

CRANE



HOKE Products CATALOG

HOKE HL SERIES - Needle Valves & Manifolds

HOKE 7L SERIES - Ball Valves & Manifolds

HOKE DBB VALVES

HOKE MONO FLANGE VALVES

www.hoke.com
www.cranecpe.com

About Hoke

Since 1855 Crane has been the world's leading innovator and pioneer of practical flow control solutions addressing and exceeding our customers' needs to enable them to operate better, faster and safer. Crane I&S, HOKE offers a comprehensive portfolio of instrumentation and sampling products and solutions

Competitive Advantage



10 DECADES OF EXPERTISE

Hoke have extensive experience in providing cutting-edge, safe, and reliable solutions for critical industries.



LARGE INSTALLED BASE

Thousands of systems installed worldwide, providing unmatched familiarity and expertise serving demanding chemical, petrochemical, oil & gas, alternative fuels, power, pulp and paper, and OEM applications, among others.



PROVEN PERFORMANCE

Hoke fluid control systems have a track record of safety and quality in high-risk environments, making them the trusted choice for customers looking to upgrade or optimize.



UNPARALLELED SUPPORT

With Crane's strong global presence and network of factory-authorized representatives, you can count on expert advice, service, and follow-up at every step.



CRANE®

100 YEARS
HOKE®

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HOKE® Valves and Manifolds Features

THE MOST UNIQUE NEEDLE VALVE ON THE MARKET TODAY

> TEE BAR

316 Stainless Steel for maximum corrosion resistance, fastened to spindle by anti-vibration bolt can be interchanged with anti-tamper feature or a handwheel with or without our patented locking device.

> SEAL

Precision machined, works in conjunction with a dynamic piston ring, giving leak free operation for the life of the product. Seals in alternative materials are available.

> PISTON RING

Uniquely offers dynamic adjustment of the packing gland seal in response to pressure change. This feature ensures leak free spindle sealing.

> INTERCHANGEABLE TIPS

Non-rotating self-centring, anti-galling spindle tip gives positive bubble-tight shut-off self-centring closure and field inter-changeability of different tip styles is possible.

> TRACEABILITY OF MATERIALS

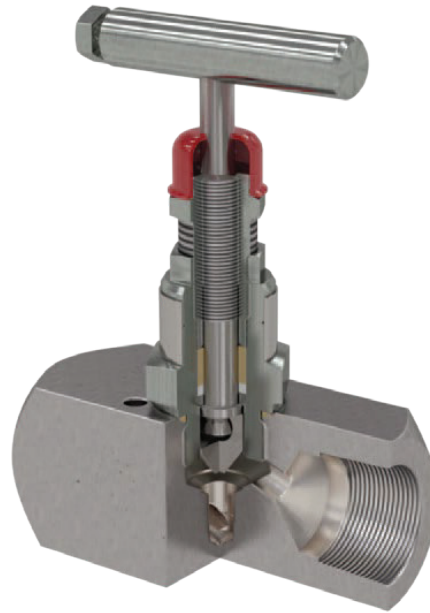
All Hoke products have material traceability and pressure test certificates to BS EN 10204 and controlled by QA procedures approved to ISO 9001. A unique code is stamped on all valve bodies linking them with their material and chemical analysis certificates.

> HOUSING

Rugged design with rolled threads in contact with body ensures high factor of safety when valve is at maximum pressure and temperature. Metal to metal, body to bonnet contact coupled with a special secondary seal offers an extremely effective leak free joint.

> DUST CAP

Protects lubricated spindle threads from the ingress of dirt. Caps are colour coded to show the type of service condition the valve is suitable for – RED (standard) PTFE packed; WHITE degreased for oxygen service; BLACK Graphite packed.



> PUSHER & LOCK NUT

These precision machined parts adjust piston ring compression on the packing to give leak free operation, even on vacuum service.

> ANTI-BLOWOUT SPINDLE

The heart of our valve. All threads are rolled and lubricated to eliminate galling. A special ten micro inch super finish on the seal diameter dramatically reduces operating torque. And the stem is anti-blowout/non-removable – a major safety feature.

> LOCKING PIN

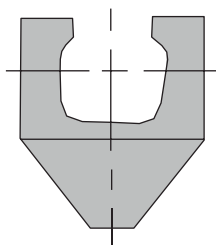
A 316 Stainless Steel pin eliminates unauthorised removal of the bonnet assembly. The pin is held by an anti-vibration spline into the body.

> IDENTITY RING

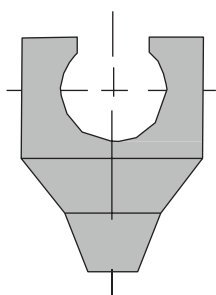
A Stainless Steel ring around the housing indicates in colour coded form the status of the valve: isolate (blue), vent (red) or equalise (green).

HOKE® Valves and Manifolds Features

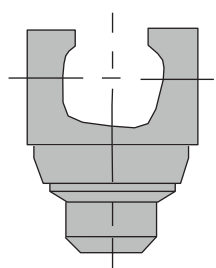
STANDARD TIP



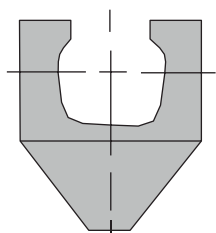
METERING TIP



SOFT TIP



HARD TIP



The Hoke Valves non-rotating plug ensures non-rotating linear plug closure eliminating galling.

Threads protected from process media.

Automatic seal pressure adjuster - ensures effective leak free spindle sealing at low and very high pressures.

Dirty media washes thru clearance - no chance of tip rotation.

Plug type open/close tips - no rotary motion on closure, no galling.

Self centring non-rotating plug closure tip.

These unique features ensure years of trouble free service even under the most adverse process conditions.

Most of the **world's instrument valves** use a "swaged" ball or tip as shown.

"Non-rotating ball" - can seize to spindle due to fine clearances.

Dirty media stays trapped in causing ball/spindle to gall on closure.

Wear on non-adjustable spindle seals leads to valve leaking in service.

On closure ball develops an indentation, if ball then rotates leakage occurs.

Above problems frequently cause ball to gall with the seat.

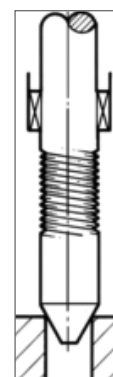
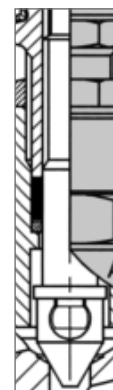
Most **lower priced** valves have these weaknesses. They are not suitable for critical instrumentation applications.

Seal is frequently only an "O" ring.

Rotating spindle gives fast wear on closure.

Threads are in contact with process media and thread lubricant is washed away.

"Live" spindle wears or galls at the tip, giving leakage.



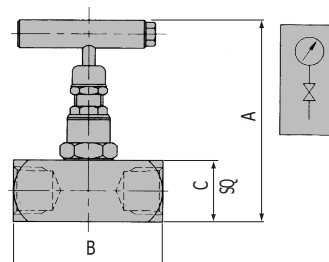
HOKE® Valves and Manifolds HI Series Hand Valves

HLF TYPE



Female x Female configuration.
Standard = 6,000 PSI.
HP = 10,000 PSI.

