



'H' Series Two Valve Manifolds

Catalog 4190-PM



















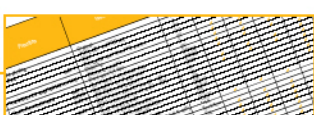


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'H' Series Two Valve Manifolds

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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.

WARNING

FAILURE, IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. Any Order accepted by Parker Hannifin will be subject to our terms and conditions of sale, copy available on request.

'H' Series Two Valve Manifolds

Standard manifold globe style bonnet design

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.

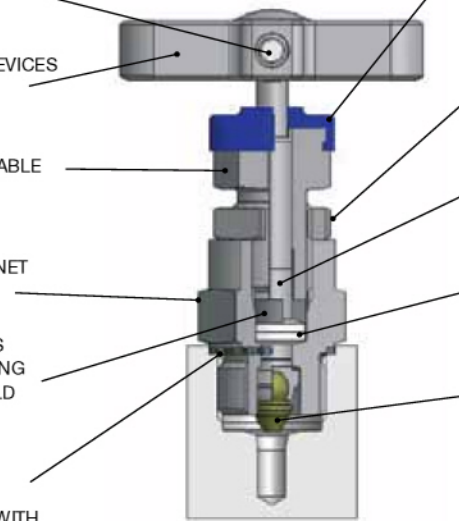
4. GLAND PACKING ADJUSTER
FOR MAXIMUM PACKING STABILITY AND PERFORMANCE, SIMPLE AND EASILY ADJUSTABLE FOR GLAND WEAR COMPENSATION.

6. VALVE BONNET
STANDARD CONSTRUCTION FOR MAXIMUM PRESSURE RATING WITH REPLACEABLE BONNET SEALING WASHER ARRANGEMENT.

8. THRUST BUSH
ANTI ROTATIONAL ADJUSTOR BUSH ENSURES UNIFORM PACKING COMPRESSION, MAXIMISING PRESSURE TIGHT SEALING AND LIMITING COLD FLOW PASSAGES.

10. BONNET/BODY WASHER
ANNEALED SEALING WASHER TO ENSURE COMPLETE ATMOSPHERIC LEAKAGE AND ALLOWING ON SITE RETRO-FIT OF BONNETS WITH 100% RE-SEALING ASSURANCE

For safe reliable and repeatable performance



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).

5. GLAND ADJUSTER LOCK NUT
A SECURE ANTI VIBRATION LOCKING MECHANISM TO PREVENT INADVERTENT GLAND ADJUSTER LOOSENING.

7. ANTI BLOWOUT SPINDLE
DESIGNED FOR LOW TORQUE OPERATION WITH HIGH QUALITY MICRO MIRROR STEM FINISH FOR POSITIVE GLAND SEALING.

9. GLAND PACKING (ADJUSTABLE)
CHEVRON EFFECT DUAL PIECE GLAND PACKING TO PROVIDE MAXIMUM SEALING AREA CONTACT WITH MINIMUM GLAND ADJUSTMENT.

11. SPINDLE TIP
SELF CENTERING, NON-ROTATIONAL TIP GIVES SUCCESSIVE POSITIVE BUBBLE TIGHT SHUT OFF ASSURING THE USER OF LEAKAGE FREE PERFORMANCE AND DOWNSTREAM FUNCTIONAL SAFETY.

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.

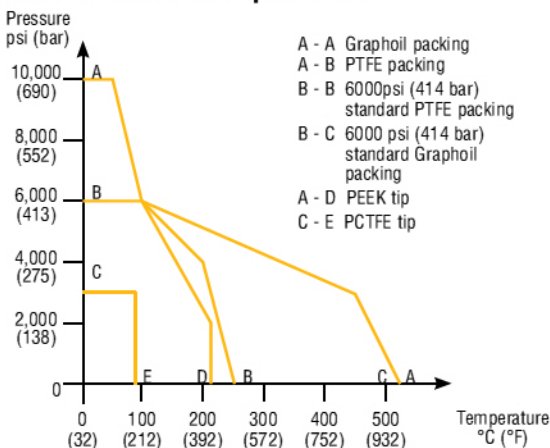
Specification

- 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 -54C to +538C (-65F to +1000F)
- PTFE standard gland packing (Graphoil optional)
- Maximum temperature PTFE 260C (500F)
- Maximum temperature Graphoil 538C (1000F)

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



'H' Series Two Valve Manifolds

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

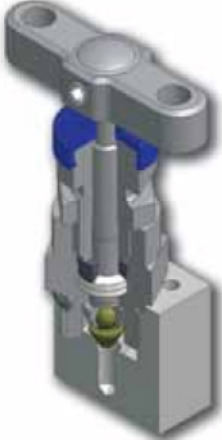






To obtain factory assembled options the manifold part number must be suffixed with the option and function designator. This allows you to select one or both of the bonnets to be fitted with the selected option or, different options to be fitted to either of the bonnets.

