

# '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.

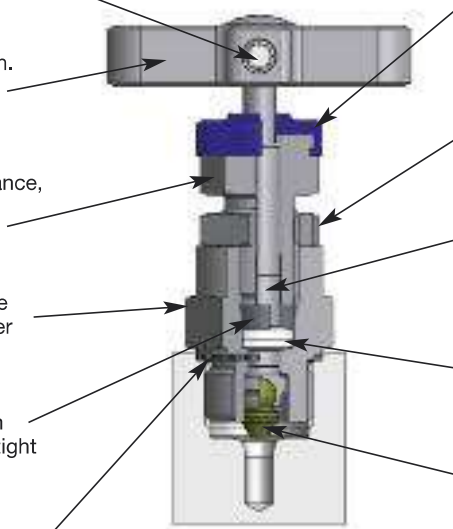
**4. Gland packing adjuster**  
For maximum packing stability and performance, simple and easily adjustable for gland wear compensation.

**6. Valve Bonnet**  
Standard construction for maximum pressure rating with replaceable bonnet sealing washer arrangement.

**8. Thrust Bush**  
Anti rotational adjuster 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.

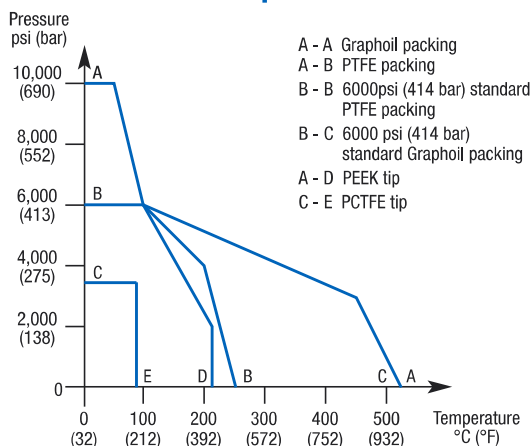
**11. Spindle tip**  
Self centering, non-rotational tip gives successive positive bubble tight shut off assuring the user of leakage free performance and downstream functional safety.

All metallic standard parts are produced in stainless steel, for alternative materials please refer to page 106. 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 pages 96/97) 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).

### Pressure vs Temperature



### 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.

## 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

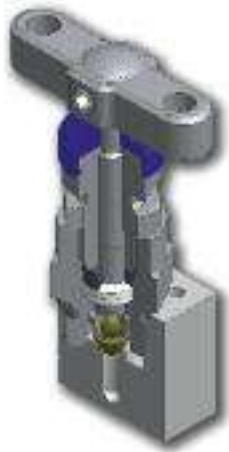





To obtain factory assembled options the manifold part number must be suffixed with the option and function designator. This allows you to select one or both of the bonnets to be fitted with the selected option or, different options to be fitted to either of the bonnets.

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 <b>KITTHL</b> Factory assembled suffix <b>THL</b></p>	 <p>For key only - part no. <b>ATHKEY/1</b></p> <p>Retro-fit kit part number <b>KITAT</b> without key <b>KITATK</b> with key Factory assembled suffix <b>AT</b> without key <b>ATK</b> with key</p>
Handwheel	Lockable handwheel	*Panel mounting
 <p>Retro-fit kit part number <b>KITHW</b> Factory assembled suffix <b>HW</b></p>	 <p>Retro-fit kit part number <b>KITLHW</b> Factory assembled suffix <b>LHW</b></p>	 <p>Retro-fit kit part number <b>KITPM</b> Factory assembled suffix <b>PM</b></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<sub>r</sub> and BSPP.



HL\*2VTF



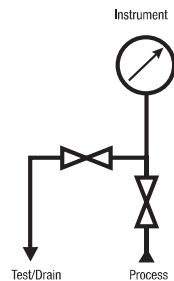
HL\*2V



HL\*2HVSDLH



HAL\*2V



Line diagram represents this group of manifolds



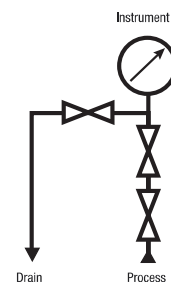
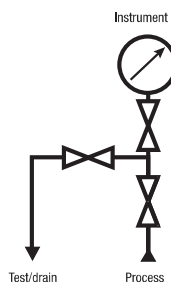
HL\*28M8F4F