Part No	Size	A	B	C	Weight (Kg)
HLF25	1/4"	3.6	2.1	1.1	0.5
HLF38	3/8"	3.6	2.4	1.1	0.5
HLF50	1/2"	3.6	2.6	1.1	0.5
HLF75	3/4"	4.0	2.9	1.5	0.8
HLF10	1"	4.5	3.2	2.0	1.4

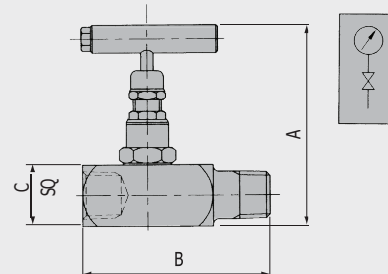


HLM TYPE



Female x Female configuration.
Standard = 6,000 PSI.
HP = 10,000 PSI.

Part No	Size	A	B	C	Weight (Kg)
HLM25	1/4"	3.6	2.8	1.1	0.5
HLM38	3/8"	3.6	2.9	1.1	0.5
HLM50	1/2"	3.6	3.4	1.1	0.5
HLM75	3/4"	4.0	3.6	1.5	0.8
HLM10	1"	4.5	3.3	2.0	1.4



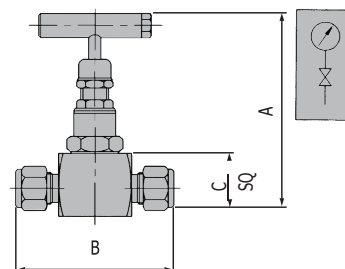
HLGL TYPE



Twin Ferrule compression fitting 6,000 PSI.
As standard not supplied with nuts and ferrules, add suffix / NF to include nuts and ferrules as shown.

Part No	Size	A	B	C	Weight (Kg)
HMGL25	1/4"	3.6	2.4	1.1	0.3
HMGL38	3/8"	3.6	2.9	1.1	0.4
HLGL50	1/2"	3.6	3.1	1.1	0.4
HLGL6mm	6mm	3.6	2.4	1.1	0.3
HLGL10mm	10mm	3.6	2.9	1.1	0.4
HLGL12mm	12mm	3.6	3.1	1.1	0.4

*GL = GYROLOK.



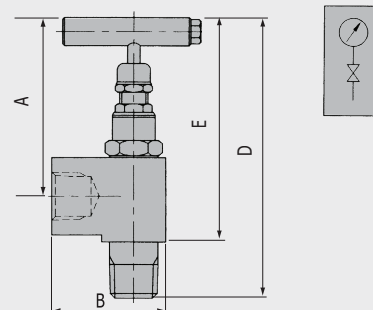
HLGL TYPE



Angle Hand Valves.
Standard 6,000 PSI.
HP = 10,000 PSI.

Part No	Connection Type	Size	A	B	C	D	E	Weight (Kg)
HLAF25	Female x Female	1/4"	3.0	1.5	1.1	-	4.0	0.4
HLAM25	Male x Female	1/4"	3.0	1.5	1.1	4.0	-	0.4
HLAF50	Female x Female	1/2"	3.0	2.0	1.1	-	4.5	0.5
HLAM50	Male x Female	1/2"	3.0	2.0	1.1	4.5	-	0.5

C = width



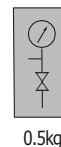
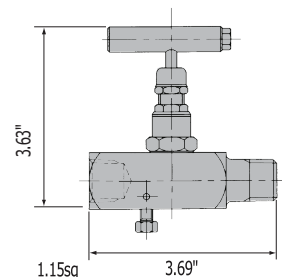
HOKE® Valves and Manifolds HI Series Gauge Valves

HLGB1M TYPE



Gauge bleed valve with 1/4" UNF bleed.
Male x Female construction.

Note:
Bleed screw supplied as standard.
GBIF (Female x Female construction).

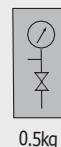
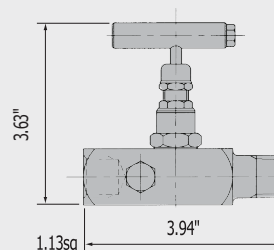


HLGV1M TYPE



Gauge vent valve with 1/4" NPT bleed.
Male x Female construction.

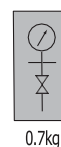
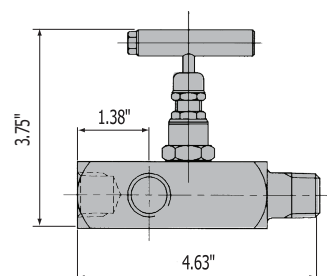
Note:
Vent plug supplied as standard.
GVIF (Female x Female construction).



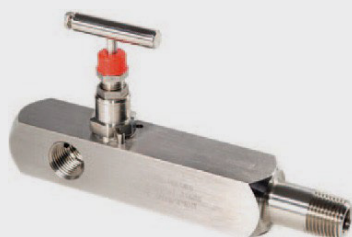
HLGM1 TYPE



Gauge multiport valve Male inlet
x three Female outlets.

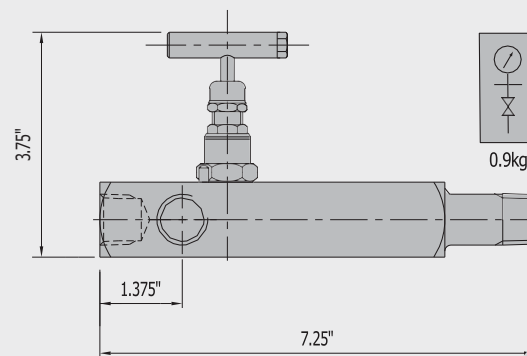


HLGM1/EXT TYPE



GM1/Ext = 3" lagging extension
available on inlet.

GM1-75/50S = 3/4" connection
available on inlet.



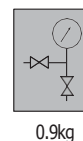
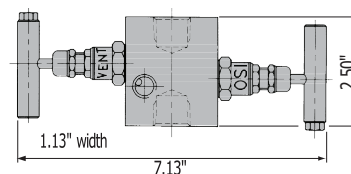
HOKE® Valves and Manifolds HI Series Two Valve Manifolds

HLG12FF TYPE



Two valve manifold Female x Female thread orientation.

Note:
Add suffix /2H for 2 through mounting holes.

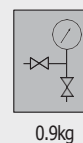
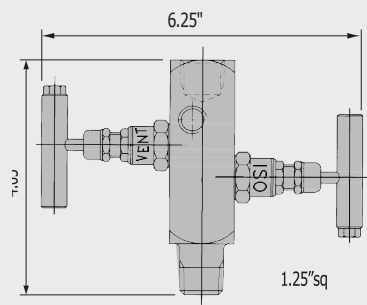


HLG12MF TYPE



Two valve manifold Male x Female thread orientation.

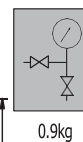
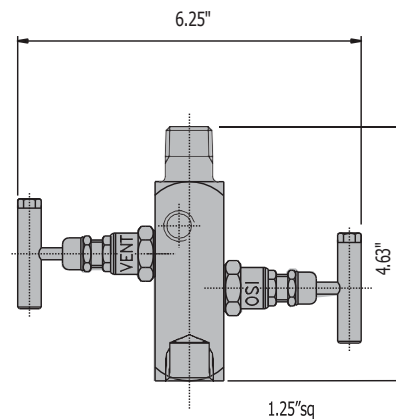
Note:
Add suffix /MTG for 2 threaded mounting holes.



HLG12FM TYPE



Two valve manifold Female x Male thread orientation.



