Hand Valves, Gauge Valves & Manifolds







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WARNING - For Your Safety-USER RESPONSIBILITY

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

This document and other information from CIRCOR Instrumentation Technologies (CIT), its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise. IT IS SOLELY THE RESPONSIBILITY OF THE SYSTEM DESIGNER AND USER TO SELECT PRODUCTS SUITABLE FOR THEIR SPECIFIC APPLICATION REQUIREMENTS AND TO ENSURE PROPER INSTALLATION, OPERATION AND MAINTENANCE OF THESE PRODUCTS, MATERIAL COMPATABILITY, PRODUCT RATINGS AND APPLICATION DETAILS SHOULD BE CONSIDERED IN THE SELECTION.

The user through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application; follow applicable industry standards; and follow the information concerning the product in the current product catalog an in any other materials provided by CIT or authorized distributors. To the extent that CIT or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

(Please refer to our Guidance on Use of Equipment document).

Offer of Sale

The items described in this document are hereby offered for sale by CIRCOR Instrumentation Technologies (CIT), its subsidiaries or its distributors. Any order accepted by CIT will be subject to our terms and conditions of sale, copy available on www.hoke.com, or by request.



HOKE, Inc PO Box 4866 Spartanburg, SC 29305-4866 Phone: (864) 574-7966 (864) 587-5608 Fax:





Hand Valves, Gauge Valves and Manifolds at a Glance

HOKE® offers a variety of precision engineered valves and 2, 3, and 5-valve Hand Valves, Gauge Valves & Manifolds in Direct and Remote Mount styles with vent configurations to meet most flow, pressure and level measurement application requirements. HOKE® 2-valve manifolds are designed for static pressure and liquid level applications; the 3 and 5 valve manifolds are well suited for use with most differential pressure transmitters and can accept both female and flange process impulse line connections.

HOKE® Hand Valves, Gauge Valves & Manifolds have been designed to provide the safest possible connection and mounting of instruments. Standard features include:

- Full 316/316L Dual Certified stainless steel components.
- Full compliance of NACE MR-01-75 specifications.
- Laser engraved identification.
- HOKE® Close tolerance NPT threads to ensure maximum engagement with mating threaded components. (Page.3)
- Available with option of integral GYROLOK[®] tube fitting connections.
- Choice of exotic alloys i.e., MONEL®, Duplex, Super Duplex, Titanium, HASTELLOY®, Alloys 625, 825, 6Mo.
- All special materials sourced from NORSOK M-650 approved mills.
- Optional mounting bracket kits available.

Pressure Equipment Directive.

Due to internal bore size and internal volumes up to and including 1"-inch/25mm, products offered in this catalogue comply with S.E.P (Sound Engineering Practice) article 3, paragraph 3 of the Pressure Equipment Directive P.E.D. 97/23/EC and therefore CE marking is not applicable.



STANDARD VALVE HEAD ASSEMBLY **Technical Specifications**



HOKE) Hand Valves, Gauge Valves & Manifolds



Note: PCTFE Soft Stem Tip (Option) is only available with PTFE Packing

PRESSURE TEMPERATURE CHART **PTFE PACKING**

Maximum pressure 6000 psi (413 bar) at 212° F (100° C) Maximum pressure 4000 psi (275 bar) at 392° F (200° C) (PTFE packing rated to maximum temperature of 392° F (200° C)) **GRAFOIL® PACKING**

Maximum pressure 6000 psi (413 bar) at 212° F (100° C) Maximum pressure 3300 psi (230 bar) at 842° F (450° C)

OTHER FEATURES

- Valves are supplied to NACE MR-01-75 specification.
- Needle valve & and block and bleed valve available in right angled form.
- Hydrostatically tested to 1.5 times maximum working pressure.
- Wide variety of process connections available by arrangement.
- Bleed & blind plugs are available.
- Isolating trim as standard, metering trim available on request.
- Panel mounting valve available on request.
- PCTFE Soft tip option available for special application
- (Max working temperature = 120° C).
- All valves and manifolds are individually boxed for protection and storage.
- Laser engraved identification.
- Valves have trace code on body with original mill certificates available all to . EN 10204-3.1.
- All special materials sourced from NORSOK M-650 approved mills.
- Ø 4.76 Standard thru bore (CV = 0.4) Fully open.
- Bonnet locking pin safely locks the bonnet to body.







