‘H’ Series Two Valve Manifolds
Catalog 4190-PM
‘H’ Series Two Valve Manifolds

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‘H’ Series Two Valve Manifolds

Introduction

With many years of manifold development and manufacture Parker Hannifin are able to offer the most comprehensive range of two valve block and bleed manifolds to suit all types of instrumentation installations, specifications and applications.

Now consolidated into one catalogue, selection can be made from a comprehensive range of bodies with a variety of connections and valve positions, optimising installation and access opportunities.

Designed to reduce installation costs and improve safety performance, the consolidation of valves into one unit provides you with a combination of instrument isolation together with bleed/vent and test facilities.

In addition to manufacturing manifolds Parker also produce a comprehensive range of single and twin ferrule high integrity tube fittings. Manufactured in a variety of materials these products are used extensively in the oil, gas, petro-chem, power, processing and many other markets.

By integrating these products, instrument manifolds and tube fittings, Parker can offer unique connection combinations which are specifically designed to eliminate site assembled threaded connectors, ingress of debris and contamination from thread sealant materials which often result in instrument failure, replacement and downtime. Eliminating the use of taper threads, factory assembled and tested connections will ensure improved performance through simpler assembly and installation procedures. This system provides total flexibility of tubing position with positive leak proof connections.

Continuous product development may from time to time necessitate changes in the details contained in this catalogue. Parker Hannifin reserve the right to make such changes at their discretion and without prior notification.

All dimensions shown in this catalogue are approximate and subject to change.
1. **POSITIVE HANDLE RETENTION DESIGN** featuring broached square engagement positioned by thread locked grub screw.

2. **“T” BAR** ergonomically designed for ease of operation. Anti-tamper and lockable devices can be supplied for on site retro-fit.

3. **DUST CAP** this has a dual purpose, preventing air born debris from contaminating the operating spindle thread and providing colour coded functional identification. Isolate (Blue) bleed/test (Red).

4. **GLAND PACKING ADJUSTER** for maximum packing stability and performance, simple and easily adjustable for gland wear compensation.

5. **GLAND ADJUSTER LOCK NUT** a secure anti vibration locking mechanism to prevent inadvertent gland adjuster loosening.

6. **ANTI BLOWOUT SPINDLE** designed for low torque operation with high quality micro mirror stem finish for positive gland sealing.

7. **GLAND PACKING (ADJUSTABLE)** chevron effect dual piece gland packing to provide maximum sealing area contact with minimum gland adjustment.

8. **THRUST BUSH** anti rotational adjustor bush ensures uniform packing compression, maximising pressure tight sealing and limiting cold flow passages.

9. **BONNET/BODY WASHER** annealed sealing washer to ensure complete atmospheric leakage and allowing on site retro-fit of bonnets with 100% re-sealing assurance.

All metallic standard parts are produced in stainless steel, for alternative materials please refer to page 18.

Manifolds produced in other specified materials will be provided with non-wetted parts as standard in stainless steel, this applies to items 1, 2, 4, 5 & 8.

**Specification**
- Height closed (standard and HP) = 47mm (1.85”)
- Height open (standard and HP) = 50.3mm (2.00”)
- Number of turns open/close - 3.5
- Stainless steel construction
- Maximum standard pressure up to 6,000 psig (414 barg)
- Maximum optional pressure (limited to HP suffix see page 8/9) up to 10,000 psig (689 barg)
- Temperature rating -54°C to +538°C (-65°F to +1000°F)
- PTFE standard gland packing (Graphoil optional)
- Maximum temperature PTFE 260°C (500°F)
- Maximum temperature Graphoil 538°C (1000°F)

