PRODUCT OVERVIEW
ABOUT HEX VALVE

Hex Valves were developed to simplify the piping required throughout the process industries. These valves are so common, "Hex Valve" became a generic term for bar stock instrument, gauge, and orifice valves. Today, leaders in the natural gas, chemical and petroleum industries depend on Hex Valve for reliable equipment that is easy to install and operate.

Testing to EPA Reference Method 21 (reference: 40 CFR 60, BAAQMD, Reg. 8, Rule 18, SCAQMD rules), all Hex Valve TFE, 1625G Grafoil and Graphaseal bonnet valves are Certified Low E, guaranteed not to leak more than 100ppm for five (5) years in accordance with industry mandates.

Hex Valve adds value for customers by manufacturing products that are reliable and durable which will help you avoid costly shutdowns and production delays. Hex Valve pays close attention to every detail of design, manufacturing and assembly of each component. Hex Valve can help you with all of your instrumentation products including manifold, needle, block & bleed, gauge, mono-weld and mono-flange valves.

Contact us today at hex@richardsind.com or +1.513.533.5600.
# Table of Contents

- Needle Valves 4
- Primary Gauge Valves 6
- Block & Bleed Valves 9
- Hexblok/Monoflange/Weld/Ball Valves 11
- Two Valve Manifolds 14
- Three Valve Manifolds 15
- Five Valve Manifolds 18
- Natural Gas Valves 19
- Power Valves 20
- Special Valves 24
HN29

**Instrument “Mini” Needle Valves**

Targeted for the gas sampling, OEM and reseller market. “T” handles or 25.4mm diameter round knurled handles.

**Sizes**

1/4” & 1/2”

**Ratings**

Stainless and carbon steel valves are rated to 414 bar @ 38°C with hard seats & 207 bar @ 38°C with soft seats (Delrin for carbon steel).

**Features**

Non-rotating tip provides tight repeatable shutoff without galling or cross scoring; saves space and reduces costs.

HN39

**Stainless Steel Instrument Needle Valves**

A compact and economical high pressure instrument block valve. All valves have integral hard seats, 316 stainless steel body and trim and Teflon/Grafoil packing.

**Sizes**

1/8", 1/4", 3/8", 1/2", 3/4", 1", 6mm, 8mm, 10mm, 14mm, 18mm, 25mm

**Ratings**

Stainless steel to 481 bar @ 38°C. 232°C limit for Teflon packed valves. 538°C limit for Grafoil packed valves.

**Features**

Non-rotating tip provides tight repeatable shutoff without galling or cross scoring; integral body & bonnet design.

EN39

**Economical Needle Valves**

All valves are available with integral hard seats, 316-NACE stainless steel body and trim and Teflon or Graphite packing. Hastelloy C and Monel available upon request.

**Sizes**

1/4” & 1/2”

**Ratings**

Stainless steel with TFE packing: 414 bar @ 38°C; 290 bar @ 204°C

**Features**

Non-rotating tip provides tight repeatable shutoff without galling or cross scoring; compact & economical.
### HN41
**Roddable Instrument Needle Valves**

A straight-thru design with Delrin seat which provides bi-directional flow and the ability to "rod-out" the valve for cleaning. Specifically targeted for oil & gas industry.

<table>
<thead>
<tr>
<th>Sizes</th>
<th>1/4&quot; &amp; 1/2&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratings</td>
<td>414 bar @ 38°C</td>
</tr>
<tr>
<td>Features</td>
<td>Roddable design; rising plug design for better shutoff; thread in bonnet above packing; larger handle and stem diameter</td>
</tr>
</tbody>
</table>

### HN49
**Instrument Needle Valves**

A heavy duty needle valve that features an industrial strength stem and bonnet and enhanced packing arrangement, all designed to handle the tough conditions of high pressure and high temperature services.

<table>
<thead>
<tr>
<th>Sizes</th>
<th>1/8&quot;, 1/4&quot;, 3/8&quot;, 1/2&quot;, 3/4&quot;, 1&quot;, 6mm, 8mm, 10mm, 14mm, 18mm, 25mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratings</td>
<td>481 bar @ 38°C; 243 bar @ 538°C (stainless steel); 454 bar @ 38°C; 296 bar @ 343°C (carbon steel); 232°C limit for Teflon</td>
</tr>
<tr>
<td>Features</td>
<td>Wide selection of body/bonnet and packing materials; non-rotating stem; backseated bonnets with packing below the stem threads</td>
</tr>
</tbody>
</table>

### HN490
**10,000# Instrument Needle Valves**

The 10,000# bonnet assembly was added to meet the very high pressure requirements in oil & gas production, specifically on offshore drilling platforms.