HOKE Hand Valves, Gauge Valves & Manifolds

HOKE® High Tolerance NPT Thread

Note: Graphic is an illustration only

NPT Engagement using High Tolerance HOKE® NPT Connections has 5-6 threads engaged when fully tightened.



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NPT Thread



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NPT Thread

QA135-13A

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Integral GYROLOK[®] Tube Fitting Connection (HOKE) Hand Valves, Gauge Valves & Manifolds

HOKE® Integral GYROLOK® Tube Fitting Connection

Note: Graphic is an illustration only - please consult HOKE® for details

The HOKE® range of hand valves, gauge valves and manifolds are available with the option of the integral GYROLOK® tube fitting connections. The integral GYROLOK® tube fitting connection is machined directly into the body of the valve or manifold, allowing tubing to be directly connected without the use of traditional threaded (NPT, BSP) connections. The integral GYROLOK® connection provides a safer connection system for high pressure, severe, steam or sour gas service where leakage has dangerous consequences.

- Eliminates traditional threaded tubing connections
- Provides a safer and more consistent tube connection
- Saves assembly time during field assembly
- Reduces potential leak paths
- No need for sealing tape or liquid sealing compounds
- Fully field maintainable
- Successfully used for over 20 years in many offshore applications
- Available in 10mm metric tube connections
- Available in ³/₄"inch & ¹/₂"inch imperial tube connections





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SINGLE BLOCK HAND VALVE



HOKE Hand Valves, Gauge Valves & Manifolds





Weight=1.1 lbs(0.5 kg)

MODEL-HM25

Also available in a range of other materials and options (See HOW TO ORDER Data Sheet Pg.7).

Application

High integrity instrument isolation of pressure gauges and pressure transmitters.



Valve Shown with 1/2" NPT Inlet & Outlet





HOW TO ORDER

HM25 Series Hand Valves



Ordering Multiple Options and Accessories

HOKE HM Valves and Manifolds are available with a wide variety of options and accessories that enable valve configurations customized to meet specific requirements. Please select or add designators from the ordering combinations as shown below:

How To Order

Standard items in bold.



Note: The body & trim parts on all 316/316L Valves & Manifolds comply to NACE MR-01-75 & NORSOK M-650 as standard.

Please consult the factory or your local distributor for information on special connections. o-rings, operating pressures, & temperature ratings.

△When selecting products for specific applications users should refer to our notice at the bottom of page 2. And the guidance of Use of Equipment on page 26.



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MULTI-PORT GAUGE VALVE



HOKE Hand Valves, Gauge Valves & Manifolds



MODEL-HM681



Weight=1.76 lbs(0.8 kg)

Also available in a range of other materials and options (See **HOW TO ORDER** Data Sheet Pg.11).

Application

High integrity instrument isolation of pressure gauges and pressure transmitters.



Valve Shown with ½" NPT Inlet & Outlet



SINGLE BLOCK & BLEED GAUGE VALVE



MODEL-HM682





Weight=2.2 lbs(1.0 kg)

Also available in a range of other materials and options (See **HOW TO ORDER Data** Sheet Pg.11).

Application

High integrity instrument isolation of pressure gauges and pressure transmitters.



Valve Shown with 1/2" NPT Inlet & Outlet & 1/2" NPT Vent Plug (Supplied loose)





Dimensions for 6K shown in inches (millimetres) are for reference only and are subject to change.



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DOUBLE BLOCK & BLEED GAUGE VALVE



HOKE) Hand Valves, Gauge Valves & Manifolds

MODEL-HM683



Weight=2.86 lbs(1.3 kg)

Also available in a range of other materials and options (See HOW TO ORDER Data Sheet Pg.11).

Application

High integrity instrument isolation of pressure gauges and pressure transmitters.



Valve Shown with 1/2" NPT Inlet & Outlet & 1/2" NPT Vent Plug (Supplied loose)





HOW TO ORDER

HM68 Series Gauge Valves



Ordering Multiple Options and Accessories

HOKE HM Valves and Manifolds are available with a wide variety of options and accessories that enable valve configurations customized to meet specific requirements. Please select or add designators from the ordering combinations as shown below:



Note: The body & trim parts on all 316/316L Valves & Manifolds comply to NACE MR-01-75 & NORSOK M-650 as standard.

Please consult the factory or your local distributor for information on special connections. o-rings, operating pressures, & temperature ratings.