**Features**
- Standard unit throughout manifold range
- Operating threads outside washout area
- Externally adjustable gland
- Low operating torque
- Alternative 10,000 psig (689 barg) range available
- Retro-fit kit for:- Anti-tamper spindle
  - Panel mounting
  - Lockable T bar
- Handwheel with lockable option
- Bonnet locking pin to prevent accidental removal fitted as standard
- Alternative graphoil packing for high temperature performance available
- Alternative self centering tip materials available for gaseous and aggressive fluids
- Safety back seated spindle prevents stem blowout and provides secondary back up stem seal
- Packing below threads to prevent lubricant washout
- All valves 100% factory tested
- NACE certified wetted parts available
- Optional cleaned and lubricated suitable for Oxygen service
- Heat code traceable body and bonnet

**Pressure vs Temperature**

![Pressure vs Temperature Graph](image)

- A - Graphoil packing
- B - PTFE packing
- B - 6000psi (414 bar) standard PTFE packing
- B - C 6000 psi (414 bar) standard Graphoil packing
- A - D PEEK tip
- C - E PCTFE tip

For safe reliable and repeatable performance
Optional manifold globe style bonnet design

For on-site assembly
The design options below can be simply retrofit to any “H” series standard manifold. Retrofit kit part numbers are listed next to the illustrated option and all parts will be supplied in stainless steel regardless of the parent body material.

For factory fitted assembly
To obtain factory assembled options the manifold part number must be suffixed with the option and function designator. This allows you to select one or both of the bonnets to be fitted with the selected option or, different options to be fitted to either of the bonnets. Function designator IS – isolate DR-drain/test.

Example HL*2VATDR – manifold with drain/bleed valve (DR) fitted with anti-tamper (AT). Isolate valve will be standard bonnet design.

Example HL*2VHWISTHLDR – manifold with isolate valve fitted with hand-wheel and drain/bleed valve fitted with “T” bar locking mechanism.

Note: Padlocks for lockable handwheels and “T” bars are not supplied (hole size 6mm/0.24”).

<table>
<thead>
<tr>
<th>Standard bonnet</th>
<th>T bar handle locking</th>
<th>Anti tamper spindle</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Standard bonnet" /></td>
<td><img src="image2" alt="T bar handle locking" /></td>
<td><img src="image3" alt="Anti tamper spindle" /></td>
</tr>
</tbody>
</table>

- Retro-fit kit part number KITTHL
- Factory assembled suffix THL

- For key only - part no. ATHKEY/1
- Retro-fit kit part number KITAT without key
- KITATK with key
- Factory assembled suffix AT without key
- ATK with key

<table>
<thead>
<tr>
<th>Handwheel</th>
<th>*Panel mounting</th>
<th>B31.1 Compliant</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image4" alt="Handwheel" /></td>
<td><img src="image5" alt="Panel mount kit" /></td>
<td><img src="image6" alt="B31.1 Compliant" /></td>
</tr>
</tbody>
</table>

- Retro-fit kit part number KITHW
- Factory assembled suffix HW

- Retro-fit kit part number KITLHW
- Factory assembled suffix LHW

- Retro-fit kit part number KITPM†
- Factory assembled suffix PM

† Panel mount kit for HP: KITPMHP

- See page 14 for details

*Panel mounting hole diameter = 26mm (1.02”), Panel thickness = Max 5mm (0.20”) Min 2.3mm (.09”).
‘H’ Series Two Valve Manifolds

Remote mount static pressure manifolds

Purpose
This series of two-valve manifolds combine valves into one unitised block to perform isolation, bleed and calibration of pressure transmitters, gauges and switches. Process, instrument and vent connections can be provided in a variety of sizes and thread forms including NPT, BSPT, and BSPP.

Instrument double block and bleed manifolds
Double block and bleed instrument manifolds for dual isolating and bleed purposes. Ideal for limited space and panel installations.

*For material codes see page 18.

For options see pages 19/20.
Remote mount static pressure manifolds

*Overall width with valves fully open

Standard product specification: self centering metal/metal seat, PTFE packed, stainless steel, T bar handle operation, 6000 psig (414 barg).

