

# 2-Valve Manifolds - Remote/Line Mount

## Ordering information

Example 1 (Default): **HLS2V**

Example 2: **HLS2V4RM8RF4F3P**

Example 3: **HNLWGS3DBB8M8R4FPOXNC**

Example 4: **HALS2VIVAM126ATK**

Example 5: **HNL6MO2VM12ATHLNC**

Example 6: **HLS3DBBIVZI84FPOX**

Example 7: **HL6MO3DBBIVAM12PFCAM6NC**

| Series                                             |                                                                                                 |                                                        |                             |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------|
| HNL                                                | Straight barstock gauge valves, long pattern                                                    |                                                        |                             |
| HNLWG                                              | Straight barstock gauge valves, long pattern with Integral Swivel Gauge connection <sup>1</sup> |                                                        |                             |
| HL                                                 | Flat barstock gauge valves, short pattern                                                       |                                                        |                             |
| HLWG                                               | Flat barstock gauge valves, short pattern with Integral Swivel Gauge connection <sup>1</sup>    |                                                        |                             |
| HAL                                                | Angled barstock gauge valves, short pattern                                                     |                                                        |                             |
| HALWG                                              | Angled barstock gauge valves, short pattern with Integral Swivel Gauge connection <sup>1</sup>  |                                                        |                             |
| HLLTF                                              | Flat barstock gauge valves with valves on top face                                              |                                                        |                             |
| HLLHV                                              | Flat barstock gauge valves, short pattern with valves at 90 degree and left hand orientation    |                                                        |                             |
| Materials                                          |                                                                                                 |                                                        |                             |
| S                                                  | 316/316L Stainless Steel                                                                        | HC                                                     | Alloy C276                  |
| 6MO                                                | 6MO Sup. Aust. St.Steel                                                                         | T                                                      | Titanium Gr. 2 <sup>2</sup> |
| M                                                  | Alloy M400 <sup>2</sup>                                                                         | 825                                                    | Alloy 825                   |
| D1                                                 | Duplex 22 Cr. Steel                                                                             | 625                                                    | Alloy 625                   |
| D2                                                 | Super Duplex 25 Cr. Steel                                                                       | C                                                      | Carbon Steel <sup>3</sup>   |
| Application Configuration                          |                                                                                                 |                                                        |                             |
| 2V                                                 | 2-valve, block and bleed/vent/drain, isolate and calibrate                                      |                                                        |                             |
| 3DBB                                               | 3-valve, double isolate and bleed/vent/drain, block-bleed-block <sup>4</sup>                    |                                                        |                             |
| 3DBB1                                              | 3-valve, double isolate and bleed/vent/drain, block-block-bleed <sup>4</sup>                    |                                                        |                             |
| Connections - Standard Options                     |                                                                                                 |                                                        |                             |
|                                                    | Inlet                                                                                           | Outlet                                                 | Vent                        |
| *                                                  | 1/2" NPT Fem.                                                                                   | 1/2" NPT Fem.                                          | 1/4" NPT Fem.               |
| 4N                                                 | 1/4" NPT Fem.                                                                                   | 1/4" NPT Fem.                                          | 1/4" NPT Fem.               |
| 4K                                                 | 1/4" BSPT Fem.                                                                                  | 1/4" BSPT Fem.                                         | 1/4" BSPT Fem.              |
| 4R                                                 | 1/4" BSPP Fem.                                                                                  | 1/4" BSPP Fem.                                         | 1/4" BSPP Fem.              |
| 8K                                                 | 1/2" BSPT Fem.                                                                                  | 1/2" BSPT Fem.                                         | 1/4" BSPT Fem.              |
| 8R                                                 | 1/2" BSPP Fem.                                                                                  | 1/2" BSPP Fem.                                         | 1/4" BSPP Fem.              |
| 4M4F4F                                             | 1/4" NPT Male                                                                                   | 1/4" NPT Fem.                                          | 1/4" NPT Fem.               |
| 8M8F4F                                             | 1/2" NPT Male                                                                                   | 1/2" NPT Fem.                                          | 1/4" NPT Fem.               |
| 12M8F4F                                            | 3/4" NPT Male                                                                                   | 1/2" NPT Fem.                                          | 1/4" NPT Fem.               |