<table>
<thead>
<tr>
<th>Sizes</th>
<th>1/4&quot;, 3/8&quot;, 1/2&quot;, 3/4&quot;, 1&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratings</td>
<td>689 bar @ 38°C or 476 bar @ 232°C. Bonnet is only available with Teflon packing</td>
</tr>
<tr>
<td>Applications</td>
<td>Shut off for most fluids including steam; compressors; hydraulic and pneumatic applications; calibration &amp; testing</td>
</tr>
</tbody>
</table>

### HN49U
**Union Bonnet Needle Valves**

Severe service union-bonnet needle valve that features a one-piece forged body and grafoil packing designed to handle the extreme conditions of high pressure and temperature services.

<table>
<thead>
<tr>
<th>Sizes</th>
<th>6mm &amp; 10mm orifice sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratings</td>
<td>689 bar @ 38°C; 241 bar @ 649°C</td>
</tr>
<tr>
<td>Features</td>
<td>Backseated bonnets with packing below the stem threads; panel mounting standard; non-rotating ball tip stem provides for repeatable, leak-tight shutoff</td>
</tr>
</tbody>
</table>
HG35

Gauge Valves

Meets the application requirement for a block & bleed valve without the need for a close nipple when connecting to a female port on a gauge pressure transmitter.

Sizes
1/4", 3/8", 1/2", 3/4", 1"

Ratings
481 bar @ 38°C; 243 bar @ 538°C (Stainless Steel with TFE packing); 232°C limit for Teflon

Features
Threads in the bonnet are above the stem packing to eliminate possible thread contamination; non-rotating tip provides tight repeatable shut-off; save money by reducing the number of components; reduces number of leak points

EG35

Economical Gauge Valves

Meets the application requirement for a block & bleed valve without the need for a close nipple when connecting to a female port on a gauge pressure transmitter.

Sizes
1/2" & 3/4"

Ratings
Stainless steel with TFE packing: 414 bar @ 38°C; 290 bar @ 204°C

Features
Valves available with integral hard seats, 316-NACE stainless steel body and trim and Teflon or Graphite packing

HG46

Gauge Valves

A quick, inexpensive and compact means of installing gauges and static pressure instrumentation. Can be supplied with a bleed valve or needle valve threaded into one of the outlets to allow for combined block & bleed functions in a single, compact unit.

Sizes
1/4", 3/8", 1/2", 3/4", 1"

Ratings
481 bar @ 38°C; 243 bar @ 538°C (Stainless Steel with graphite packing); 232°C limit for Teflon

Features
Compact design; non-rotating tip; OS&Y bonnet for added safety; packing below the threads prevents lubricant wash out and corrosion
**HG47**

A roddable, hard seated orifice valve. Ideal for use on high temperature, viscous service. Provides full port, unrestricted flow.

**Sizes**
1/4", 3/8", 1/2", 3/4", 1"

**Ratings**
481 bar @ 38°C; 243 bar @ 538°C (Stainless Steel with graphite packing); 232°C limit for Teflon

**Features**
Cost savings by reducing number of components and leak points; compact design, Non-rotating tip; packing below the threads prevents lubricant washout and corrosion.

---

**HG48**

Provides three outlet connections to facilitate the mounting of gauges and other static pressure instruments in a variety of positions.

**Sizes**
1/4", 3/8", 1/2", 3/4", 1"

**Ratings**
481 bar @ 38°C; 243 bar @ 538°C (Stainless Steel with graphite packing); 232°C limit for Teflon

**Features**
Cost savings by reducing number of components and leak point; compact design; non-rotating tip; packing below threads prevents lubricant washout and corrosion.

---

**EG48**

Provides three outlet connections to facilitate the mounting of gauges and other gauge pressure instruments in a variety of positions. Integral hard seat matches body material.