Standard range part numbers

<table>
<thead>
<tr>
<th>Part No</th>
<th>Inlet (NPT)</th>
<th>Outlet (NPT)</th>
<th>Bleed/test (NPT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HL*2V</td>
<td>1/2&quot; female</td>
<td>1/2&quot; female</td>
<td>1/4&quot; female</td>
</tr>
<tr>
<td>HAL*2V</td>
<td>1/2&quot; female</td>
<td>1/2&quot; female</td>
<td>1/4&quot; female</td>
</tr>
<tr>
<td>HL*2HVSDLH</td>
<td>1/2&quot; female</td>
<td>1/2&quot; female</td>
<td>1/4&quot; female</td>
</tr>
<tr>
<td>HL*2VTF</td>
<td>1/2&quot; female</td>
<td>1/2&quot; female</td>
<td>1/4&quot; female</td>
</tr>
<tr>
<td>HL*28M8F4F</td>
<td>1/2&quot; male</td>
<td>1/2&quot; female</td>
<td>1/4&quot; female</td>
</tr>
<tr>
<td>HL*3DBB</td>
<td>1/2&quot; female</td>
<td>1/2&quot; female</td>
<td>1/4&quot; female</td>
</tr>
<tr>
<td>HL*3DBB1</td>
<td>1/2&quot; female</td>
<td>1/2&quot; female</td>
<td>1/4&quot; female</td>
</tr>
</tbody>
</table>

*Insert material designator, see page 18

Function
Blue cap – isolate,
Red Cap – drain/bleed

Specification
- Maximum standard pressure up to 6,000 psig (414 barg), to ANSI Class 2500
- Temperature rating - see page 4
- Standard port sizes up to 1/2” NPT

Features
- Standard high performance bonnet design
- Colour coded valve function identification
- Alternative materials of construction available
- Optional port sizes and thread forms available: BSPTr, BSPP
- Socket and butt weld connections available
- PTFree connections available (see page 15)
- Blank and bleed plugs available
- NACE certified on request
- Optional cleaned and lubricated suitable for Oxygen service
- Heat code traceable body and bonnet
‘H’ Series Two Valve Manifolds

High pressure 10,000 psig (689 barg) two valve manifolds

Purpose
This series of manifolds have been designed for more aggressive applications and for operation up to 10,000 psig (689 barg).

Instrument double block and bleed manifolds
Designed for dual isolating and bleed purposes, ideal for limited space and panel installations.

*For material codes see page 18. For options see pages 19/20.
‘H’ Series Two Valve Manifolds

High pressure 10,000 psig (689 barg) two valve manifolds

**Standard product specification:** self centering metal/metal seat, PTFE packed, stainless steel, T bar handle operation, 10,000 psig (689 barg).

**Standard range part numbers**

<table>
<thead>
<tr>
<th>Part No</th>
<th>Inlet (NPT)</th>
<th>Outlet (NPT)</th>
<th>Bleed/test (NPT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HL*2VHP</td>
<td>1/2” female</td>
<td>1/2” female</td>
<td>1/4” female</td>
</tr>
<tr>
<td>HAL*2VHP</td>
<td>1/2” female</td>
<td>1/2” female</td>
<td>1/4” female</td>
</tr>
<tr>
<td>HL*28M8F4FHP</td>
<td>1/2” male</td>
<td>1/2” female</td>
<td>1/4” female</td>
</tr>
<tr>
<td>HL*3DBBHP</td>
<td>1/2” female</td>
<td>1/2” female</td>
<td>1/4” female</td>
</tr>
<tr>
<td>HL*3DBB1HP</td>
<td>1/2” female</td>
<td>1/2” female</td>
<td>1/4” female</td>
</tr>
</tbody>
</table>

*Insert material designator, see page 18

**Features**

- Standard high performance bonnet design
- Colour coded valve function identification
- Alternative materials of construction available
- Optional port sizes and thread forms available: BSPTr, BSPP
- Socket and butt weld connections available
- PTFree connections available (see page 15)
- Blank and bleed plugs available
- NACE certified on request
- Optional cleaned and lubricated suitable for Oxygen service
- Heat code traceable body and bonnet

**Function**

Blue cap – isolate,
Red Cap – drain/bleed

*Overall width with valves fully open
‘H’ Series Two Valve Manifolds

Direct mount static pressure manifolds

Purpose
This series of two valve manifolds is designed for direct mounting to process measurement pressure transmitters. Standard functions include isolation, test, bleed and calibration.

