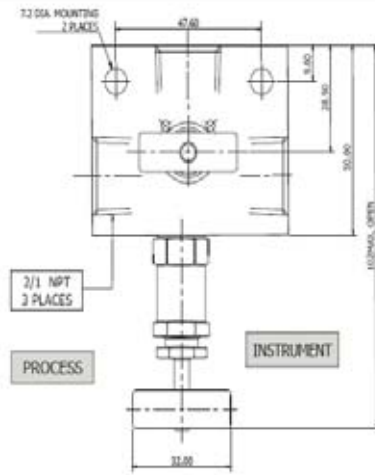


- **VBR56-5V-8N**
Block, Equalizer and Bleed
5 valve Remote Mount Manifold
Pipe to pipe female NPT
Bleed port female NPT

MANIFOLDS

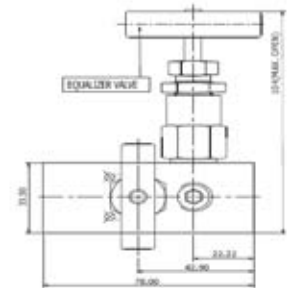
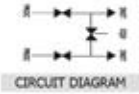
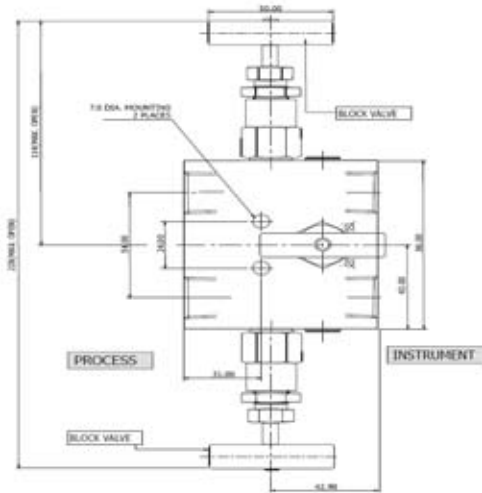
FOR AUTROL SMART PRESSURE TRANSMITTER

VBR56-2V-8N

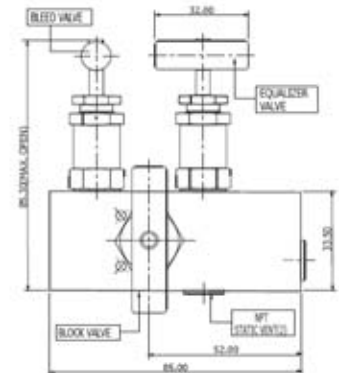
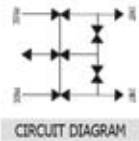
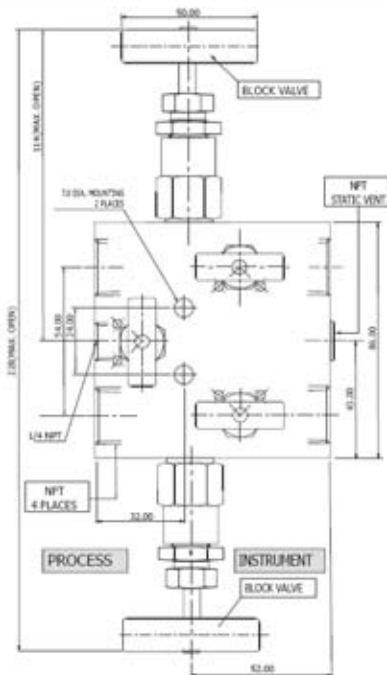


Unit : (mm)

VBR56-3V-8N



VBR56-5V-8N



FOR AUTROL SMART PRESSURE TRANSMITTER

Design

- AUTROL Manifold design hydrostatic test at 1.5 times the working pressure.
- Safety Locking Pin preventing detachment of bonnet from body is vibration tested to MIL-STD-167-1.
- Pressure boundary wetted parts are selected to Chapter 3, Material B31.1 , 123 Acceptable Materials.