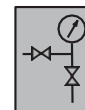
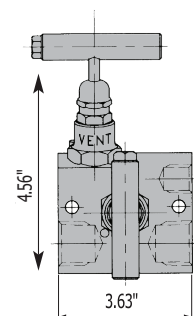
HOKE® Valves and Manifolds HI Series Two Valve Manifolds

HLG12AF TYPE



Two valve manifold Female x Female thread ori- entation, for wall mounting and bottom venting.

Note:
Mounting holes are standard.



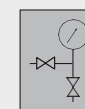
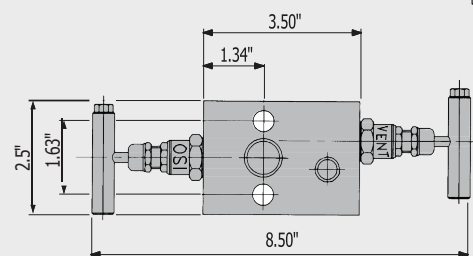
1.0kg

Width 1.25"

HLY24 TYPE



Direct mounting pipe to flange two valve manifold.



1.4kg

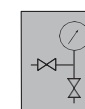
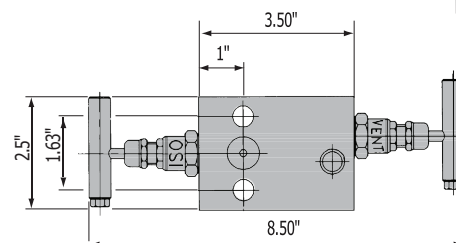
Width 2.50"

HLY25 TYPE



Direct mounting flange to flange two valve manifold.

Note:
Kidney flanges in many styles are optional.



1.4kg

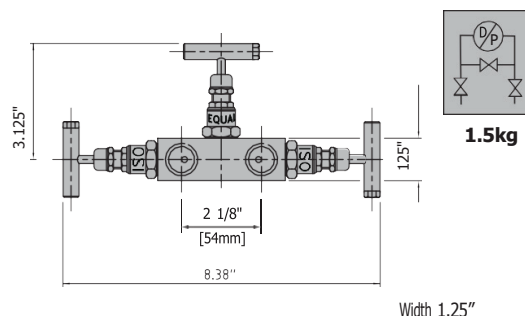
Width 1.25"

HOKE® Valves and Manifolds HI Series Three Valve Manifolds

HLY33 TYPE



Remote mounting pipe to pipe.

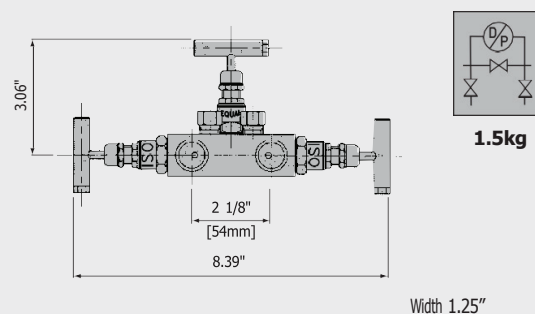


HLYV33 TYPE



Remote mounting pipe to pipe, with vent ports.

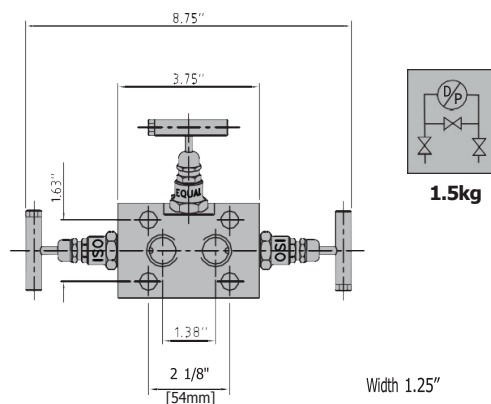
Note:
Pressure plugs supplied as standard.
Vent plugs may be supplied by adding suffix /VP.



HLY34 TYPE



Direct mounting pipe to flange.

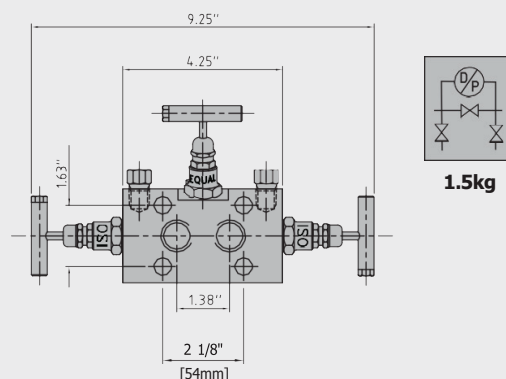


HLYV34 TYPE



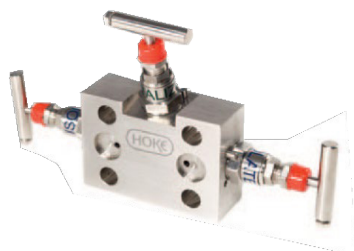
Direct mounting pipe to flange, with vent ports.

Note:
Pressure plugs supplied as standard.
Vent plugs may be supplied by adding suffix /VP.



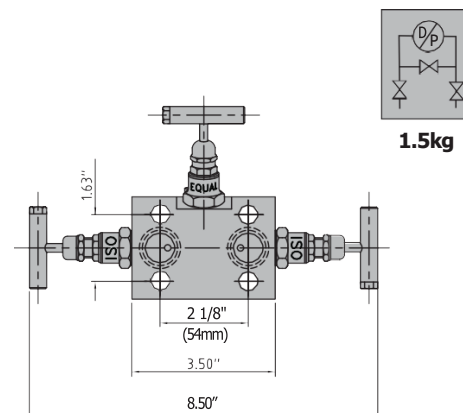
HOKE® Valves and Manifolds HI Series Three Valve Manifolds

HLY35 TYPE



Direct mounting flange to flange.

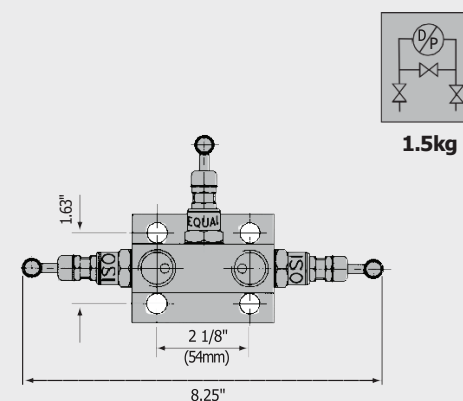
Note:
Kidney flanges in many styles are optional.



HLT34 TYPE



Direct mounting pipe to flange.

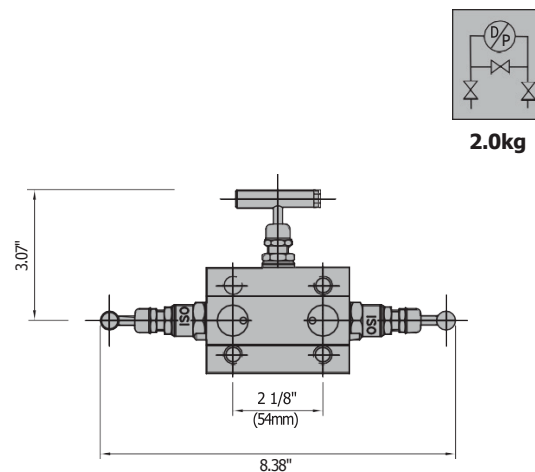


HLH33 TYPE



Direct mounting flange to flange.

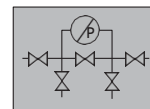
Note:
Kidney flanges in many styles are optional.