*For material codes see page 18.

For options see pages 19/20.
‘H’ Series Two Valve Manifolds

Direct mount static pressure manifolds

**Standard specification**: self centering metal/metal seat, PTFE packed, stainless steel, T bar handle operation, 6000 psig (414 barg). Supplied as standard with 1 off PTFE instrument seal and appropriate 7/16” UNF high tensile zinc plated carbon steel bolts.

**Standard range part numbers**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Inlet (NPT)</th>
<th>Outlet</th>
<th>Drain/bleed</th>
</tr>
</thead>
<tbody>
<tr>
<td>HD*2EXT</td>
<td>1/2” female</td>
<td>Flanged</td>
<td>1/4” female</td>
</tr>
<tr>
<td>HEF*2LH</td>
<td>Flanged</td>
<td>Flanged</td>
<td>1/4” female</td>
</tr>
<tr>
<td>HEF*2LH8N</td>
<td>1/2” female</td>
<td>Flanged</td>
<td>1/4” female</td>
</tr>
<tr>
<td>HD*2HLHFF</td>
<td>Flanged</td>
<td>Flanged</td>
<td>1/4” female</td>
</tr>
<tr>
<td>HD*2HLH</td>
<td>Flanged</td>
<td>Flanged</td>
<td>1/4” female</td>
</tr>
<tr>
<td>HD*2HLHCP</td>
<td>1/2” female</td>
<td>Flanged</td>
<td>1/4” female</td>
</tr>
</tbody>
</table>

*Insert material designator

**Function**
- Blue cap – isolate
- Red Cap – drain/bleed

All manifolds are drilled suitable for bracket mounting - standard manifold support brackets are available.

Straight through flow pattern rising plug valves are available for HEF*2LH and HEF*2LH8N.

*For material codes see page 18. For options see pages 19-20.

**Specification**
- Maximum standard pressure up to 6,000 psig (414 barg), to ANSI Class 2500
- Temperature rating - see page 4
- Standard port sizes up to 1/2” NPT

**Features**
- Standard high performance bonnet design
- Colour coded valve function identification
- Alternative materials of construction available
- Optional port sizes and thread forms available: BSPT, BSPP
- Socket and butt weld connections available
- PTFree connections available (see page 15)
- Blank and bleed plugs available
- NACE certified on request
- Optional cleaned and lubricated suitable for Oxygen service
- Heat code traceable body and bonnet
‘H’ Series Two Valve Manifolds

Flanged connected static pressure manifolds

Purpose
These manifolds are designed for fast and efficient installation and removal of pressure measurement instruments. Single kidney flange arrangements are provided with optional inlet connections for total installation flexibility, the redundant connection can also be used for purge operations.

The dual flanged model enables users to mount two pressure measuring devices connected to a common inlet, redundant cross-hole connections can be used for process purging.

Kidney flange connections can also be provided with male threaded outlet, A-LOK®, CPI™ or PTFree connections.

Closing the isolation valves and operating the bleed valve gives operators the opportunity of venting trapped pressurised fluids to an environmentally safe area. Further access through the bleed connection enables in-situ instrument calibration.

All manifolds are drilled suitable for bracket mounting – standard manifold support brackets are available.