**Sizes**
1/2" & 3/4"

**Ratings**
SS with TFE packing & hard seat: 414 bar @ 38°C; 290 bar @ 204°C

**Features**
All valves are available with integral hard seats; 316-NACE stainless steel body & trim; Teflon or Graphite packing

---

**HG65**

Designed for compact side-by-side mounting on standard orifice flanges, condensate chambers, mercury traps and seal traps. Two outlet ports are provided for impulse line connections or for pressure mounting.

**Sizes**
1/4", 3/8", 1/2", 3/4", 1"

**Ratings**
481 bar @ 38°C; 243 bar @ 538°C (Stainless Steel with graphite packing); 232°C limit for Teflon

**Features**
Ideal for light hydrocarbons or utility service; non-rotating tip stem; VOC emission compliance; reduce cost & installation time
**HG12**

The valve features a built-in vent or bleed screw on the outlet side of the valve. In process line mounted instrument or signal line tubing, venting or line-filling capabilities can be added.

**Sizes**

1/4", 3/8", 1/2", 3/4", 1"

**Ratings**

481 bar @ 38°C; 243 bar @ 538°C (Stainless Steel with graphite packing); 232°C limit for Teflon

**Features:**

Compact, side-by-side mounting; reduce potential leakage; non-rotating tip stem; reduce cost & installation time

---

**EG65**

**Economical Orifice Block Valves**

Designed for compact side-by-side mounting on standard orifice flanges, condensate chambers, mercury traps and seal traps. Two outlet ports are provided for impulse line connections or for pressure mounting.

**Sizes**

1/2" & 3/4"

**Ratings**

414 bar @ 38°C; 209 bar @ 538°C (Stainless Steel with graphite packing); 204°C limit for Teflon

**Features:**

Ideal for light hydrocarbons or utility service; reduce cost & installation time

---

**HO25**

Features an OS&Y bolted bonnet and two outlet connections. The HO25 is more compact and has a shorter profile than the HG65 model to reduce vibration.

**Sizes**

1/4", 3/8", 1/2", 3/4", 1"

**Ratings**

481 bar @ 38°C; 243 bar @ 538°C (Stainless Steel with graphite packing); 232°C limit for Teflon

**Features**

Compact, side-by-side mounting; reduce potential leakage; non-rotating tip stem; reduce cost & installation time
### HB50/51

A fully packed and backseated block valve along with a bleed valve with directional discharge tube and stem stop. The HB50 can provide secondary block & bleed functions on multiple instrument installations. The HB51 utilizes a bleed screw in lieu of a bleed valve.

**Sizes**

<table>
<thead>
<tr>
<th>Sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;, 3/8&quot;, 1/2&quot;, 3/4&quot;, 1&quot;</td>
</tr>
</tbody>
</table>

**Ratings**

<table>
<thead>
<tr>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>481 bar @ 32°C; 243 bar @ 538°C (Stainless Steel with graphite packing); 232°C limit for Teflon</td>
</tr>
</tbody>
</table>

**Features**

<table>
<thead>
<tr>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost savings; compact design features 2 valves in 1 to utilize less space; non-rotating tip; packing below threads</td>
</tr>
</tbody>
</table>

### EB50

Economical Block & Bleed Valves

A fully packed and backseated block valve along with a bleed/plug. With a gauge or transmitter threaded in its outlet, it will allow pressure to be blocked and bled for convenient instrument removal. It can also provide secondary block & bleed functions.

**Sizes**

<table>
<thead>
<tr>
<th>Sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;, 3/8&quot;, 1/2&quot;, 3/4&quot;, 1&quot;</td>
</tr>
</tbody>
</table>

**Ratings**

<table>
<thead>
<tr>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>481 bar @ 32°C; 243 bar @ 538°C (Stainless Steel)</td>
</tr>
</tbody>
</table>

**Features**

<table>
<thead>
<tr>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost savings; compact design features 2 valves in 1 to utilize less space</td>
</tr>
</tbody>
</table>

### HB52

Bleed Tee Valves

Ideal for modernizing outdated, non-bleed gauge installations. During instrument maintenance, simply thread it into the outlet of an existing block valve. An instrument is then threaded into the HB52 outlet to complete the installation.