| 4A                                                 | 1/4" A-LOK <sup>5</sup>                                                                         | 1/4" A-LOK <sup>5</sup>                                | 1/4" NPT Fem.               |
| 6A                                                 | 3/8" A-LOK <sup>5</sup>                                                                         | 3/8" A-LOK <sup>5</sup>                                | 1/4" NPT Fem.               |
| 8A                                                 | 1/2" A-LOK <sup>5</sup>                                                                         | 1/2" A-LOK <sup>5</sup>                                | 1/4" NPT Fem.               |
| M6A                                                | 6mm A-LOK <sup>5</sup>                                                                          | 6mm A-LOK <sup>5</sup>                                 | 1/4" NPT Fem.               |
| M10A                                               | 10mm A-LOK <sup>5</sup>                                                                         | 10mm A-LOK <sup>5</sup>                                | 1/4" NPT Fem.               |
| M12A                                               | 12mm A-LOK <sup>5</sup>                                                                         | 12mm A-LOK <sup>5</sup>                                | 1/4" NPT Fem.               |
| Other Connection Options <sup>6</sup>              |                                                                                                 |                                                        |                             |
| *F                                                 | Fem. NPT connection. Utilise for non-default selections                                         |                                                        |                             |
| *M                                                 | Male NPT connection. Utilise for non-default selections                                         |                                                        |                             |
| *#F                                                | Fem. connection. Utilise when connections and specifications vary                               |                                                        |                             |
| *#M                                                | Male connection. Utilise when connections and specifications vary                               |                                                        |                             |
|                                                    | K                                                                                               | BSPT BS21, ISO7/1 - British Standard Taper Pipe thread |                             |
|                                                    | R                                                                                               | BSPP BS2779 - British Standard Parallel Pipe thre      |                             |
|                                                    | RD                                                                                              | DIN 16284/16288/EN837 BSPP gauge connection type       |                             |
| SW*                                                | ASME B16.11, EN12760 Female Socket Weld <sup>7</sup>                                            |                                                        |                             |
| *M2X                                               | ISO Metric M20x1.5 Parallel Pipe thread - outlet option with Swivel Gauge connection (WG type)  |                                                        |                             |
| Butt Weld and Male Socket Weld - Pipe <sup>8</sup> |                                                                                                 |                                                        |                             |
| Type                                               | Size                                                                                            | Schedule (Thickness)                                   | Extension                   |
| BW                                                 | Butt Weld <sup>9</sup>                                                                          | 4 1/4" NB                                              | * Default                   |
|                                                    |                                                                                                 | 6 3/8" NB                                              |                             |
| MSW                                                | Male Socket Weld <sup>10</sup>                                                                  | 8 1/2" NB                                              | C 75mm                      |
|                                                    |                                                                                                 | 12 3/4" NB                                             | D 100mm                     |
| Inverted Connection and PTFree connect™            |                                                                                                 |                                                        |                             |
| Type                                               | Fitting                                                                                         | Unit                                                   | Inlet/Outlet                |
| IV                                                 | Inverted Connection Tube OD <sup>11</sup>                                                       | M Metric                                               | 6 6mm                       |
|                                                    |                                                                                                 |                                                        | 10 10mm                     |
| PF                                                 | PTFree connect tube stub <sup>12</sup>                                                          |                                                        | 12 12mm                     |
| PFC                                                | PTFree connect male union <sup>12</sup>                                                         | I Imperial                                             | 4 1/4"                      |
|                                                    |                                                                                                 |                                                        | 6 3/8"                      |
|                                                    |                                                                                                 |                                                        | 8 1/2"                      |
|                                                    |                                                                                                 |                                                        | 4F 1/4" NPT <sup>13</sup>   |