## 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

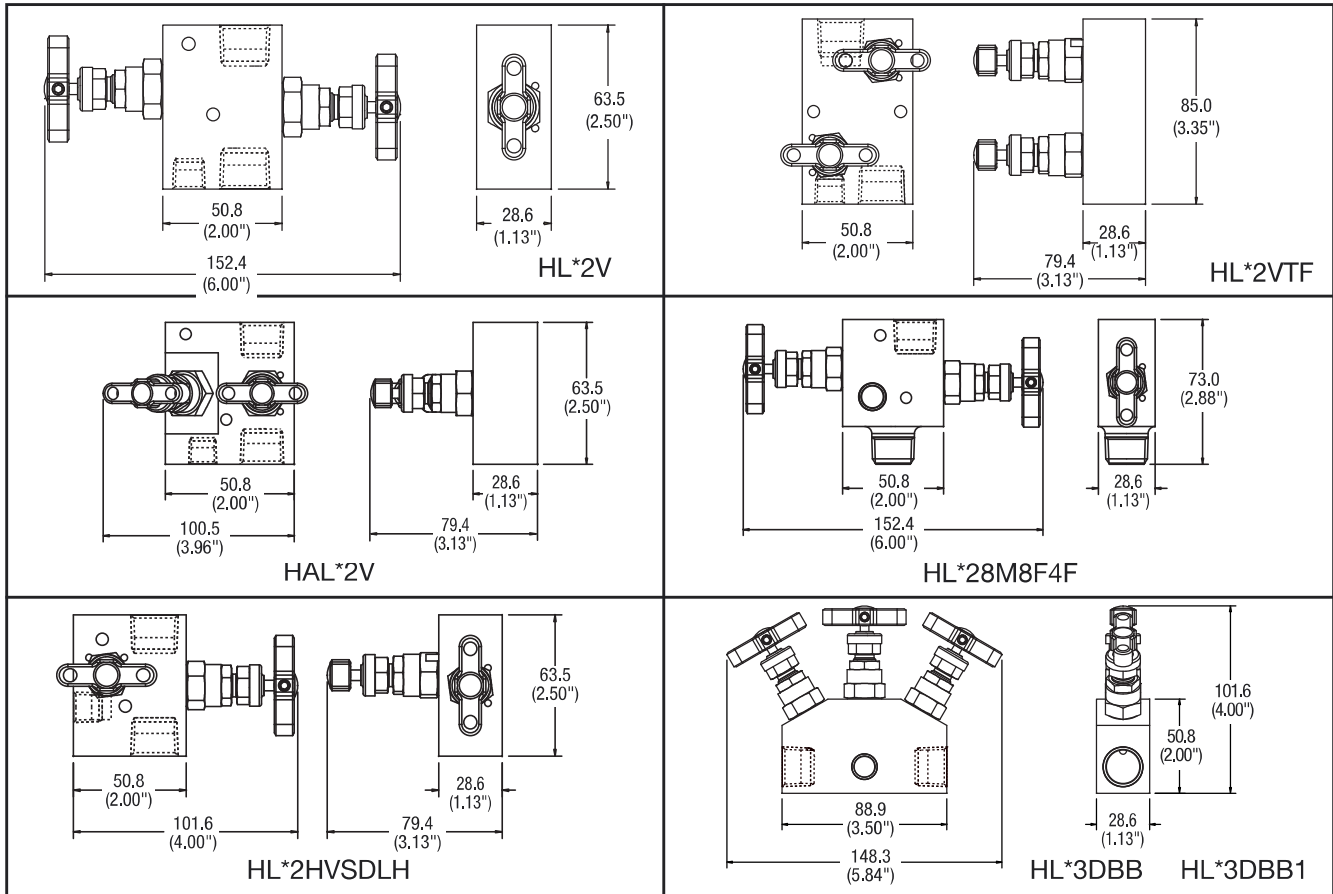


HL\*3DBB1

\*For material codes see pages 106/107.

For options see pages 108/109.

## 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.	Standard connections		
	Inlet (NPT)	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*3DDB	1/2" female	1/2" female	1/4" female
HL*3DDB1	1/2" female	1/2" female	1/4" female

\*Insert material designator, see pages 106/107

### 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 92.
- 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<sub>r</sub>, BSPP.
- Socket and butt weld connections available.
- PTFree connections available (see page 103).
- Blank and bleed plugs available.
- NACE certified on request.
- Optional cleaned and lubricated suitable for Oxygen service.
- Heat code traceable body and bonnet.