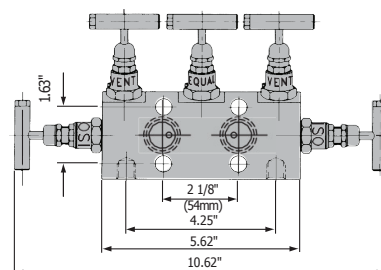
HOKE® Valves and Manifolds HI Series Five Valve Manifolds

HLY52 TYPE

Direct mounting flange to flange.

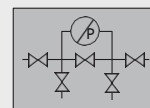


2.3kg

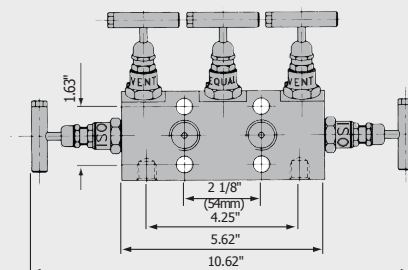


HLY53 TYPE

Direct mounting pipe to flange.

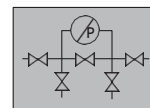


2.3kg

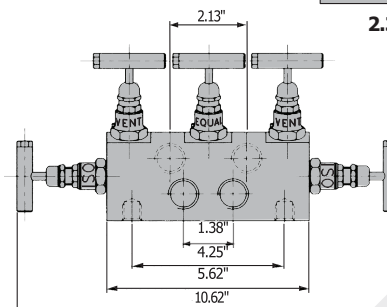


HLY54 TYPE

Remote mounting pipe to pipe.



2.3kg



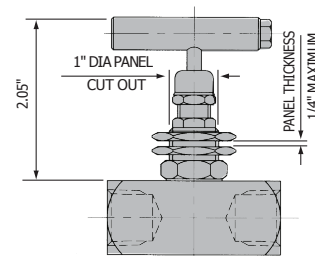
HOKE® Valves and Manifolds Head Unit Options

PANEL MOUNT OPTION



Panel mount option.
Suffix / PM.

Note:
Additionally drilled and tapped mounting holes (suffix /PMHT) top, or bottom (suffix/PMHB) available.

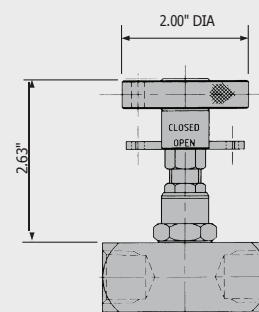


HAND WHEEL LOCKING AND POSITION INDICATOR OPTION



Hand wheel locking and position indicator option.
Suffix / HL-PL.

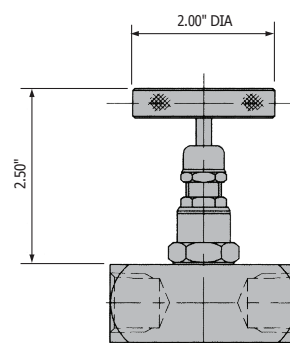
Note:
Padlock is extra.
Suffix / PAD.



STAINLESS STEEL HAND WHEEL OPTION



Stainless steel hand wheel (316 grade).
Suffix / SSHW.

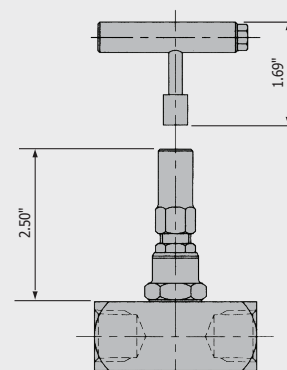


ANTI TAMPER OPTION

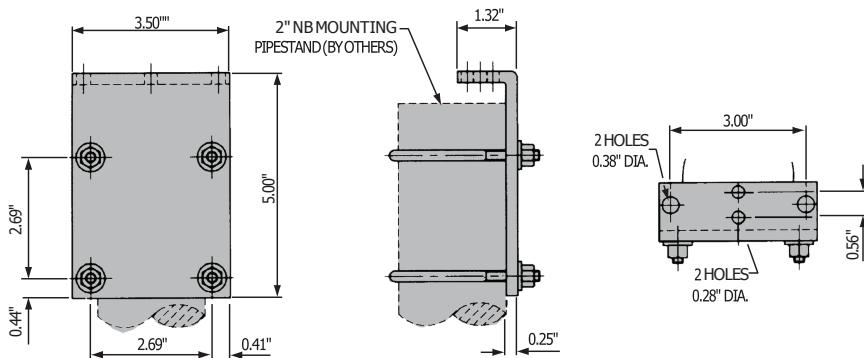


Anti-tamper option.
Suffix / AT.

Note:
Anti-'key' is extra.
Suffix / AT-KEY.



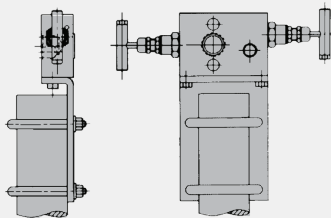
HOKE® Valves and Manifolds Manifold Accessories



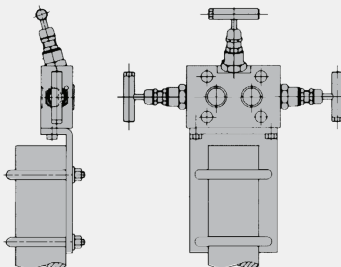
HL52 TYPE

For mounting 2, 3 & 5 valve manifolds to a 2" NB pipestand. Mounting brackets supplied with "U" bolts, washers and nuts. Material of all components is zinc plated and passivated Carbon Steel. Special brackets can be supplied on request

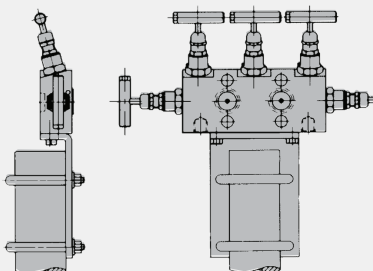
Y24/Y25



Y34/Y35



Y52/Y53



STEAM TRACE BLOCKS

The steam trace block is bolted to the manifold and because it is not an integral part of the manifold, stress levels (due to temperature cycling) are kept to a minimum. Steam trace blocks vary in size depending on manifold type.

MANIFOLD HEATING, ELECTRICAL

Specially designed 3/8" diameter cartridge manifold heater is available. The heater is inserted into the valve manifold and is protected by a brass cable gland and steel conduit designed for Zone 1 hazardous areas and approved to EEx and Exe IIc, BAS number: EX831220U. Output range either 25 or 50 watts, for 200/240 volts.

HOKE® Valves and Manifolds How To Order

HOW TO ORDER HL SERIES NEEDLE VALVES

Typical Ordering Part Number

HL25 1 1 F 8 6MO AA

TIP

1 = Hard

2 = Soft

PACKING

1 = PTFE

2 = GRAFOIL® [AA (10,000 psi) not available]

CONNECTION

F = Female inlet x Female outlet

M = Male inlet x Male outlet

L = Male inlet x Female outlet

SIZE

4 = 1/4" NPT

8 = 1/2" NPT

ALLOY

YL = 316/316L

HC = HASTELLOY® C276

M = MONEL®

D50 = Super Duplex

TI = Titanium

TB = Titanium Blue Anodized

DX3 = Duplex

625 = 625 INCONEL®

825 = 825 INCONEL®

6MO = 6% Mo

E = Carbon Steel

OPTIONS

AA = 10,000 psi Rated

AB = Anti Tamper Vent(s)

AC = Lockable Vent(s)

AD = Anti Tamper Isolate

AE = Lockable Isolate

AH = BSPP Connections

AO = Norsok M-650 Material Required

AP = Panel nut on bonnets

AR = Firesafe

AS = Round Hand Wheel for Vent

AT = Round Hand Wheel for Isolate

BC = Round Hand Wheel - Lockable Vent

BE = Round Hand Wheel - Lockable Isolate

Note: Keys are not included and are sold separately. Order part number HLATHDL-316 for key.