|                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <sup>1</sup> Available as standard with 1/2" BSPP ( <b>8R</b> ); 1/4" BSPP ( <b>4R</b> ) by special request. Available only in 316SS. Consult your local Parker support for other potential material options. |
| <sup>2</sup> This material selection down-rates manifold.                                                                                                                                                     |
| <sup>3</sup> For Carbon Steel consult your local Parker representation.                                                                                                                                       |
| <sup>4</sup> Available on <b>HL</b> and <b>HNL</b> series only.                                                                                                                                               |

\* Default connection, no designator required.

<sup>5</sup> Available on **HNL** series only.  
For CPI™ (single ferrule tube fitting) connection change **A** to **Z**.  
1/4" NPT Fem. is default standard, some model types may be available with other connections.

<sup>6</sup> Default standard manifolds require no additional designators. Example: 1/2" NPT Fem. inlet & 1/2" NPT Fem. outlet & 1/4"NPT Fem. vent = **HL\*2V** (as example above).  
As connection choices vary, all connections must be designated. **Examples:**  
• 1/4" NPT Male (**4M**) inlet, 1/2" NPT Fem. (**8F**) outlet, 1/4" NPT Fem. vent (**4F**) = **4M8F4F**  
• 1/2"BSPP Fem. (**8RF**) inlet & 1/2"BSPP Fem. (**8RF**) outlet & 1/4"NPT Fem. vent (**4F**) = **8RF8RF4F**  
• 1/2"BSPP Fem. (**8RF**) inlet & 1/2"BSPP Fem. (**8RF**) outlet & 1/4"BSPT Fem. (**4KF**) vent = **8RF8RF4KF**  
\* Insert size designator.  
# Insert specification (**K/R/RD**).

<sup>7</sup> As standard, valves with Female Socket Weld connections will be of the same length as per the equivalent NPT pipe threaded variants.

<sup>8</sup> Available on **HNL** series only.

<sup>9</sup> No designator required.

<sup>10</sup> As standard, valves with Male Socket Weld conn. will have 1/2" (13mm) added to overall length (per connection) when compared to equivalent threaded valve. Extended body dimensions are also offered - see tables and main catalogue.

<sup>11</sup> As standard, valves with Male Socket Weld conn. will have 1/2" (13mm) added to overall length (per connection) when compared to equivalent threaded valve. Extended body dimensions are also offered - see tables and main catalogue. **Example:**  
3/4" NB male socket weld conn. with Sch.XXS wall pipe and 100mm body extension = **MSW12BD**.

<sup>12</sup> **Examples:**  
• 10mm A-LOK inverted inlet/outlet & 1/4" NPT Fem. vent/drain = **IVAM104F**  
• 10mm CPI inverted inlet/outlet & 1/4" NPT Fem. vent/drain = **IVZM104F**

<sup>13</sup> **Examples:**  
• 10mm A-LOK tube stub con. inlet/outlet & 1/4" NPT Fem. vent/drain = **PFAM104F**  
• 3/8" CPI male union con. inlet/outlet & 1/4"NPT Fem. vent/drain = **PFCZ164F**

<sup>14</sup> 1/4" NPT Fem. is default standard for bleed/vent/drain, some model types may be available with other connections

- 2-valve block & bleed/isolate & calibrate/vent/drain, short pattern flat barstock manifold, manufactured from 316 Austenitic Stainless Steel material, having 1/2" NPT Fem. connection to both inlet & outlet and a 1/4" NPT fem. bleed/vent/drain connection. Gland packing is PTFE.
- 2-valve block & bleed/isolate & calibrate/vent/drain, long pattern flat barstock manifold, manufactured from 316 Austenitic Stainless Steel material, having 1/4" BSPP Male connection to inlet & 1/2" BSPP Fem. outlet with 1/4" NPT Fem. vent/drain connection. Gland packing is Graphite and a 1/4" NPT blanking plug is supplied.
- 3-valve block-bleed-block/double isolate & bleed/vent/drain, long pattern barstock manifold, manufactured from 316 Aust.St.St., with 1/2" NPT male inlet connection, 1/2" BSPP fem. outlet connection via integral welded swivel and 1/4" NPT fem. vent/drain/bleed. A 1/4" NPT blanking plug is supplied. Suitable for oxygen service and complies to NACE.
- 2-valve angle head block & bleed/isolate & calibrate/vent/drain, short pattern flat barstock manifold, 316 Aus.St.St. material with Parker Superior Advantage 12mm inverted tube con. to inlet and outlet. The bleed/vent/drain is also an inverted A-LOK tube con. suitable for 6mm tube. Gland packing is PTFE. Anti-Tamper operation and a single key.
- 2-valve block & bleed, long pattern manifold, manufactured from 6MO super austenitic stainless steel material with Parker A-LOK 12mm integral tube connections to inlet and outlet and 1/4" NPT fem. vent/drain/bleed. Manifold is also fitted with locking T bar handle operation and is compliant to NACE.
- 3-valve block-bleed-block/double isolate & calibrate vent/drain, flat barstock manifold manufactured from 316 Austenitic Stainless Steel material having Parker Superior 1/2" Inverted integral CPI tube connections and a 1/4" NPT fem. vent/drain/bleed. Gland packing is PTFE. A 1/4" NPT blanking plug is supplied. Suitable for oxygen service.
- 3-valve block-bleed-block/double isolate & calibrate vent/drain, flat barstock manifold manufactured from 6MO Super Austenitic Stainless Steel material having Parker Superior Advantage 12mm inverted integral A-LOK tube connections to inlet and outlet with 6mm integral PTFree male union A-LOK tube connection to vent/drain/bleed. Gland packing is PTFE and the manifold complies to NACE.