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").

Standard bonnet	T bar handle locking	Anti tamper spindle
	 <p>Retro-fit kit part number KITTHL Factory assembled suffix THL</p>	 <p>For key only - part no. ATHKEY/1 Retro-fit kit part number KITATK with key Factory assembled suffix AT without key ATK with key</p>
Handwheel	*Panel mounting	B31.1 Compliant
 <p>Retro-fit kit part number KITHW Factory assembled suffix HW</p>	 <p>Retro-fit kit part number KITPM Factory assembled suffix PM † Panel mount kit for HP: KITPMHP</p>	 <p>See page 14 for details</p>
Lockable handwheel		
 <p>Retro-fit kit part number KITLHW Factory assembled suffix LHW</p>		

*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_r and BSPP.



HL*2VTF



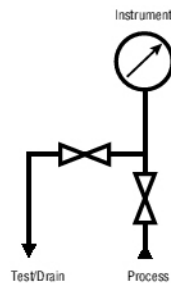
HL*2V



HL*2HVSDLH



HAL*2V



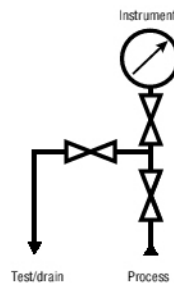
Line diagram represents this group of manifolds



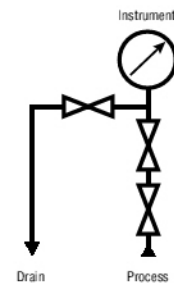
HL*28M8F4F

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.