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

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

HOKE® Valves and Manifolds Ball Valve Specifications

ADVANCED LOW TORQUE DESIGN

Our ball valves have very low operating torques, and a range of seat materials to give the ultimate in process environmental compatibility.

STAINLESS STEEL HANDLE

One piece stamped 316 Stainless Steel handle gives positive feel, quarter turn rust-free operation.

STOP PIN

A 316 Stainless Steel "dead stop" pin is held into the body by a machined anti-vibration spline.

SEATS

Our totally enclosed seats offer wide process compatibility whilst maintaining a positive sealing across the entire operating range. This high level of seat integrity allows both vacuum, and high pressure services from one valve.

FIRESAFE SEATS

This option, in the event of a fire, ensures the ball/seat metal to metal contact is maintained. Note that the body and stem seals are changed to graphite.

BALL

This precision machined component is super finished assuring low operating torques.

FULL FLOW

Positive 90° travel combined with clear thru' bores, review table for full or reduced bore.

PROCESS THREADS

CNC super finished screw cut threads ease assembly with reduced risk of galling.

SPINDLE

A one piece stem incorporates an anti-blowout shoulder which maintains seal integrity at all pressures. Twin anti-vibration lock nuts are standard.

BODY SEALS

Totally contained PTFE 'O' ring body seals give high body integrity, and additionally protect the body threads from process media.



HOKE® Valves and Manifolds Ball Valve Specifications

QUALITY ASSURANCE

ISO 9001 quality system registered by Lloyd's Register.

CERTIFICATION AND TRACEABILITY

All body components exhibit unique identification coding and material test certificates to BS EN 10204.

TESTING

All Hoke ball valves are subjected to three pressure tests, a hydrostatic test at the full rated pressure and low pressure pneumatic test at 50 PSI (3.5 BAR), as well as a shell test to 1.5 times working pressure.

VACUUM SERVICE

Our ball valves are suitable for vacuum service and have been tested at 0.01mbar with no detectable leakage.

ANTI-STATIC OPTION

Can be specified with our ball valves.

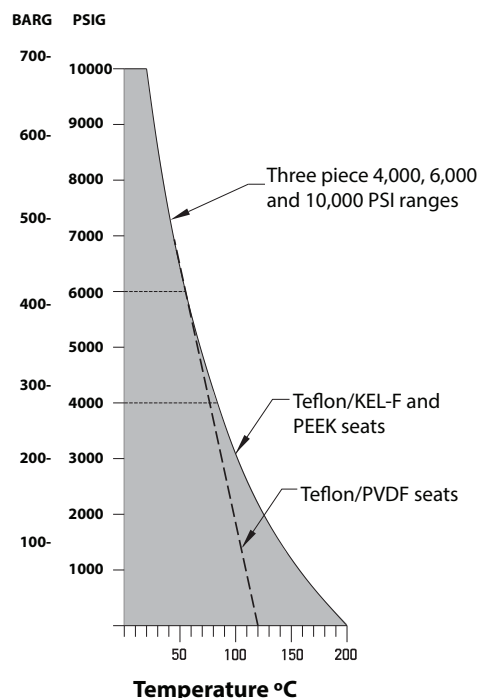
CONTINUOUS DEVELOPMENT

of existing and new ball valve products maintain the highest levels of performance and integrity for our products. Hoke Valves maintain in-house fire test, cycling and combined pressure/temperature test facilities.

CRYOGENIC

Ball valves have been low temperature tested down to minus 196°C please consult factory with system specifications.

BALL VALVE PRESSURE VS TEMPERATURE CURVE



SEATS

- Three piece body 10mm ball valves with unique twin seat 120°C (250°F) maximum: Teflon/PVDF standard. 200°C (390°F) maximum: Teflon/KEL-F add /KL.
- Three piece 14 and 20mm ball valves with solid seat 200°C (390°F) maximum: PEEK.

FLOW CO-EFFICIENT "C_v"

The Flow Co-efficient "C_v" of a valve is the flow of water (gallons/minute) through a fully opened valve, with a pressure drop of 1 psi across the valve.

$$Q_L = C_v \sqrt{\frac{\Delta P}{G}}$$

(For liquid)

$$Q_g = 61 C_v \sqrt{\frac{P_2 \Delta P}{g}}$$

(For liquid)

Q_L = flow rate of liquid (gal./minute)

Q_g = flow rate of gas (CFM at STP)

ΔP = differential pressures across the valve (PSI)

P₂ = outlet pressures (PSI)

G = specific gravity of liquid; (for water, G = 1)

g = specific gravity of gas; g air = 1.0000

Size	1/4"	3/8"	1/2"	1/2"	3/4"	1"
Bore (inches)	0.375	0.375	0.375	0.551	0.551	0.787
Bore (mm)	10	10	10	14	14	20
Flow Cv	6.3	6.3	6.3	11.7	11.7	27.9

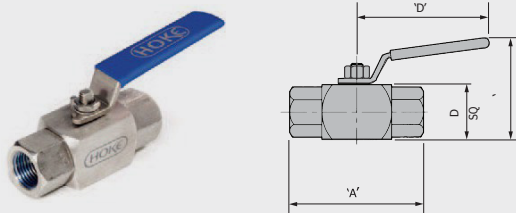
* Over size bore

HOKE[®] Valves and Manifolds Ball Valve Specifications

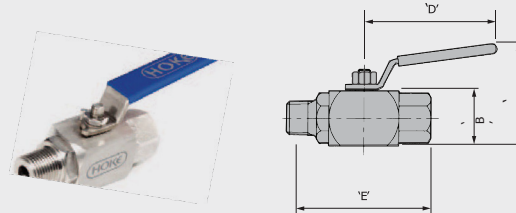
7L SERIES BALL VALVES TO 10,000 PSI

THREE PRESSURE RANGES 3,000 PSI (200 BAR), 6,000 PSI (400 BAR) AND 10,000 PSI (700 BAR). SIZES TO 1" NPT.

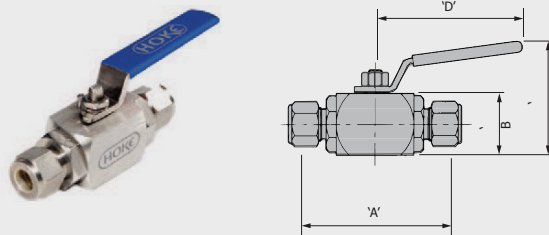
FEMALE x FEMALE THREADED ENDS



MALE x FEMALE THREADED ENDS



GYROLOK INTEGRAL TWIN FERRULE COMPRESSION ENDS



As standard not supplied with nuts and ferrules.

Suffix / NF (nuts and ferrules).