*For material codes see page 18. For options see pages 19-20.
‘H’ Series Two Valve Manifolds

Standard dimensions


Standard range part numbers

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Inlet (NPT)</th>
<th>Outlet</th>
<th>Bleed/test (NPT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L*2V1KFMB</td>
<td>2 x 1/2&quot; female</td>
<td>1 x Flanged x 1/2&quot; female</td>
<td>1/4&quot; female</td>
</tr>
<tr>
<td>L*2V2KFMB</td>
<td>1/2&quot; female</td>
<td>2 x Flanged x 1/2&quot; female</td>
<td>1/4&quot; female</td>
</tr>
</tbody>
</table>

*Insert material designator

Function
Blue cap – isolate,
Red Cap – drain/bleed

Specification
- Maximum standard pressure up to 6,000 psig (414 barg), to ANSI Class 2500
- Temperature rating -40C to +204C (-40F to +400F)
- Standard port sizes up to 1/2” NPT

Features
- Standard high performance bonnet design
- Colour coded valve function identification
- Alternative materials of construction available
- Optional port sizes and thread forms available: BSPTr, BSPP
- Socket and butt weld connections available
- PTFree connections available (see page 15)
- Blank and bleed plugs available
- NACE certified on request
- Optional cleaned and lubricated suitable for Oxygen service
- Heat code traceable body and bonnet
- Mini bleed valves for compact installation

*For material codes see page 18. For option codes see pages 19-20.
‘H’ Series Two Valve Manifolds

Power plant products - compliant with ANSI B31.1

H Series Hand valves & manifolds
Designed and developed from our highly successful H series valves. These products meet the requirements of both ANSI B31.1 (Power plants) and B31.3 (Petrochemical plants), including the materials of construction.

Features
- All valves are graphite packed for high temperature service
- Non rotating, hard stem tip with metal to metal seating for bubble tight shut-off
- Back seat design
- Blow-out proof stem
- Pressures & temperatures in accordance with ASME class 2500
- Patented Tru-Lok safety bonnet locking device prevents accidental removal
- Standard orifice 4mm (Cv 0.35)

Specific pressure / temperature performance

316 SS
- 6000 psig @ 100°F (414 bar @ 38°C)
- 2915 psig @ 1000°F (201 bar @ 538°C)

Plus a range of manifolds:

Part numbering & Product range offered:
For H series valves and manifolds use CAT4190HV; CAT4190PM; CAT4190FM then replace the prefix ‘H’ with ‘HPP’. Eg: HNVS8FF becomes HPPNVS8FF3

Product range:
HPPNVS; HPPGV; HPPBSNVS2; HPPLS2V; HPPLS2HVSDLH; HPPALS2V; HPPLS3M; HPPLS5M; HPPDS2HLH; HPPDS3M; HPPDS5M; HPPEFS2/3/5

Consult factory or come and see us about other options.
‘H’ Series Two Valve Manifolds

PTFree connect™

Manifold connections
Many users continually desire the elimination of taper threads and their associated sealant.
The PTFree connect™ system enables users to assemble tube lines to any of the manifold ports without the need for PTFE tape or other liquid sealant.
The PTFree connection can be applied to any of the manifold featured in this catalogue. These will be factory fitted, pin locked and pressure tested.
PTFree connect™ enables angled tube connections to be swivelled until the optimum tube alignment position has been achieved. Assembly to the tube connector is achieved by tightening the standpipe nut one-quarter turn from the finger tight position.
Manifolds can also be supplied with male connectors using the same thread form as the PTFree connect™. They can be provided factory fitted, pin locked and tested before they leave our manufacturing plant.
Some size restrictions may be necessary due to the close proximity of some connections and the across flat hexagon dimensions, as a guide PTFree connect™ for inlet and outlet can be up to 1/2” or 12mm o/d., drain/bleed connections should be restricted to 1/4” or 6mm. For PTFree male connectors inlet and outlet should be restricted to 3/8” or 10mm and 1/4” or 6mm o/d for drain/bleed.