HL*3DBB



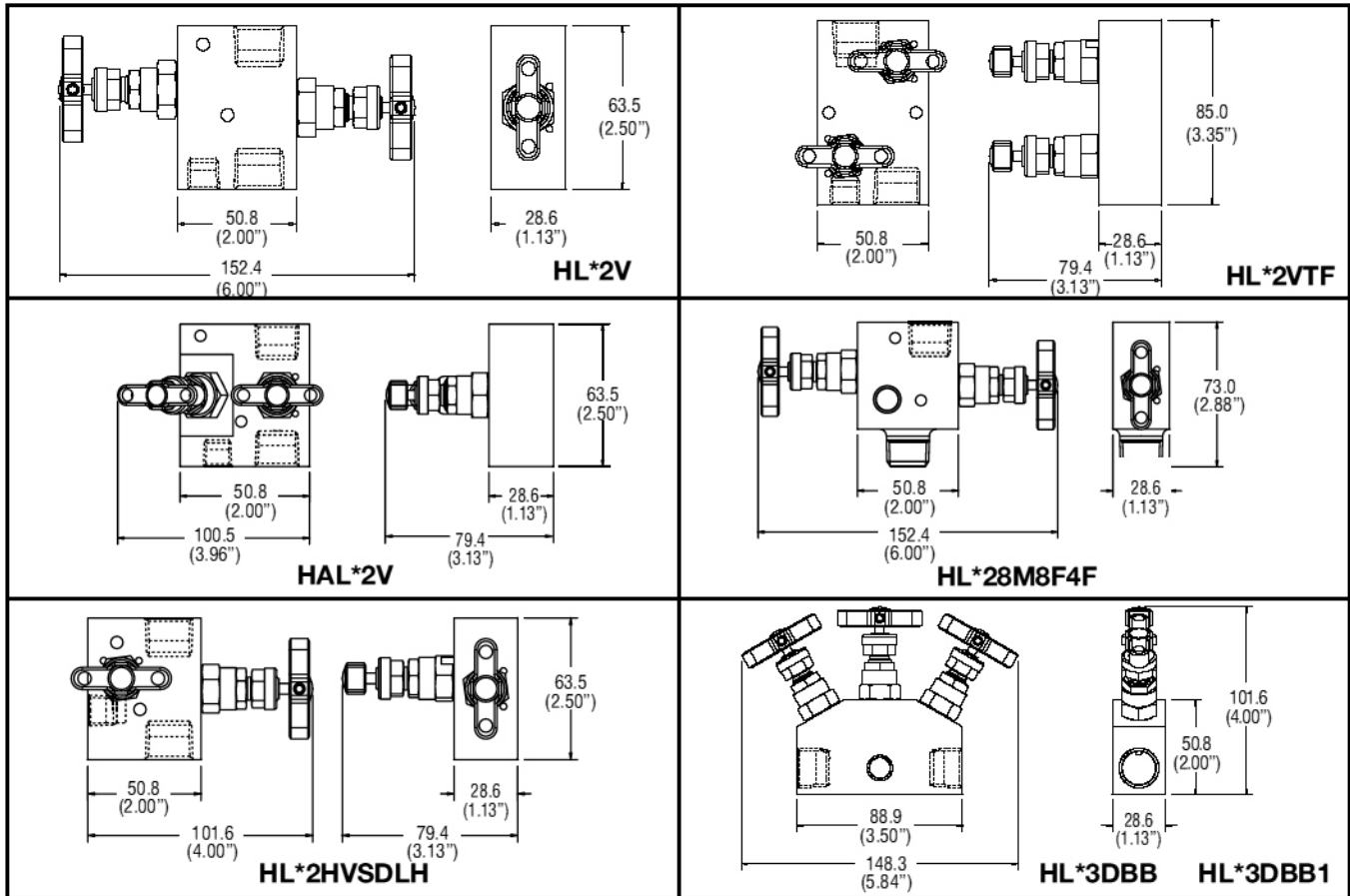
HL*3DBB1

*For material codes see page 18.

For options see pages 19/20.

'H' Series Two Valve Manifolds

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

Part No	Inlet (NPT)	Standard connections	
		Outlet (NPT)	Bleed/test (NPT)
HL*2V	1/2" female	1/2" female	1/4" female
HAL*2V	1/2" female	1/2" female	1/4" female
HL*2HVSDLH	1/2" female	1/2" female	1/4" female
HL*2VTF	1/2" female	1/2" female	1/4" female
HL*28M8F4F	1/2" male	1/2" female	1/4" female
HL*3DBB	1/2" female	1/2" female	1/4" female
HL*3DBB1	1/2" female	1/2" female	1/4" female

*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: BSPT_r, 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

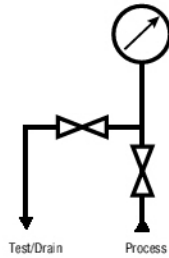
High pressure 10,000 psig (689 barg) two valve manifolds

Purpose

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



HL*2VHP



Line diagram represents this group of products



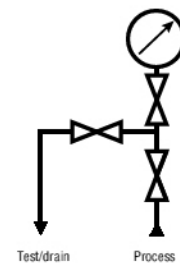
HAL*2VHP



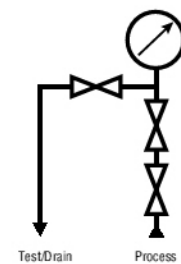
HL*28M8F4FHP

Instrument double block and bleed manifolds

Designed for dual isolating and bleed purposes, ideal for limited space and panel installations.