| OPTIONS                                     |                                                   |
|---------------------------------------------|---------------------------------------------------|
| High Pressure - 10,000 PSI (689 bar) option |                                                   |
| <b>HP</b>                                   | High Pressure                                     |
| Gland Packing Options                       |                                                   |
| <b>3</b>                                    | Graphite <sup>14</sup>                            |
| <b>FS</b>                                   | Firesafe design <sup>15</sup>                     |
| Seating Options - Needle Valves only        |                                                   |
| <b>6S</b>                                   | 6mm bore seat <sup>16</sup>                       |
| <b>RT</b>                                   | Regulating/Metering Tip                           |
| <b>ST</b>                                   | Stellite Tip                                      |
| <b>9</b>                                    | PCTFE Soft Tip <sup>17</sup>                      |
| <b>PK</b>                                   | PEEK Soft Tip                                     |
| Plug/Bleed Valve Options <sup>18</sup>      |                                                   |
| <b>P</b>                                    | Blank Plug                                        |
| <b>BV</b>                                   | Bleed Valve/Plug                                  |
| Operator Options <sup>19</sup>              |                                                   |
| <b>HW</b>                                   | Handwheel for all valves                          |
| <b>LHW</b>                                  | Handwheel Locking for all valves                  |
| <b>THL</b>                                  | T Bar Locking for all valves                      |
| <b>AT</b>                                   | Anti-Tamper for all valves <sup>20</sup>          |
| <b>ATK</b>                                  | Anti-Tamper for all valves with Key <sup>21</sup> |
| <b>ATHKEY</b>                               | Anti-Tamper Key <sup>22</sup>                     |
| Mounting Options                            |                                                   |
| <b>BK</b>                                   | Assembled with Carbon Steel bracketry & bolts     |
| <b>BKS</b>                                  | Assembled with Stainless Steel bracketry & bolts  |
| Other Options                               |                                                   |
| <b>OX</b>                                   | Cleaned & lubricated for Oxygen use               |
| <b>NC</b>                                   | NACE MR-01-75 Compliant                           |
| <b>M*</b>                                   | Assembly and Test of Free Issue Instrument        |

<sup>14</sup> Not required when Firesafe design option (**FS**) selected.

<sup>15</sup> Not available for PCTFE Soft Tip (**9**) or Oxygen use (**OX**).

<sup>16</sup> 6mm bore seat and other flow passages not available on all selections. Please consult your local Parker support.

<sup>17</sup> 3,000 PSI/207 BAR only. See catalogue page 14.

<sup>18</sup> Plugs supplied loose in a packing box. See page 61.

<sup>19</sup> These options can be specified to independent valves:  
Add **I** to specify specify assembly to Isolate valves.  
Add **V** to specify specify assembly to Vents/Drains/Bleeds.  
Examples:  
• **ATI** = Anti-Tamper to Isolate valve.  
• **HWV** = Handwheel to Vents/Drains/Bleeds.  
<sup>20</sup> Anti-Tamper operation and no Key.  
<sup>21</sup> Anti-Tamper operation and one Key supplied per manifold.  
<sup>22</sup> Specify quantity required as separate line item.

\* Specify assembly and test option - see page 71.

### IMPORTANT NOTES:

- For optimum results in integral tube connections on manifolds, the use of Parker pre-assembly tooling is highly recommended. For inverted style integral tube connections the use of Parker pre-assembly tooling is mandatory.
- Not all options/combinations are available in each single product model type.
- We reserve the right to review/revise this part number structure at any time. If necessary, we can refuse and/or recommend the most suitable alternative part number(s). We may also apply MOQ rules.
- Should your part number selection exceed 25 characters in length when completed, then it is likely to be incorrect, please consult your local Parker representation for assistance.
- If in any doubt, please consult your local Parker representation.