PTFree connect™
(Code FRC)

PTFree male connectors
(Code FRCM)

Part Number Construction Examples

<table>
<thead>
<tr>
<th>Manifold</th>
<th>Connection Style</th>
<th>A-LOK (L) or CPI“ (D) L or B</th>
<th>Metric or inch tube M or I</th>
<th>Inlet (E) + size</th>
<th>Outlet (X) + size</th>
<th>Drain/vent/test</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLS2V</td>
<td>FRC</td>
<td>L</td>
<td>M</td>
<td>E12</td>
<td>X12</td>
<td>D6</td>
</tr>
<tr>
<td>HALS2V</td>
<td>FRCM</td>
<td>B</td>
<td>I</td>
<td>E6</td>
<td>X6</td>
<td>D4N</td>
</tr>
</tbody>
</table>

Part No. HLS2VFRCLME12X12D6 = 2 valve manifold with all A-LOK PTFree connect™ Inlet 12mm, Outlet 12mm Drain/vent/test 6mm. Stainless steel standard construction.

Part No. HALS2VFRCMBIE6X6D6N = 2 valve manifold with CPI™ PTFree male connector Inlet 3/8 o.d, Outlet 3/8 o/d Drain/vent/test 1/4” NPT. Stainless steel standard construction.
‘H’ Series Two Valve Manifolds

Manifold bracket support

Purpose
It is essential to fully support impulse/pressure measurement tubing lines, manifolds and instruments. All Parker manifolds are designed to accommodate bracket mounting and support, a full range of brackets with additional U bolts are available.

Brackets are designed for panel and wall mounting and give full clearance for ease of handle operation. They are also suitable for vertical and horizontal positioning on 2” pipe-stand.

Standard brackets are produced from 4mm thick carbon steel plate to provide maximum rigidity and support. For full corrosion protection the brackets are shot blasted and zinc sprayed.

Alternative bracket material is available upon request.

Part No. BKT1CS
Simple to install bracket for horizontal/vertical 2” stanpipe, wall, panel or base mounting, bracket stand-off prevents handle obstruction.

Suitable for:
- HL*2V
- HL*28M8F4F
- HAL*2V
- HL*2HVSDLH
(Not suitable for HP versions)

For ‘U’ bolts suffix part no. with B.
Example BKT1CSB

For manifold/bracket bolts add ‘bolt set’ suffix from matrix.
Example: Bracket, ‘U’ bolt and manifold/bracket bolts BKT1CSB1 (suitable for H*L2V).

Part No. BKT2CS
Universal manifold mounting bracket suitable for all remote mount manifolds.
This bracket allows 90 degree positioning enabling total installation flexibility and prevents handle obstruction

Suitable for the above manifolds and:
- HL*2VTF
- HL*3DBB
- HL*3DBB1
- HAL*2VHP

Suitable for all HP versions

For ‘U’ bolts suffix part no. with B
Example BKT2CSB

For manifold/bracket bolts add bolt set suffix from matrix.
Example: Bracket, ‘U’ bolt and manifold/bracket bolts BKT2CSB2 (suitable for HL*3DBB).
‘H’ Series Two Valve Manifolds

Manifold bracket support

Part No. BKT3CS

Suitable for:
- HD*2HLH
- HD*2HLHCP
- HD*2HLHFF

For ‘U’ bolts suffix part no. with B
Example BKT3CSB

For manifold/bracket bolts add bolt set suffix from matrix.
Example: Bracket, ‘U’ bolt and manifold/bracket bolts BKT3CSB3 (suitable for HD*2HLH).

Part No. BKT4CS

Suitable for:
- HEF*2LH8N
- HEF*2LH

For ‘U’ bolt suffix part no. with B
Example BKT4CSB

For manifold/bracket bolts add bolt set suffix from matrix.
Example: Bracket, ‘U’ bolt and manifold/bracket bolts BKT4CSB4 (suitable for HEF*2LH).

‘U’ Bolt with nuts & washers for 2” NB standpipe

Part No. UBACS

Carbon steel standard

Universal manifold mounting bracket suitable for all direct mount manifolds. This bracket design enables horizontal or vertical instrument positioning.

For extruded style manifold blocks providing full base support for horizontal or vertical fixing to 2” pipestand.

Manifold/bracket bolts c/w nuts and washers.