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REMOTE MOUNT 2-VALVE MANIFOLD



HOKE) Hand Valves, Gauge Valves & Manifolds

MODEL-HM8232





Weight=1.98 lbs(0.9 kg)

Also available in a range of other materials and options (See HOW TO ORDER Data Sheet Pg.22).

Using the 2-valve manifold

In normal operation the "isolate" valve is open while the "vent" valve is closed.

To remove the instrument, first close the "isolate" valve, then open the "vent" valve to relieve pressure upstream of the "isolate" valve.

Calibration option

By connecting a calibration gauge to the vent port, it is possible to check the calibration of the instrument without removing it from the installation.



Valve Shown with 1/2" NPT Inlet & Outlet & 1/4"NPT Vent Plug (Supplied loose)



DIRECT MOUNT 2-VALVE MANIFOLD



MODEL-HM8212





Weight=3.08 lbs(1.4 kg)

Also available in a range of other materials and options (See **HOW TO ORDER** Data Sheet Pg.22).

Using the 2-valve manifold

In normal operation the "isolate" valve is open while the "vent" valve is closed.

To remove the instrument, first close the "isolate" valve, then open the "vent" valve to relieve pressure upstream of the "isolate" valve.

Calibration option

By connecting a calibration gauge to the vent port, it is possible to check the calibration of the instrument without removing it from the installation.



Valve Shown with 1/2" NPT Inlet & 1/4" NPT Vent Plug (Supplied loose)





Dimensions shown in inches (millimetres) are for reference only and are subject to change.



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REMOTE MOUNT 2-VALVE MANIFOLD (FLAT FACE) MODEL-HM8262



Hand Valves, Gauge Valves & Manifolds





Weight=2.6 lbs(1.2 kg)

Also available in a range of other materials and options (See HOW TO ORDER Data Sheet Pg.22).

Using the 2-valve manifold

In normal operation the "isolate" valve is open while the "vent" valve is closed.

To remove the instrument, first close the "isolate" valve, then open the "vent" valve to relieve pressure upstream of the "isolate" valve.

Calibration option

By connecting a calibration gauge to the vent port, it is possible to check the calibration of the instrument without removing it from the installation.



Valve Shown with 1/2" NPT Inlet & Outlet & 1/2" NPT Vent Plug (Supplied loose)



DIRECT MOUNT 2-VALVE MANIFOLD (ENCLOSURE) MODEL-HM8292



HOKE) Hand Valves, Gauge Valves & Manifolds





Also available in a range of other materials and options (See HOW TO ORDER Data Sheet Pg.22).

Using the 2-valve manifold

In normal operation the "isolate" valve is open while the "vent" valve is closed.

To remove the instrument, first close the "isolate" valve, then open the "vent" valve to relieve pressure upstream of the "isolate" valve.

Calibration option

By connecting a calibration gauge to the vent port, it is possible to check the calibration of the instrument without removing it from the installation.



Valve Shown with 1/2" NPT Inlet & 1/2"NPT Vent Plug (Supplied loose)









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REMOTE MOUNT 2-VALVE MANIFOLD



HOKE Hand Valves, Gauge Valves & Manifolds

MODEL-HM82GAM8 WITH ½" INTEGRAL GA ADAPTER





Weight=3.3 lbs(1.5 kg)

Also available in a range of other materials and options (See HOW TO ORDER Data Sheet Pg.22).

Using the 2-valve manifold

In normal operation the "isolate" valve is open while the "vent" valve is closed.

To remove the instrument, first close the "isolate" valve, then open the "vent" valve to relieve pressure upstream of the "isolate" valve.

Calibration option

By connecting a calibration gauge to the vent port, it is possible to check the calibration of the instrument without removing it from the installation.



Valve Shown with 1/2" NPT Inlet & Outlet & 1/4" NPT Vent Plug (Supplied loose)



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REMOTE MOUNT 3-VALVE MANIFOLD



HOKE Hand Valves, Gauge Valves & Manifolds

MODEL-HM8332



solate Equalize Instrument

Process In

Weight=3.08 lbs(1.4 kg)

Also available in a range of other materials and options (See **HOW TO ORDER** Data Sheet Pg.22).

Using the 3-valve manifold

In normal operation the "isolate" valves are open while the "equalize" valve is closed.