# Mounting Brackets

## Brackets for remote/line mount manifolds and gauge valves

It is essential to fully support impulse/pressure measurement tubing lines, manifolds and instruments. For this reason, all Parker manifolds are designed to accommodate bracket mounting and support.

A full range of bracket mounting kits can be supplied fully assembled to the manifolds, or supplied separately for on-site installation. Available in either all carbon or all stainless steel, they are specifically matched to Parker manifolds to ensure the clearance

needed to efficiently operate all handles and are also designed to offer maximum rigidity and support in horizontal or vertical orientations on panels, walls or 2" NB pipe stands.

Parker is also able to offer all other items necessary to complete your installations, including the 2"NB pipe stands, tubing clamps, cable/tube trays, populated enclosure solutions and much more. For further information please contact your local Parker support.

### Brackets for 2-valve remote mount manifolds - BKT1



Image shown: Part No.: HLS2VBK

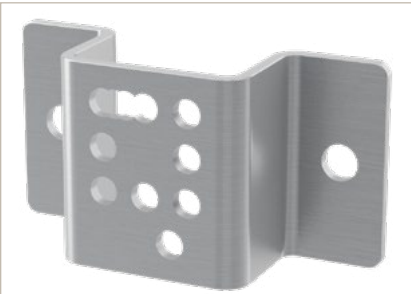
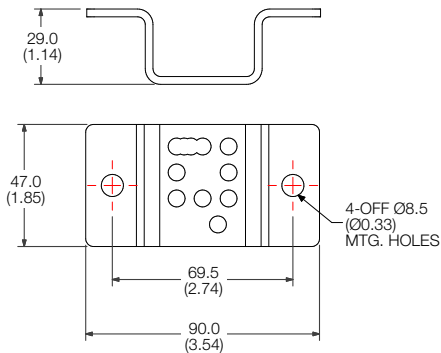


Image shown: Part No.: BKT1SSB1



#### How to order:

| Item                                                                                    | Part Number                    |                                   | Suitable for Manifold Type                 |
|-----------------------------------------------------------------------------------------|--------------------------------|-----------------------------------|--------------------------------------------|
|                                                                                         | Bracket material: Carbon Steel | Bracket material: Stainless Steel |                                            |
| Bracket with M8 'U' Bolt and manifold Bolt Kit (Nuts and washers: M5 x 45 Bolt (2-OFF)) | BKT1CSB1                       | BKT1SSB1                          | HL*2V<br>HL*2V8M8F4F<br>HAL*2V<br>HLLHV*2V |

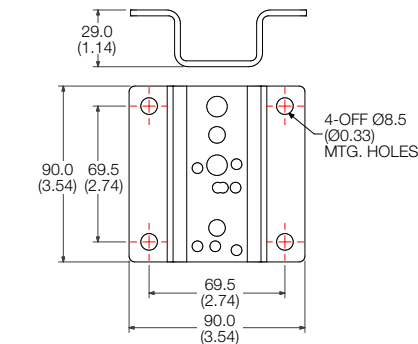
### Brackets for 2-valve remote mount manifolds and 3-valve DBB manifolds - BKT2



Image shown: Part No.: HLS3DBBBK



Image shown: Part No.: BKT2SSB2



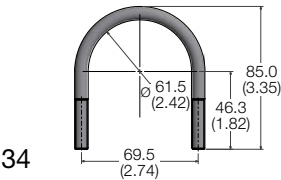
#### How to order:

| Item                                                                                      | Part Number                    |                                   | Suitable for Manifold Type |
|-------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------|----------------------------|
|                                                                                           | Bracket material: Carbon Steel | Bracket material: Stainless Steel |                            |
| Bracket with M8 'U' Bolts and manifold Bolt Kit (Nuts and washers: M5 x 45 Bolt (2-OFF))  | BKT2CSB1                       | BKT2SSB1                          | HAL*2VHP<br>HLTF*2V        |
| Bracket with M8 'U' Bolts and manifold Bolt Kit (Nuts and washers: M10 x 12 Bolt (2-OFF)) | BKT2CSB2                       | BKT2SSB2                          | HL*3DBB<br>HL*3DBB1        |

#### 'U' bolt with nuts and washers for 2" NB standpipe



Bracket kits include U bolts with nuts and washers.