**Sizes**

<table>
<thead>
<tr>
<th>Sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;, 3/8&quot;, 1/2&quot;, 3/4&quot;, 1&quot;</td>
</tr>
</tbody>
</table>

**Ratings**

<table>
<thead>
<tr>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>481 bar @ 38°C; 243 bar @ 538°C (Stainless Steel)</td>
</tr>
</tbody>
</table>

**Features**

<table>
<thead>
<tr>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost savings by reducing number of components and leak points; compact design features 2 valves in 1 to utilize less space</td>
</tr>
</tbody>
</table>
HB59

A fully packed backseated block and bleed valve that minimizes threaded connections. Typically used on applications where waste must be returned to the line or holding vessel.

Sizes: 1/4", 3/8", 1/2", 3/4", 1"

Ratings: 481 bar @ 38°C; 243 bar @ 538°C (Stainless Steel with graphite packing); 232°C limit for Teflon

Features: Cost savings; compact design; non-rotating tip; packing below the threads prevents lubricant washout and corrosion

HB24/25/26/27

Available individually or optionally threaded into an unused outlet port on a variety of models. Used for bleeding off high pressure media.

Sizes: 1/4", 3/8", 1/2", 3/4"

Ratings: 481 bar @ 38°C; 243 bar @ 538°C (Stainless steel)

Features: Reduce costs and installation time

HG35

Meets the application requirement for a block & bleed valve without the need for a close nipple when connecting to a female port on a gauge pressure transmitter.

Sizes: 1/4", 3/8", 1/2", 3/4", 1"

Ratings: 481 bar @ 38°C; 243 bar @ 1000°F (Stainless Steel with graphite packing); 232°C limit for Teflon

Features: Threads in the bonnet are above the stem packing to eliminate possible thread contamination; non-rotating tip provides tight repeatable shut-off; save money by reducing the number of components; reduces number of leak points

EG35

Meets the application requirement for a block & bleed valve without the need for a close nipple when connecting to a female port on a gauge pressure transmitter.

Sizes: 1/2" & 3/4"

Ratings: Stainless steel with TFE packing: 414 bar @ 38°C; 290 bar @ 204°C

Features: Valves available with integral hard seats, 316-NACE stainless steel body and trim and Teflon or Graphite packing
**HEXBLOK VALVES**

**HEXBLOK**

Used primarily on upstream offshore/onshore oil production and initial processing installations. Typically used on liquid hydrocarbon applications to minimize the size and weight of the pipe-valve assemblies associated with gauge pressure or analytical instrumentation.

<table>
<thead>
<tr>
<th>Sizes</th>
<th>1/2&quot; - 2&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratings</td>
<td>In accordance to ASME B16.5 for class 150 to 2500 up to 6000psi. Working temperatures up to 232°C for Teflon &amp; Graphite packing and PEEK seals</td>
</tr>
<tr>
<td>Features</td>
<td>Compact; rigid; lighter; safer; lower cost than conventional piping methods; reduced link points; pressure point closer to pressure measurement</td>
</tr>
</tbody>
</table>

**Ball Valves**

**Needle Valves**

Used primarily on upstream offshore/onshore oil production and initial processing installations. Typically used on liquid hydrocarbon applications to minimize the size and weight of the pipe-valve assemblies associated with gauge pressure or analytical instrumentation.

<table>
<thead>
<tr>
<th>Sizes</th>
<th>1/2&quot; - 2&quot;; 10mm Bore/Orifice sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratings</td>
<td>In accordance to ASME B16.5 for class 150 to 2500 232°C for Teflon packing; 538°C for Graphite packing</td>
</tr>
<tr>
<td>Features</td>
<td>Large standard orifice and porting; large, robust bonnet and NRT stem design means longer life, less breakage; non-rotating stem tip</td>
</tr>
</tbody>
</table>
### MONOFLANGE VALVES

**Applications:** pressure instrument take-off points, sampling systems, chemical injection systems, hydraulic power units, high pressure fire safe valves, drains for tanks and pipes where space is limited.