Style	Size	Max pressure (at 20 °C)	Bore size		Dimensions (inches)					Max temperature °C	Weight Kg	CV
			mm	inch	A	B	C	D	E			
Twin ferrule compression fitting (Tube O.D.)	6mm	6000	10	0.40	3.97	1.25	2.50	3.31	-	200	0.4	6.3
	10mm	6000	10	0.40	3.97	1.25	2.50	3.31	-	200	0.4	6.3
	12mm	6000	10	0.40	4.13	1.25	2.50	3.31	-	200	0.4	6.3
	1/4"	6000	10	0.40	3.88	1.25	2.50	3.31	-	200	0.4	6.3
	3/8"	6000	10	0.4	3.88	1.25	2.5	3.31	-	200	0.4	6.3
	1/2"	6000	10	0.40	4.13	1.25	2.50	3.31	-	200	0.4	6.3
Female (NPT)	1/4"	6000	10	0.40	2.38	1.25	2.50	3.31	2.94	200	0.4	6.3
		10000	10	0.40	2.38	1.25	2.50	3.31	2.94	200	0.4	6.3
	3/8"	6000	10	0.40	2.38	1.25	2.50	3.31	3.00	200	0.4	6.3
		10000	10	0.40	2.38	1.25	2.50	3.31	3.00	200	0.4	6.3
	1/2"	6000	10	0.40	3.38	1.25	2.50	3.31	3.63	200	0.5	6.3
		10000	10	0.40	3.38	1.25	2.50	4.06	3.63	200	0.5	6.3
		6000	14	0.55	4.07	1.50	3.00	4.06	4.50	240	1.2	11.7
	3/4"	6000	14	0.55	4.07	1.50	3.00	4.06	4.75	240	1.1	11.7
		6000	20*	0.80	4.83	2.00	3.50	4.06	5.56	240	2.0	27.9
	1"	6000	20*	0.80	4.83	2.00	3.50	4.06	5.66	240	1.9	27.9

3/4" and 1" 10,000 PSI valves are available to special designs.

* 3/4" and 1" size's available with 10mm reduced bore.

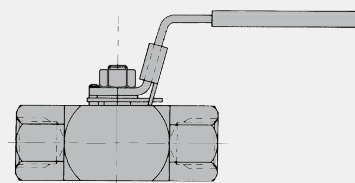
HOKE® Valves and Manifolds Ball Valve Options

HANDLE LOCKING OPTION



Valves can be locked in either the open or closed position with padlock available.
Suffix / HL.

Note:
Padlock is extra. Suffix / PAD.
standard.
Vent plugs

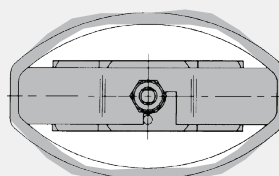


PMB PANEL MOUNT OPTION



For all three piece ball valve body sizes this simple, and cost effective handle solution is a clear advantage.
Suffix / PMB.

OVAL HANDLE OPTION



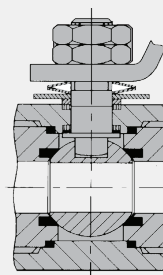
An oval handle can be fitted as an option to the standard lever style (Plan view shown).
Suffix / OH.

ACTUATED BALL VALVE OPTION



A range of air, pneumatic or electric actuators can be factory or plant fitted to any Hoke ball valve.

FIRESAFE/ANTI-STATIC OPTION



Tested to BS6755 part 2, these valves have body and stem seals in fire resistant Graphite. The metal lip seat is designed to ensure leak free seating when the seats burns in fire conditions.
The spindle disc springs ensure a positive leakfree gland.

HOKE® Valves and Manifolds How To Order

HOW TO ORDER 7L SERIES BALL VALVES

7LB23 F 4 Y AO EH50 FS LT PK

VALVE

7L23 = standard

7LB23 = Full Bore

THREAD

F = Female NPT standard

RG = BSP Thread

G = GYROLOK® Connection

CONNECTION SIZE

4 = 1/4"

6 = 3/8"

8 = 1/2"

12 = 3/4"

16 = 1"

ALLOY

Y = 316 SS standard

YL = 316L

6MO = 6% MO

HC = HASTELLOY® C276

M = MONEL®

D50 = Super Duplex

TI = Titanium

TB = Titanium Blue Anodized

DX3 = Duplex

625 = 625 INCONEL®

825 = 825 INCONEL®

NORSOK

AO = NORSOK M-650 Material Req.

SEAT MATERIAL

I PVDF Seats standard

PK = Peek Seats

LOCKING DEVICE

LT = Locking Plate

FIRESAFE

FS = Fire Safe

EXTENDED STEM & SIZE

EH50 = Ext. Stem - 50mm

HOKE® Valves and Manifolds Double Block & Bleed Valve Solutions



- Each Double Block & bleed has a unique number recording its factory history and we are now way above 100,000 of these units in installation worldwide.
- A smaller unit vs the traditional hook-up, bringing both piping and instrumentation isolation into one unit – this means;
- Less weight, which is significant on the top side of a platform, when you combine all the pressure instrument take-offs. Typical installation it is reduced from 33kg to 7kg, a weight reduction of 75%!
- Weight reduction is also an issue when take-off is horizontal, this instils a bending moment and could cause critical fracture of pipeline interface and is generally overcome by adding more stanchions & cussetting to support traditional installation, which adds even more weight.
- Cost reduction – typically 30% saving over traditional installation, which jumps up to 70% in the case of valves made from exotic materials for more exacting processes!
- Cost saving on site – the cost of one factory tested component, as opposed to different piping valves, instrument valves, flanges, connections and flanged seal rings and then the cost to raise purchase orders and expediting department to chase the parts in goods receivable, etc., and then the shipping costs are larger and weightier, specs must all be taken into account, rises in cost can be 30% of the overall cost. Coded welders could be required as well.
- Safety – including spool pieces the type of valve, i.e. standard 3-piece valve used in installation may have as many as nine additional leak points.
- Health & safety legislation is moving more and more towards testing at a considerable cost to each one of these joints after installation, cost of which can be excessive.
- Health & Safety – USA and abroad process safety management document OCEA 3132, here in the UK Health & Safety Executive application HSG253 which is readily downloadable free, states double block & bleed must be used. All these documents stem from the Piper Alpha disaster over 20 years ago and the P36 disaster in Brazil, both of which indicated double block & bleed as a marked improvement for safety.
- The 'top-hat' or T-section forging use of the body of the valve, and the H section use of flange to flange variance is upset forged, which means the grain flow of the material flows into the flange, making for a very strong body.
- First isolation is to a full piping valve ASME V111 specification, ball configurations whether they be standard 2-ball valves isolate and needle valve vent, 3-needle valves or 3-ball valves are all firesafe certified valves.
- Delivery – the DBB part machine program that was set-up many years ago, in which we machined all aspects of the double block & bleed apart from one aspect, the customer specifies which is the flange, which leads to very quick lead times.
- Any different variations, including vent and injection, ball range, exotic materials, all the options available from standard ball and needle valves.

HOKE® Valves and Manifolds Double Block & Bleed Valve Solutions

1 ADVANCED DESIGNS

Our products conform to the latest international design specifications and are approved by leading companies.

2 TOUGH HANDLES

Rugged, 316 stainless steel, low torque, quarter turn handles will not rust in off-shore service.

3 POSITIVE STOP PINS

A 316 stainless steel pin held into the 11 body by a machined anti-vibration spline assures an absolute 90° turn.

4 HIGH PERFORMANCE SEATS

Unique enclosed seats offer great process compatibility but restrict creep or distortion in service. Our approach achieves high levels of seat integrity at low and high pressures.

5 FIRESAFE BALL VALVES

Go metal to metal in a fire to reduce leakage due to seat destruction.