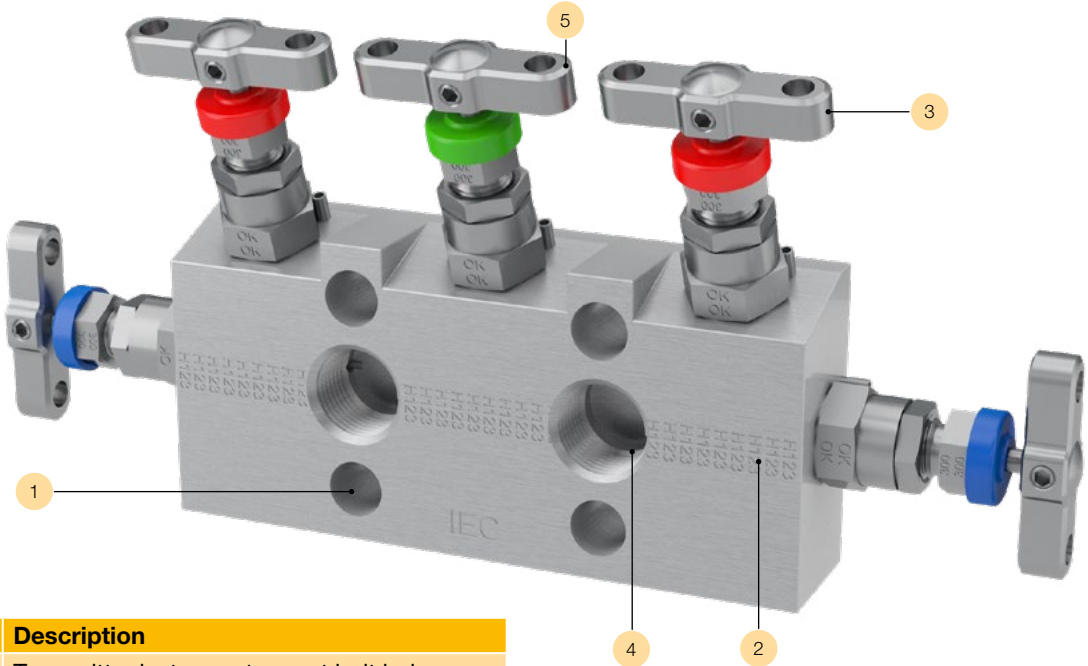


# 3 and 5-Valve Manifolds - H Series

## Introduction

Combining three or five bonnet assemblies into one block, this Parker 3 and 5-valve manifolds range is primarily used in applications requiring Differential Pressure Transmitters, Gauges and/or Chart Recorders mainly for the purpose of flow measurement. In some circumstances, differential pressure measurement will also be used in other applications, such as level or filtration.

In combination with Parker A-LOK® or CPI™ compression tube fittings and PTFree connect™ technologies, a superior advantage is gained allowing users to eliminate threaded connections and reduce leak paths, whilst offering superior installation and operational performance.



| Reference | Description                             |
|-----------|-----------------------------------------|
| 1         | Transmitter instrument mount bolt holes |
| 2         | Material heat code traceability         |
| 3         | Ergonomic T-bar operator                |
| 4         | Process inlet connection                |
| 5         | Transmitter equalise valve              |

|       |                 |
|-------|-----------------|
| BLUE  | Isolate/block   |
| RED   | Drain/vent/test |
| GREEN | Equalise        |

These manifolds are widely used in situations where a differential pressure measurement device requires maintenance, offering safe isolation to allow venting/drainage and calibration of that device. They also provide the means for removal and re-installation of an instrument in a live process situation. They are used in every industry in a wide range of applications - everywhere where accurate and secure pressure measurement of steam, air, gas, oil, water or other non-viscous liquids is required.

We are confident you will find a manifold style, type and connection option to suit your applications, but should you require something different or need assistance to make your selection, please contact your local Parker support.

These manifolds are available in a remote (or line) mount and in a direct mounting style for bolting directly to the face of Differential Pressure Transmitters with an array of input connection styles and types. The unique Parker superior advantage in this regard is being the ability to create a threadless leak-free hook up. Where additional operational security or functionality is required, a number of differing flow path configurations and additional ports are available to allow purging upstream or downstream of the isolation valves.



Example shown: 3-valve direct mount manifold with NPT connections and additional test/purge ports.