<table>
<thead>
<tr>
<th>Sizes</th>
<th>Flange in accordance to ASME B16.5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ratings</strong></td>
<td>Class 150 to 2500. Working Temperatures up to 538°C</td>
</tr>
<tr>
<td><strong>Features</strong></td>
<td>Compact; rigid; lighter; safer; lower cost than conventional piping methods; reduced link points; pressure point closer to pressure measurement</td>
</tr>
</tbody>
</table>

### MONOWELD VALVES

**Used on upstream offshore/onshore gas & oil production and initial processing installations.** Typically used on single or dual gauge pressure or analyzer installations to minimize the size & weight of the pipe-valve assemblies.

<table>
<thead>
<tr>
<th>Sizes</th>
<th>1/4&quot;, 3/8&quot;, 1/2&quot;, 3/4&quot;, 1&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ratings</strong></td>
<td>In accordance to ASME B16.5 for class 150 to 2500 232°C for Teflon packing; 538°C for Graphite packing</td>
</tr>
<tr>
<td><strong>Features</strong></td>
<td>Integral Weldolet® means one weld instead of two per gauge pressure or analyzer take off, reduces total installation height and weight</td>
</tr>
</tbody>
</table>
MONOBALL Valves

Designed for direct shutoff of flow like any ball valve. The difference is the compact design and light weight. It can be used in conjunction with other valves to allow for a safer shutoff creating a double block for safety.

<table>
<thead>
<tr>
<th>Sizes</th>
<th>1/2&quot; - 2&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratings</td>
<td>ANSI B16.34 flange ratings for Class 150 - 2500# flanges 689 bar @ 38°C with Carbon PEEK Seats or 431 bar @ 38°C with standard PEEK Seats</td>
</tr>
<tr>
<td>Features</td>
<td>Small, thin design and lightweight; design allows you to combine with other valves in series for safe shutoff; 10mm through bore; API 607 5th Edition Fire Safe</td>
</tr>
</tbody>
</table>
## TWO VALVE MANIFOLD VALVES

### HM50

**Static Pressure Manifold Valves**

A single flanged static pressure manifold that includes a primary block valve, a secondary shutoff valve and a bleed valve into a single valve assembly. The secondary shutoff and bleed valve allows the gauge and transmitter to be vented and/or removed.

<table>
<thead>
<tr>
<th>Sizes</th>
<th>1/2&quot; x Instrument Flange</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratings</td>
<td>481 bar @ 38°C; 243 bar @ 538°C (Stainless Steel with graphite packing); 232°C limit for Teflon</td>
</tr>
<tr>
<td>Features</td>
<td>Reduce costs and installation time; non-rotating tip stem; fully backseated bonnets</td>
</tr>
</tbody>
</table>

### EM50

**Economical Static Pressure Manifold Valves**

A single flanged, static pressure manifold that incorporates a block valve and a vent valve into a single valve assembly. The side vent outlet is plugged, allowing removal during maintenance or the installation of a calibration fitting.

<table>
<thead>
<tr>
<th>Sizes</th>
<th>1/2&quot; x Instrument Flange</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratings</td>
<td>414 bar @ 38°C; 290 bar @ 204°C (Stainless Steel with TFE packing)</td>
</tr>
<tr>
<td>Features</td>
<td>Compact &amp; economical</td>
</tr>
</tbody>
</table>

### HM59

**Static Pressure Manifold Valves**

A line-mounted two valve manifold that functions as a shutoff and vent valve for static pressure instrumentation. Provides separate instrument bleed and a calibration entry port to allow for fast, accessible zeroing and calibration of gauge pressure transmitters.

<table>
<thead>
<tr>
<th>Sizes</th>
<th>1/4&quot;, 1/2&quot;, 3/4&quot;, 1&quot;</th>
</tr>
</thead>
</table>
| Ratings        | Stainless Steel: 481 bar @ 38°C & 243 bar @ 538°C  
Carbon Steel: 454 bar @ 38°C & 296 bar @ 343°C |
| Features       | Low cost; easy to install; non-rotating tip stem; fully backseated bonnets |
**EM59**

**Economical Gauge Pressure Manifold Valves**

A compact remote two valve manifold that functions as a shutoff and vent valve for static pressure instrumentation. It reduces the number of threaded connections, resulting in fewer potential leak points.

**Sizes**  
1/2”

**Ratings**  
414 bar @ 38°C; 290 bar @ 204°C (Stainless Steel with TFE packing)

**Features**  
Easy to install; less material and labor costs

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**HM58**

**Level Manifold Valves**

Simplified, lower cost alternatives to traditional manifolds used in D/P level installations. Eliminates the need for tubing, fittings, instrument pipe stands and their associated installation costs.