This provides a differential pressure reading to the pressure gauge or transmitter. To zero the instrument, first close the downstream "isolate" valve then open the "equalize" valve and adjust the zero setting on the instrument.



Valve Shown with ½" NPT Inlet & Outlet





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DIRECT MOUNT 3-VALVE MANIFOLD



HOKE Hand Valves, Gauge Valves & Manifolds

MODEL-HM8312



Process In solate Equalize Ð Instrumen

Weight=3.52 lbs(1.6 kg)

Also available in a range of other materials and options (See HOW TO ORDER Data Sheet Pg.22).

Using the 3-valve manifold

In normal operation the "isolate" valves are open while the "equalize" valve is closed.

This provides a differential pressure reading to the pressure gauge or transmitter. To zero the instrument, first close the downstream "isolate" valve then open the "equalize" valve and adjust the zero setting on the instrument.



Valve Shown with ½" NPT Inlet



REMOTE MOUNT 5-VALVE MANIFOLD



(HOKE)

MODEL-HM8532



Weight=5.95 lbs(2.7 kg)

Also available in a range of other materials and options (See **HOW TO ORDER** Data Sheet Pg.22).

Using the 5-valve manifold In normal operation the "isolate" valves are open while the "equalize" and "vent" valves are closed. This provides a differential pressure reading to the pressure gauge or transmitter. To zero the instrument, first close both "vent" valves and the downstream "isolate" valve. Then open the "equalize" valve and adjust the zero setting on the instrument. To remove the instrument, first close both "isolate" valves, then open the "equalize" valves to reliave process the manifed and the instrument. valves to relieve pressure between the manifold and the instrument.

Calibration options

An option provided by 5-valve manifolds which is not available on 3-valve types is connecting the "vent" port to known pressure sources to check the calibration of the instrument.

Valve Shown with ½" NPT Inlet & Outlet & ¼"NPT Vent Plugs (Supplied loose)





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2.1in 54mm

0

OUTLETS

DIRECT MOUNT 5-VALVE MANIFOLD



MODEL-HM8512



Weight=6.17 lbs(2.8 kg)

Also available in a range of other materials and options (See HOW TO ORDER Data Sheet Pg.22).

Using the 5-valve manifold In normal operation the "isolate" valves are open while the "equalize" and "vent" valves are closed. This provides a differential pressure reading to the pressure gauge or transmitter. To zero the instrument, first close both "vent" valves and the downstream "isolate" valve. Then open the "equalize" valve and adjust the zero setting on the instrument. To remove the instrument, first close both "isolate" valves, then open the "equalize" valve. To reficie pressure process the manifed and the instrument. valves to relieve pressure between the manifold and the instrument.

Calibration options

An option provided by 5-valve manifolds which is not available on 3-valve types is connecting the "vent" port to known pressure sources to check the calibration of the instrument.



Valve Shown with ½" NPT Inlet & ¼"NPT Vent Plugs (Supplied loose)





DIRECT MOUNT 5-VALVE MANIFOLD (ENCLOSURE) MODEL-HM8592







Weight=12.8 lbs(5.8 kg)

Also available in a range of other materials and options (See HOW TO ORDER Data Sheet Pg.22).

Using the 5-valve manifold

Using the 5-valve manifold In normal operation the "isolate" valves are open while the "equalize" and "vent" valves are closed. This provides a differential pressure reading to the pressure gauge or transmitter. To zero the instrument, first close both "vent" valves and the downstream "isolate" valve. Then open the "equalize" valve and adjust the zero setting on the instrument. To remove the instrument, first close both "isolate" valves, then open the "equalize" valve and adjust the zero setting on the instrument. valves to relieve pressure between the manifold and the instrument.

Calibration options

An option provided by 5-valve manifolds which is not available on 3-valve types is connecting the "vent" port to known pressure sources to check the calibration of the instrument.



Valve Shown with ½" NPT Inlet & ¼"NPT Vent Plugs (Supplied loose)



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HOW TO ORDER





Ordering Multiple Options and Accessories

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Note: The body & trim parts on all 316/316L Valves & Manifolds comply to NACE MR-01-75 & NORSOK M-650 as standard.

Please consult the factory or your local distributor for information on special connections. o-rings, operating pressures, & temperature ratings.

AWhen selecting products for specific applications users should refer to our notice at the bottom of page 2. And the guidance of Use of Equipment on page 26.