<table>
<thead>
<tr>
<th>Manifold Part No.</th>
<th>Bolt Set</th>
<th>Part No.</th>
<th>Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>HL*2V</td>
<td>M5 x 45 Bolt</td>
<td>BS1</td>
<td>1</td>
</tr>
<tr>
<td>HAL*2V</td>
<td>M5 x 45 Bolt</td>
<td>BS1</td>
<td>1</td>
</tr>
<tr>
<td>HL*28M8F4F</td>
<td>M5 x 45 Bolt</td>
<td>BS1</td>
<td>1</td>
</tr>
<tr>
<td>HL*2HVSDLH</td>
<td>M5 x 45 Bolt</td>
<td>BS1</td>
<td>1</td>
</tr>
<tr>
<td>HL*2VTF</td>
<td>M5 x 45 Bolt</td>
<td>BS1</td>
<td>1</td>
</tr>
<tr>
<td>HL*3DBB</td>
<td>M10 x 14 Bolt</td>
<td>BS2</td>
<td>2</td>
</tr>
<tr>
<td>HL*3DBBS1</td>
<td>M10 x 14 Bolt</td>
<td>BS2</td>
<td>2</td>
</tr>
<tr>
<td>HD*2HLH</td>
<td>M6 x 14 Bolt (1-OFF)</td>
<td>BS3</td>
<td>3</td>
</tr>
<tr>
<td>HD*2HLHFF</td>
<td>M10 x 14 Bolt (1-OFF)</td>
<td>BS3</td>
<td>3</td>
</tr>
<tr>
<td>HD*2HLHCP</td>
<td>M10 x 14 Bolt (2-OFF)</td>
<td>BS2</td>
<td>2</td>
</tr>
<tr>
<td>HEFS2LH</td>
<td>M6 x 45 Bolt</td>
<td>BS4</td>
<td>4</td>
</tr>
<tr>
<td>HEFS2LH8N</td>
<td>M6 x 45 Bolt</td>
<td>BS4</td>
<td>4</td>
</tr>
</tbody>
</table>

All nut and bolt sets are standard in Carbon Steel
### ‘H’ Series Two Valve Manifolds

#### Material options

<table>
<thead>
<tr>
<th>Material</th>
<th>*Insert code for selected material in part number</th>
<th>HAL*2V</th>
<th>HL*2VTF</th>
<th>HL*3DBB</th>
<th>HD*2HLFF</th>
</tr>
</thead>
<tbody>
<tr>
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<td>S</td>
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All non-wetted parts ie those not in contact with the process medium will be supplied in stainless steel.

High pressure versions can be supplied in any of the above materials.

---

#### Manifold types

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<th>HD*2EXT</th>
<th>HL*2V1KFMB</th>
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All non-wetted parts ie those not in contact with the process medium will be supplied in stainless steel.
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<th>Function</th>
<th>Option Detail</th>
<th>Part No. suffix</th>
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<td>Gland packing</td>
<td>Graphoil</td>
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<td>PCTFE (207 bar/3000 psi)</td>
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<td>PEEK</td>
<td>PK</td>
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<td>Rising plug valve style PTFE packed</td>
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<td>Stellite tip</td>
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<td>Plug/Bleed valve (supplied loose in box)</td>
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<td>Bleed valve 1/4 NPT</td>
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<td>DIN 19213 sealing grooves</td>
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<td>M10 x 1.5 CS Mounting bolts</td>
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<td>Bolts for 3051 inclusive flange</td>
<td>CSBCP</td>
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<td>Swivel gauge outlet (**insert size/thread N=NPT)</td>
<td>**SG</td>
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<td>Lockable T bar</td>
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<td>(See page 5 for details)</td>
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<td>Anti tamper spindle &amp; key</td>
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<td>Lockable handwheel</td>
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<td>Mounting</td>
<td>Note 5 Assembled to bracket</td>
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<td>Condition</td>
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**Available options**