**Sizes**  
1/2”, 1”, 1-1/2”, 2”, 3”, 4”

**Ratings**  
481 bar @ 38°C; 243 bar @ 538°C (Stainless Steel with graphite packing); 232°C limit for Teflon

**Features**  
Can be used for vented or closed tank, bottom or side-mounted installations or for tank top mounted bubbler installations.

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**HM45**

**In-line Manifold Valves**

A general purpose instrument manifold designed for connecting differential pressure transmitters to impulse line tubing. Connectors are 1/2” NPT on industry standard 2-1/8” center-to-center dimensions.

**Sizes**  
1/4”; 3/8”; 1/2”; 3/4”; 1”

**Ratings**  
481 bar @ 38°C; 243 bar @ 538°C (Stainless Steel with graphite packing); 232°C limit for Teflon

**Features**  
VOC emission compliance; non-rotating tip stem; minimum emission flange; removable bracket option
**EM45**

A general purpose instrument manifold designed for connecting differential pressure transmitters or flow recorders to impulse line tubing.

- **Sizes**: 1/2"
- **Ratings**: 414 bar @ 38°C; 290 bar @ 204°C (Stainless Steel with TFE packing)
- **Features**: Available with integral hard seats; 316-NACE Stainless Steel body & trim and Teflon or Graphite Packing

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**HM46**

The same design as the HM45 but also incorporating a vent valve allowing a technician to perform instrument bleed or blowdown procedures.

- **Sizes**: 1/4", 3/8", 1/2", 3/4", 1"
- **Ratings**: 481 bar @ 38°C; 243 bar @ 538°C (Stainless Steel with graphite packing); 232°C limit for Teflon
- **Features**: VOC emission compliance; non-rotating tip stem; minimum emission flange; removable bracket option

---

**HM53**

Used to perform the block, equalizing and vent requirements of differential pressure transmitter applications. The single mounting flange allows the transmitter to bolt directly to the manifold, eliminating the piping of excess tubing and nipples.

- **Sizes**: 1/2" x Instrument Flange
- **Ratings**: 481 bar @ 38°C; 243 bar @ 538°C (Stainless Steel with graphite packing); 232°C limit for Teflon
- **Features**: VOC emission compliance; non-rotating tip stem; minimum emission flange; removable bracket option

---

**EM53**

Economical Single Flanged Manifolds

Used to perform the block, equalizing and vent requirements of differential pressure transmitter applications. Has a single mounting flange allowing the transmitter to bolt directly to the manifold.

- **Sizes**: 1/2" x Instrument Flange
- **Ratings**: 414 bar @ 38°C; 290 bar @ 204°C (Stainless Steel with TFE packing)
- **Features**: Available with integral hard seats; 316-NACE stainless Steel body & trim and Teflon or Graphite Packing
**HM54**

**Double Flanged Manifold Valves**

Used to perform the block, equalizing and vent requirements of differential pressure transmitters. The manifold can bolt directly to the instrument and can be mated directly to the orifice flange using futbol flanges and short nipples.

**Sizes**

- Instrument Flange x Instrument Flange

**Ratings**

- 481 bar @ 38°C; 243 bar @ 538°C (Stainless Steel with graphite packing); 232°C limit for Teflon

**Features**

- VOC emission compliance; non-rotating tip stem; minimum emission flange; removable bracket option

---

**EM54**

**Economical Double Flanged Manifold Valves**

Used to perform the block, equalizing and vent requirements of differential pressure transmitters. The manifold can bolt directly to the instrument and can be mated directly to the orifice flange using futbol flanges and short nipples.

**Sizes**

- Instrument Flange x Instrument Flange

**Ratings**

- 414 bar @ 38°C; 290 bar @ 204°C (Stainless Steel with TFE packing)

**Features**

- VOC emission compliance; minimum emission flange; removable bracket option

---

**HM10/13/14/16/18**

**Rigid Mount Manifold Valves**

The rigid mount manifolds feature an integral mounting flange, eliminating the extra bolting associated with a transmitter mounting bracket.