Ordering Information and Technical Data

| Manifold Type | Ordering Number | End Connections | | Pressure Rating PTFE packing psig (bar) | Temperature Rating | | Orifice of Block Valve mm(in.) | Weight Kg (lb) |
|---------------|-----------------|--------------------------------|------------|---|---------------------|---------------------|--|---------------------|
| | | Process | Instrument | | PTFE packing | Grafoil packing | | |
| Remote Mount | VBR56-5V-8N | 1 / 2 " Female NPT | | 6000 (413) at 100 F (37 C) | -53 C to 232 C | -53 C to 523 C | 3.2 (0.126) | 0.78 (1.71) |
| | VBR56-5V-8N | 1 / 2 " Female NPT | | | | | 6.4 (0.251) | 1.92 (4.23) |
| | VBR56-5V-8N | 1 / 2 " Female NPT | | | | | 2.1 (4.59) | |
| Direct Mount | VBD56-2V-8N | 1 / 2 " Female to Flange | | 3000 (210) at 450 F (232 C) | (-65 F to 450 F) | (-65 F to 973 F) | 3.2 (0.126) | 1.6 (3.5) |
| | VBD56-3V-8N | | | | | | 6.4 (0.251) | 1.64 (3.6) |
| | VBD56-5V-8N | | | | | | 3.1 (6.8) | |

- Pressure Rating optional Grafoil packing: 1715 psig(118 bar) at maximum temperature 973 F (523 C).
- To order the optional Grafoil packing, add -GF to the ordering number. i.e., VBR56-3V-8N-GF

Operation and Application

| 2- Valve VBR56-2V & VBD56-2V Series | 3- Valve VBR56-3V & VBD56-3V Series | 5- Valve VBR56-5V & VBD56-5V Series |
|--|---|--|
| For isolating, Calibrating and draining Pressure Gauges and Transmitters | For measuring flow or lever using A differential Pressure Transmitter. | For measuring flow or level using a differential Pressure Transmitter or gauge with bleeding, Calibration and Test functions. |
| In operation, the block valve is Normally open when the bleed valve is closed. To remove the instrument, close the block valve first, and open the bleed valve to Relieve pressure upstream of the block valve. For Calibration, by connecting a Calibration gauge to the bleed port, able to check the calibration of the instrument without removing it from the installation. | In operation, both block valves are open while the equalizer valve is closed to read a differential pressure to the pressure gauge or transmitter. To zero the instrument, close the block valve first then open the Equalizer valve and zero adjust the instrument To remove the instrument, close block valves first, then unscrew the bleeding plug to relieve pressure between the manifold and instrument. | In operation, both block valves are open while the equalizer and bleed valves are closed to read a differential pressure to the pressure gauge or transmitter. To zero the instrument, close block valves and bleed valve, and open the equalizer valve and zero adjust the instrument. For calibration, connect the bleed port to a pressure gauge to check the calibration of the instrument. |

- Packing adjustment : Extreme or rapid temperature cycle may require packing adjustment to maintain a leak-free system. Tightening the Locknut on the bonnet is for the packing adjustment.

V46 Series Gauge Root Valves

AUTROL Gauge Root Valves offer a safe way of positioning gauges and installing pressure switches.

Design

- This valve is designed to ASME B16.34 Class 2500
- S316 construction with the minimum schedule 160 pipe wall on valve inlet
- V46GRL Series : Extended body allowing 4.0" of pipe insulation

Features

- 1 / 2" and 1 / 3" male to 1 / 2" female and connections
- 1 / 2" female gauge ports standard
- Non-rotating stem tip design
- Sour gas option to NACE MR0175 latest version