**Function**

- Gland packing
- Seating
- Plug/Bleed valve (supplied loose in box)
- Connection and bolting
- Operating mechanism
- Mounting
- Condition

**Option Detail**

- Graphoil
- PCTFE
- PEEK
- Rising plug valve style PTFE packed
- Stellite tip
- Blank plug 1/4 NPT
- Bleed valve 1/4 NPT
- Socket weld (* insert pipe size)
- Butt weld (* insert pipe size)
- DIN 19213 sealing grooves
- BSPT (*insert pipe size (e.g. 8K = 1/2")
- BSPP (*insert pipe size (e.g. 8R = 1/2")
- St. St. Mounting bolts
- M10 x 1.5 CS Mounting bolts
- M10 x 1.5 St. St. Mounting bolts
- Front face drain 1/4" NPT
- Bolts for 3051 inclusive flange
- Swivel gauge outlet (**insert size/thread N=NPT)
- Lockable T bar
- Anti tamper spindle
- Anti tamper spindle & key
- Handwheel
- Lockable handwheel
- Assembled to bracket
- NACE (latest issue)
- Cleaned and lubricated for oxygen use
- Firesafe
- Heat code trace certificates
- Test certificates
- Air testing
- Lockable handwheel

**Part No. suffix**

- 3
- 9
- PK
- RP
- ST
- P
- BV
- SW*NB
- BW*NB
- DIN†
- *K
- *R
- SSB
- CSB10
- SSB10
- FFD
- CSBCP
- **SG
- THL
- AT
- ATK
- HW
- LHW
- BRK
- HCT
- TC
- PT
- NACE
- OXY
- FS

**Notes**

1. Seat material RP=standard acetal, RP9 = PTCFE, RPPK = PEEK.
2. For tube socket or tube butt weld use 1/16 inch denominations and change NB to TB. For metric tube size use actual metric (mm) dimensions e.g. SW12MMTB.
4. For BSPP connections drain/bleed will be 1/8 BSPP.
5. Bracket will include ‘U’ bolt & manifold/bracket bolts.
6. Heat code traceable certificates for body and bonnet.
### ‘H’ Series Two Valve Manifolds

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<tr>
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<td>HKITGRAPHOILSEALS</td>
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<td>Isolate valve with PTFE gland, metal seat</td>
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<tr>
<td>Drain/bleed valve with PTFE gland, m metal seat</td>
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*Insert 9 for PCTFE seat
*Insert PK for PEEK

### Description

- **Option Detail**
  - **STD Graphite**
  - **PCTFE**
  - **PEEK**
  - Rising plug valve style PTFE packed
  - Stellite tip
  - Blank plug 1/4 NPT
  - Bleed valve 1/4 NPT
  - Socket weld *insert pipe size
  - Butt weld *insert pipe size
  - DIN 19213 sealing grooves
  - BSPT (*insert pipe size e.g. 8K = 1/2")
  - BSPP (*insert pipe size e.g. 8R = 1/2")
  - St. St. Mounting bolts
  - M10 x 1.5 CS Mounting bolts
  - M10 x 1.5 St. St. Mounting bolts
  - Front face drain 1/4” NPT
  - Bolts for 3051 inclusive flange
  - Swivel gauge outlet (**insert size/thread N=NPT)
  - See below
  - Lockable T bar
  - Anti tamper spindle
  - Anti tamper spindle & key
  - Handwheel
  - Lockable handwheel
  - Assembled to bracket
  - B31.1 compliant Power Plant
  - Heat code trace certificates
  - Test certificates
  - Air testing
  - Cleaned and lubricated for oxygen use
  - NACE (latest issue)
  - Firesafe

### Accessories and spares

- See page 5 for details
‘H’ Series Two Valve Manifolds

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Pressure Gauge Accessories

Diaphragm Seals

Mechanical Pressure Measurement

Condensate Pots

Electrical Temperature Measurement

Parker grade tubing

Please contact the Instrumentation division or one of our many distributors for more information on our range of complimentary products.
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<tr>
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