**Sizes**

- 1/2" x Instrument Flange

**Ratings**

- 481 bar @ 38°C; 243 bar @ 538°C (Stainless Steel with graphite packing); 232°C limit for Teflon

**Features**

- Non-rotating tip stem; your choice of mounting options; fully packed bonnets
FIVE VALVE MANIFOLD VALVES

**HM57**

Two shutoff valves, two equalizing valves and a vent/calibration valve in a single, compact assembly. The double equalizing arrangement insures against measurement error that can occur from equalizer leakage between high and low pressure connections.

- **Sizes**: 1/2", Flanged
- **Ratings**: 481 bar @ 38°C; 243 bar @ 538°C (Stainless Steel with graphite packing); 232°C limit for Teflon
- **Features**: Reduce costs & installation time; integral vent/calibration valve; fewer leak points; your choice of mounting styles

**EM57**

Two shutoff valves, two equalizing valves and a vent/calibration valve in a single, compact assembly. The double equalizing arrangement insures against measurement error that can occur from equalizer leakage between high and low pressure connections.

- **Sizes**: 1/2", Flanged
- **Ratings**: 414 bar @ 38°C; 290 bar @ 204°C (Stainless Steel with TFE packing)
- **Features**: Precise measurement; ideal for custody transfer or other critical flows

**HM37**

Two isolation valves, two equalizing valves and a vent/calibration valve in a single, compact assembly. When expensive liquid or gas changes ownership, precise measurement is critical.

- **Sizes**: Flanged
- **Ratings**: 207 bar @ 38°C; 103 bar @ 93°C
- **Features**: User friendly design; longer body; mounting taps for universal bracket installation; o-ring bonnets; 2 configurations
**HE30**

A compact and cost effective alternative to the more costly five-valve manifold. Delrin or Teflon soft seat valves insure redundant equalizer isolation, eliminating the possibility of costly leaks there or through the vent/calibrate valve.

<table>
<thead>
<tr>
<th>Sizes</th>
<th>1/4”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratings</td>
<td>103 bar @ 38°C; 34 bar @ 93°C</td>
</tr>
<tr>
<td>Features</td>
<td>Delrin seats insure tight shutoff; offset vent valve for ergonomic handle operation, non-rotating tip stem</td>
</tr>
</tbody>
</table>

**EH37**

Designed for direct mounting to the transmitter with a threaded inlet and instrument flanged outlet. The unique, compact barstock design makes this a good choice when a direct mount manifold with vent and calibration access is crucial.

<table>
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<tr>
<td>Ratings</td>
<td>414 bar @ 38°C; 290 bar @ 204°C (Stainless Steel with TFE packing)</td>
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<tr>
<td>Features</td>
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**HM37**

Two isolation valves, two equalizing valves and a vent/calibration valve in a single, compact assembly. When expensive liquid or gas changes ownership, precise measurement is critical.

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<tr>
<td>Features</td>
<td>User friendly design; longer body; mounting taps for universal bracket installation; o-ring bonnets; 2 configurations</td>
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</tbody>
</table>
PM SERIES

Three & Five Valve Power Manifold Valves

A complete line of three and five valve instrument manifolds for the power industry. For in-line, single flanged for mounting, double flanged for direct mounting and direct mounted compact wafer.

Sizes: 1/2", 3/4", Flanged

Ratings: 414 bar @ 38°C; 209 bar @ 538°C (Stainless Steel with Graphite Packing)

Features: Conforms to the Power Standards ANSI B31.1 and B31.3 specifications

PM SERIES

Two Valve Power Manifold Valves

Available as a primary block valve, bleed valve and secondary shutoff valve into one small unit, or a line-mounted manifold that functions as a shutoff and bleed valve for static pressure instrumentation.

Sizes: 1/2", 3/4", Flanged

Ratings: 414 bar @ 38°C; 209 bar @ 538°C (Stainless Steel with Graphite Packing)

Features: Conforms to the Power Standards ANSI B31.1 and B31.3 specifications

PM75

Power Manifold Valves

Designed for remote mounting of differential pressure transmitters. It includes two isolation valves, one test valve and two test/purge valves. The manifold can be mounted via pipe stand or instrument rack.