6 BALL

This precision machined component is super finished assuring low operating torques.

7 THROUGH BORE OF BALL VALVES

True positive 90° opening combined with clear through bores across the range.

8 PRECISION PROCESS THREADS

Super finished screwcut – not tapped threads – using advanced CNC machines ensure easy assembly and leak tight threads with reduced risk of galling.

9 SOLID BACKSEATED ANTI-BLOWOUT SPINDLE

Precision, rugged one piece stem incorporates anti-blow out feature and maintains seal integrity at all pressures. Anti-vibration lock nuts are standard to all products.

10 BODY SEALS

Totally contained 'O' ring type body seals for body integrity and additionally protecting internal body threads from process media.

11 DROP FORGED BODY

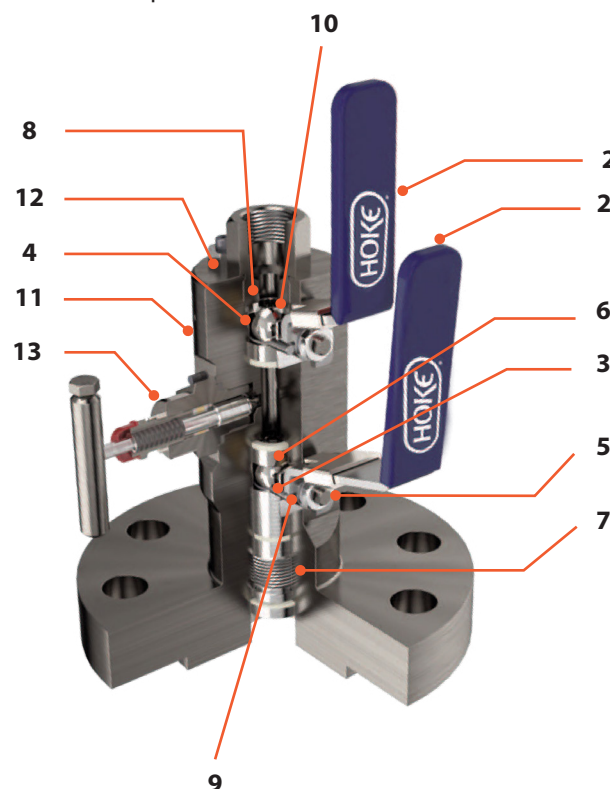
A rigid one piece drop forged body, eliminates potential leak points experienced with conventional hook ups.

12 'BLOK-LOK' (PATENT PENDING)

Anti-removable pin, non-welded connector locking system which prevents accidental disassembly when in service.

13 HEAVY DUTY FIRESAFE NEEDLE VALVES

Hoke's proven heavy duty needle pattern head unit features a rugged fire- safe and tested construction.



HOKE® Valves and Manifolds Double Block & Bleed Valve Solutions

EXPLOSIVE DECOMPRESSION

Explosive decompression occurs when gas at high pressure permeates into seal materials. When the gas pressure is reduced the absorbed gas expands which can cause the seals to swell and blister. Hoke Valves only use seal material within their 'Double Block and Bleed Valve' range that are resistant to explosive decompression.

OPTIONS

CARBON STEEL DOUBLE BLOCK AND BLEED VALVES

have stainless steel end adaptors, seal housings and inserts as standard construction. The parts mentioned can also be made from carbon steel if specifically requested. Plating as standard with painting options available.

HANDLE LOCKING - /HL Hoke unique handle locking system will prevent accidental operation – tamper-proof.

SPANNER ACTUATION - /SA Hoke tamper-proof spanner actuation – for ball valve handles only.

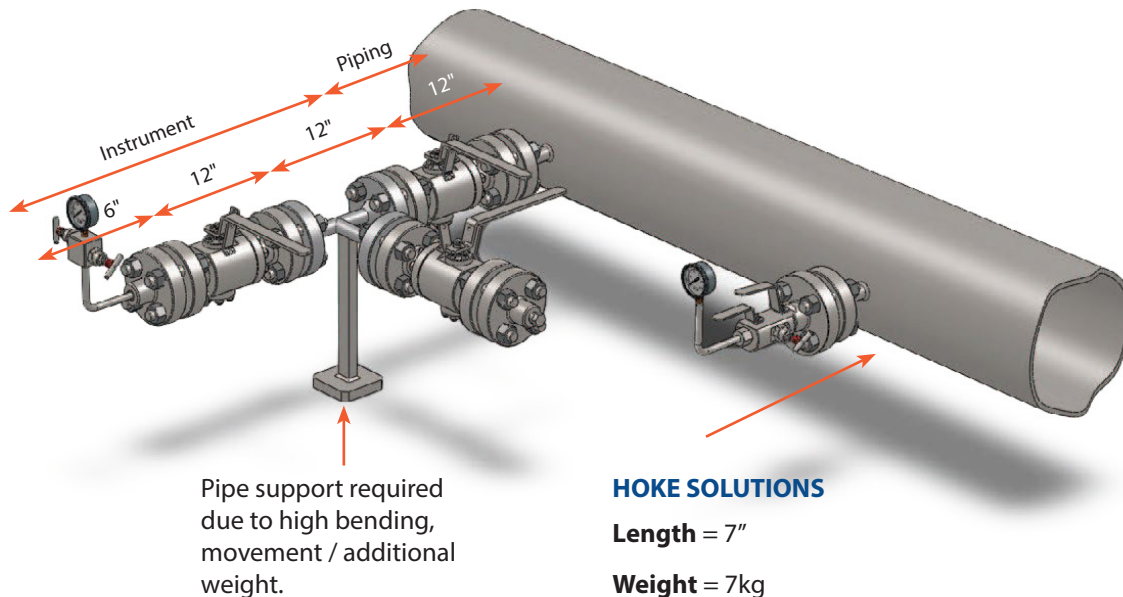
STANDARD

FIRESAFE - /FS Firesafe construction compliant with BS 6755 part 2. API 607 and API 6FA. Fully certified to Lloyds type approval certificate numbers 88/0345, 91/0117, 92/0140 and 93/00068. High temperature Graphite replaces PTFE for seals.

NACE - /NA **Compliance** to NACE specification MR-01-75 latest revision – suitable for sour service – resistant to sulphide stress corrosion cracking. 316 stainless steel is solution annealed for trims.



HOKE® Valves and Manifolds Double Block & Bleed Valve Solutions



YOUR PROBLEM

Length = 42"

Weight = 100kg (based on 1.5" 1500 class)