HL*S3DBBHP



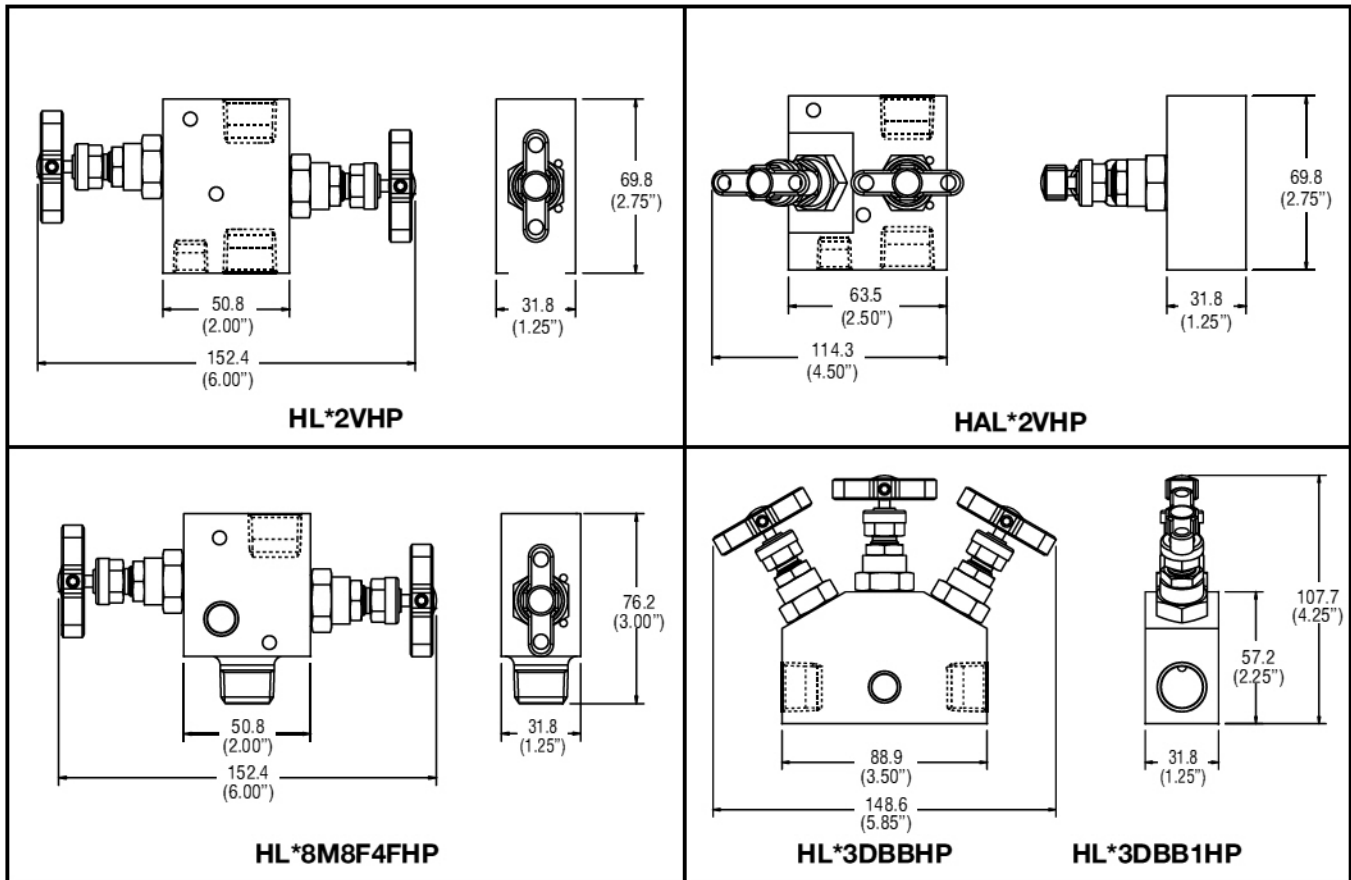
HL*3DBB1HP

*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



*Overall width with valves fully open

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

Part No	Inlet (NPT)	Standard connections	
		Outlet (NPT)	Bleed/test (NPT)
HL*2VHP	1/2" female	1/2" female	1/4" female
HAL*2VHP	1/2" female	1/2" female	1/4" female
HL*28M8F4FHP	1/2" male	1/2" female	1/4" female
HL*3DBBHP	1/2" female	1/2" female	1/4" female
HL*3DBB1HP	1/2" female	1/2" female	1/4" female

*Insert material designator, see page 18

Function

Blue cap – isolate,
Red Cap – drain/bleed

Specification

- Maximum standard pressure up to 10,000 psig (689 barg), to ANSI Class 4500 (St. St.)
- 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_r, 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

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.



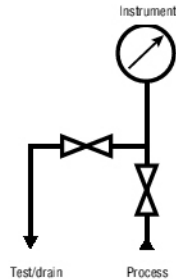
HD*2EXT
Base entry enclosure mountable



HD*2HLHFF
Straight through bolted flange



HEF*2LH



Line diagram represents
this group of products



HD*2HLH



HEF*2LH8N



HD*2HLHCP
For Model 3051 transmitter

*For material codes see page 18.

For options see pages 19/20.