Sizes: 1/2", 3/4", Flanged

Ratings: 414 bar @ 38°C; 209 bar @ 538°C (Stainless Steel with Graphite Packing)

Features: Conforms to the Power Standards ANSI B31.1 and B31.3 specifications
PM76  
**Five Valve Power Manifold Valves**

Designed for direct mounting to transmitter by unique wafer design. The compact design eliminates the requirement for additional tubing or piping from manifold to transmitter.

<table>
<thead>
<tr>
<th>Sizes</th>
<th>1/2&quot;, 3/4&quot;, Flanged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratings</td>
<td>6000 psig @ 100°F; 3030 psig @ 1000°F (Stainless Steel with Graphite Packing)</td>
</tr>
<tr>
<td>Features</td>
<td>Conforms to the Power Standards ANSI B31.1 and B31.3 specifications</td>
</tr>
</tbody>
</table>

PM10/13/14/16/18  
**Rigid Mount Power Manifold Valves**

Can mount directly to the pipe stand securing the impulse lines so the transmitter can be installed or removed independently of the piping.

<table>
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<th>1/2&quot;, 3/4&quot;, Flanged</th>
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<tbody>
<tr>
<td>Ratings</td>
<td>414 bar @ 38°C; 209 bar @ 538°C (Stainless Steel with Graphite Packing)</td>
</tr>
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<td>Features</td>
<td>Conforms to the Power Standards ANSI B31.1 and B31.3 specifications</td>
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</table>

PG46  
**Gauge Power Valves**

Provides three outlet connections to facilitate the mounting of gauges and other static pressure instrumentation in a variety of positions. The design results in a compact installation with minimal leak points.

<table>
<thead>
<tr>
<th>Sizes</th>
<th>1/4&quot;, 1/2&quot;, 3/4&quot;, 1&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratings</td>
<td>414 bar @ 38°C; 209 bar @ 538°C (Stainless Steel with Graphite Packing)</td>
</tr>
<tr>
<td>Features</td>
<td>Conforms to the Power Standards ANSI B31.1 and B31.3 specifications</td>
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PN49  
**Needle Power Valves**

A fully packed needle valve for high pressure and high temperature applications. Produced in a wide variety of inlet and outlet sizes.

<table>
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<th>1/4&quot;, 1/2&quot;, 3/4&quot;, 1&quot;</th>
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<tr>
<td>Ratings</td>
<td>414 bar @ 38°C; 209 bar @ 538°C (Stainless Steel with Graphite Packing)</td>
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<td>Features</td>
<td>Conforms to the Power Standards ANSI B31.1 and B31.3 specifications</td>
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</table>
For critical services, the PB59 block and bleed valve features a fully packed and backseated block valve along with a fully packed integral bleed valve.

**Sizes**
1/4", 1/2", 3/4", 1"

**Ratings**
414 bar @ 38°C; 209 bar @ 538°C (Stainless Steel with Graphite Packing)

**Features**
Conforms to the Power Standards ANSI B31.1 and B31.3 specifications

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A soft seated multi-valve manifold that allows you to connect one air/gas source to the inlet for distribution of up to twelve separate work stations. Used in place of conventional methods for the distribution of plain air and purge gases.

**Sizes**
1/4", 1/2", 3/4", 1"

**Ratings**
103 bar @ 38°C; 34 bar @ 93°C

**Features**
Reduce costs and installation time; reduces potential leakage; integral mounting plates; fully backseated bonnets; anti-tamper handles

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A sample/drain valve used to extract a fresh sample while providing tight shutoff and high pressure and temperature capabilities.

**Sizes**
3/4", 1", 1-1/2"

**Ratings**
214 bar @ 38°C; 148 bar @ 538°C (Stainless Steel with Graphite Packing)

**Features**
Wide material selection suits a variety of applications & services; reciprocating stem; dual seating option
HGSY/HGVS

Act as thermal and liquid seal barriers between hot process vapors (such as steam and heat transfer fluids) and the gauge pressure instrument. It provides maximum instrumentation protection in half the space.

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Ratings</td>
<td>414 bar @ 38°C; 209 bar @ 538°C (Stainless Steel with graphite packing, if applicable)</td>
</tr>
<tr>
<td>Features</td>
<td>Minimizes space/radius requirements; minimizes deflection stress; thermal protection; leak point minimization</td>
</tr>
</tbody>
</table>