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MOUNTING BRACKET KITS

HOKE Hand Valves, Gauge Valves & Manifolds

Mounting bracket kits enable a user to mount a manifold onto a gauge stand or a 2in (50mm) nominal bore pipe stand. Mounting kits are manufactured in stainless steel and allow the instrument to be removed without disturbing the impulse pipework connection. They also add support to the complete assembly.







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HOKE, Inc

MOUNTING BRACKET KITS



HOKE Hand Valves, Gauge Valves & Manifolds

HM8000BKT

Weight=2.20 lbs(1.0 kg) Used On Model HM8212 & HM8332







HM8232BKT Weight=2.20 lbs(1.0 kg) Used On Model HM8232



MOUNTING BRACKET KITS

HM8100BKT





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Installation & use of equipment should be done by trained personnel!

1 MATERIALS

- Materials must be compatible with medium.
- Pressure and temperature also have direct bearing on the correct seal & body material to be used and must be considered when specifying. See pressure/temperature ratings table contained in our printed literature.
- If in any doubt, consult HOKE[®].

THREADS AND JOINTING 2

- All pressure connections should be leak tight and should be observed when first applying pressure.
- Recommended maximum operating pressure for each size of thread and type of material must not be exceeded.
- Please note the stated pressures represent the maximum applied pressure. If in doubt, consult the manufacturer.
- Care must be taken to ensure mis-match of threads does not occur.
- Mating female connections must have a pressure rating that is compatible with the pressure range of the product.
- Valves with parallel threads must have the independent seal made on the flat seating using a washer or bonded seal of material compatible with the pressure medium.
- Valves with tapered threads have the joint made by mating of the threads. It is common practice to apply jointing material to the male thread. This must be compatible with the pressure medium and applied in the correct quantity to ensure non-interference with the mating of the threads.
- NPT and other tapered thread forms when manufactured to the standard specification may not be adequate to offer sufficient thread engagement for safe use under pressure.
- Particular care must be taken to ensure the valve has the correct pressure rating for the application.

3 INSTALLATION

- When joining up a valve to the system, the system must not be pressurized.
- If the valve is already fitted to a gauge at time of installation, the valve should be in the closed position to prevent the build up of pressure from entering the gauge. The valve should then be opened slowly and care taken to ensure the pressure entering the gauge does not exceed its pressure rating.
- When the valve does not have a gauge fitted at time of installation (i.e., with an open port) the valve should be in the open position which will prevent build up of pressure within the valve. Care should therefore be taken to confirm that all systems are sealed before pressurizing.
- Manifolds and equalizing valves are accompanied by specific installation instructions and these should be referred to before proceeding with installation.

MAINTENANCE

- Valves etc. should be part of a planned maintenance programme to ensure they continue to function properly.
- The time interval between examinations will vary depending upon site conditions, the number of opening and shutting operations etc. and should be determined in the light of experience.
- Threaded connections should be checked for leaks and tightened as required.
- If leaking through the packing is evident, loosen locknut, tighten packing compression bolt to torque rating of 13 lbs/ft (18 Nm) minimum to 18 lbs/ft (25 Nm) maximum and re-tighten locknut.

REPAIRS 5

- The design of these valves allows packing or whole stem assembly to be replaced without removing the valve from the system but the system must be closed down and any residual pressure exhausted in a controlled manner before proceeding.
- To replace packing: Remove handle, slacken locknut, remove compression bolt and compression gland ring. Remove packing and replace. Re-assemble in reverse order to the above and tighten to torque described in Paragraph 4.
- To replace whole stem assembly: Remove handle and bonnet locking pin. Remove whole head assembly (N.B. To loosen turn
- anti-clockwise). Slacken locknut, remove compression bolt and compression gland ring. Remove stem assembly by withdrawing downwards. Fit new stem assembly and packing.

Re-assemble in reverse order to the above and tighten compression bolt to torque described in Paragraph 4.

- Re-fit head assembly to valve body and tighten to torque of 100 lbs/ft (135.58Nm) Replace locking pin. Test valve for leaks.
- Note: Ensure stem is screwed fully into the bonnet before refitting to body. Fit locking pin, after testing.
- If the valve seat is damaged, the whole valve should be replaced.

SPARES

We recommend that spares should be held in the form of whole stem assemblies.

Note: It is the responsibility of the customer to select the proper valve. If in any doubt, consult HOKE®





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