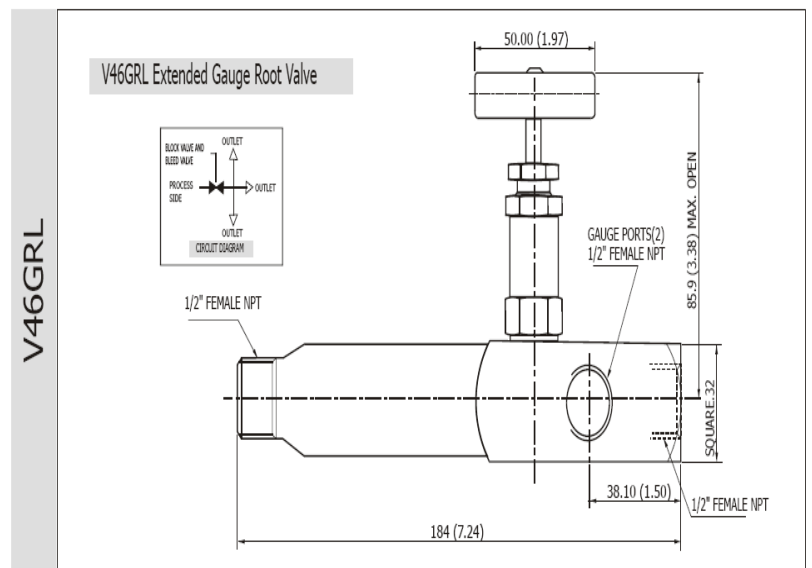
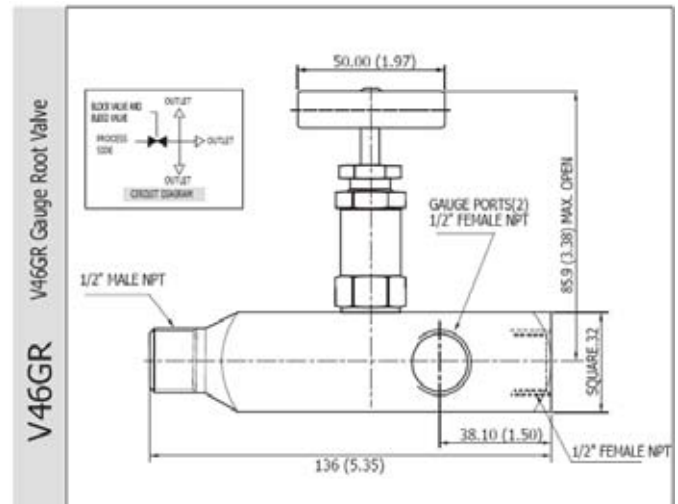
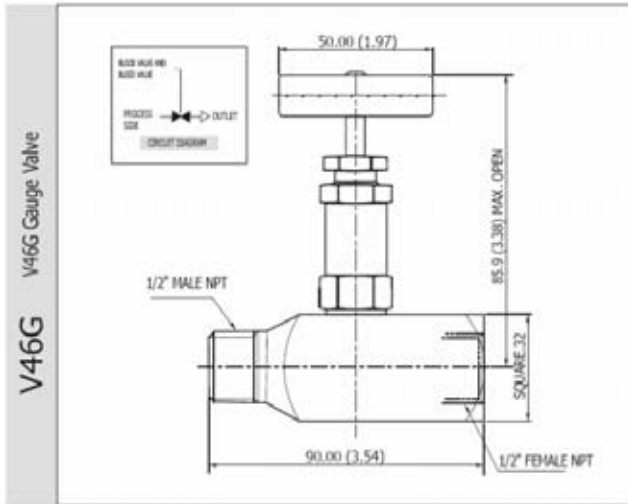
Ordering Information and Technical Data

| Valve Ordering Number | End Connection Male to Female NPT | Orifice mm (in.) | Seat | Stem Packing | Pressure Rating | Pressure Rating @Max. Temp. | Body Length mm (in.) | * |
|-----------------------|-----------------------------------|------------------|------|--------------|--|---|----------------------|---|
| V46G-8N | 1 / 2" to 1 / 2" | 5.0 (0.20) | S316 | PTFE | 6000 psig -65F ~ 100F (413 bar -54C ~ 38 C) | 4130 psig @ 450 F (284 bar @232 C) | 90.0 (3.54) | 1 |
| V46GR-8N | 1 / 2" to 1 / 2" | 5.0 (0.20) | S316 | PTFE | | | 136.0 (5..35) | 3 |
| V46GR-12N8N | 3 / 4" to 1 / 2" | 5.0 (0.20) | S316 | PTFE | | | 136.0 (5..35) | 3 |
| V46GRL-8N | 1 / 2" to 1 / 2" | 5.0 (0.20) | S316 | PTFE | | | 184.0 (7.24) | 3 |
| V46GRL-12N8N | 3 / 4" to 1 / 2" | 5.0 (0.20) | S316 | PTFE | | | 184.0 (7.24) | 3 |

- * The number of female NPT Gauge Port
- V46GRL has a extended body for pipe insulation.
- Optional Grafoil packing for high temperature is available. The rating is 1715 psig @ 973 F (118 bar @ 523 C).
To order, use – GF as a suffix to the ordering number. Example : V46G – 8N - GF

MANIFOLDS

FOR AUTROL SMART PRESSURE TRANSMITTER



Factory Test

- Every Manifold & Gauge Root Valve is tested with the nitrogen @ 100 psig (68 bar) for leakage at the seat to a maximum allowable leak rate of 0.1 scc/min

Safe Valve Selection

The selection of a valve for any application or system design must be considered to ensure safe performance.

Valve function, valve rating, material compatibility, proper installation and maintenance remain the sole responsibility of the system designer and the user. Manufacture accepts no liability for any improper selection, installation, operation or maintenance.

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Email: info@autroltransmitters.com