- 3 Ball & needle valve manifolds
- 24 Bolts
- 6 Gaskets

YOUR KEY SELLING POINTS

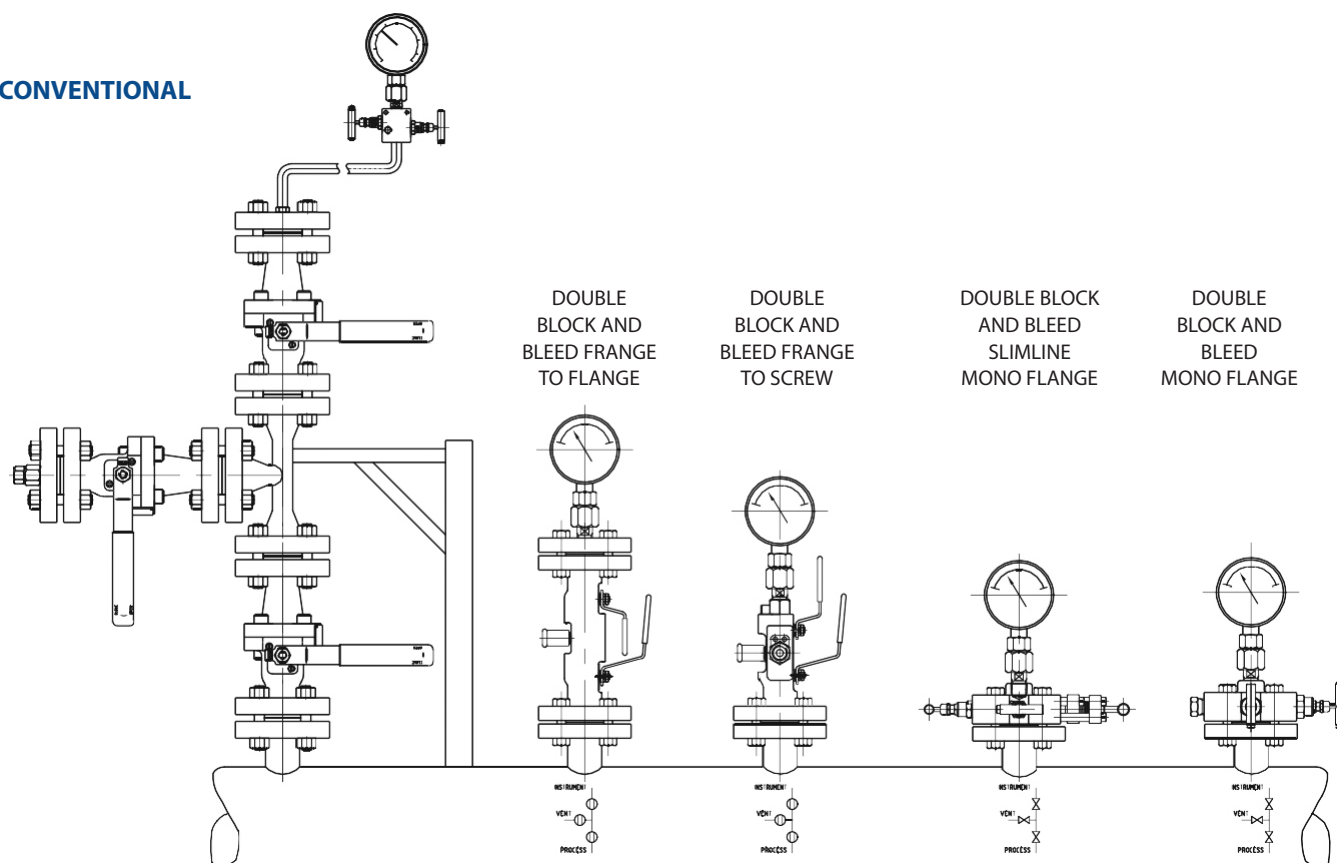
- We eliminate a terrific amount of space when compared with welding three individual valves together.
- We save a huge amount of direct labour and site installation costs.
- We have reduced leakage points massively - a huge benefit as fugitive emissions are so important.
- We have reduced costs.
- We only have one component to be ordered, not many as in the old applications, which can save on inventory and site confusion.
- We can get away from local site support by reducing the bending moment.
- We can bring the pressure instrument a lot closer to the point of pressure measurement thus saving space which is most important on skip mounting applications.
- Unique numbering system on each valve recording factory history (the "original manufacture being over 25 years and 200,000+ sold).

HOKE® Valves and Manifolds Double Block & Bleed Valve Solutions

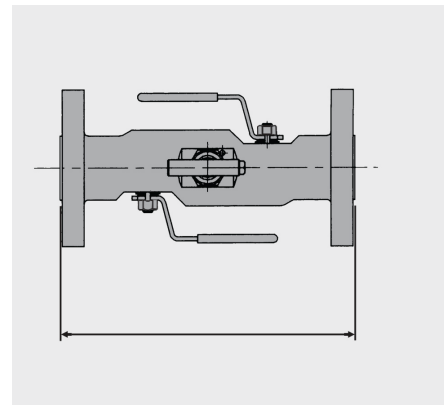
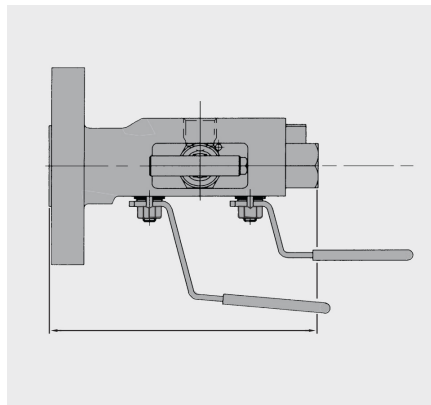
HOKE's unique approach offers the designer of sampling, draining, injection and pressure instrument take-off points a simple, rigid, compact, safe, low-cost option to "CONVENTIONAL PRACTICE". Our double block and bleed valves are used in critical applications, where cost, weight and space saving are paramount for:

- Pressure instrument take-off points.
- Sampling systems, where a pipeline probe is integral with our valve.
- Chemical injection systems, where a check valve is part of our valve assembly.
- Drains for tanks and pipes, where space is restricted.
- High pressure firesafe diverter valves.
- Hydraulic power unit systems.
- Reduced vibrational stresses.
- Cost savings with exotic material designs are huge.

CONVENTIONAL



HOKE® Valves and Manifolds D Type Double Block & Bleed



FLANGE TO PIPE – THREE BORES – THREE STANDARD MATERIALS

SIZE RANGES		
BALL VALVE BORE 0.40"/10mm CV 6.3	BALL VALVE BORE 0.55"/14mm CV 11.7	BALL VALVE BORE 0.80"/20mm CV 27.9
Flange size 1/2" NB to 2" NB, Flange Classes 150 to 2500 RF & RTJ. Also API 5K & API 10K.	Flange size 3/4" NB to 2" NB, Flange Classes 150 to 2500 RF & RTJ. Also API 5K & API 10K.	Flange size 1" NB to 2" NB, Flange Classes 150 to 2500 RF & RTJ. Also API 5K & API 10K.
Outlet connection: 1/2" NPT Female standard. Vent connection: 1/2" NPT Female standard.	Outlet connection: 3/4" NPT Female standard. Vent connection: 1/2" NPT Female standard.	Option – 3" NB, 150 to 2500 Outlet connection: 1" NPT Female standard. Vent connection: 1/2" NPT Female standard.

FLANGE TO FLANGE – THREE BORES – THREE STANDARD MATERIALS

SIZE RANGES		
BALL VALVE BORE 0.40"/10mm CV 6.3	BALL VALVE BORE 0.55"/14mm CV 11.7	BALL VALVE BORE 0.80"/20mm CV 27.9
Flange size 1/2" NB to 2" NB, Flange Classes 150 to 2500 RF & RTJ. Also API 5K & API 10K.	Flange size 3/4" NB to 2" NB, Flange Classes 150 to 2500 RF & RTJ. Also API 5K & API 10K.	Flange size 1" NB to 2" NB, Flange Classes 150 to 2500 RF & RTJ. Also API 5K & API 10K.
Outlet connection: Flange size & Class can be different from inlet. Vent connection: 1/2" NPT Female standard.	Outlet connection: Flange size & Class can be different from inlet. Vent connection: 1/2" NPT Female standard.	Outlet connection: 1" NPT Female standard. Vent connection: 1/2" NPT Female standard.

CARBON STEEL

- Standard specification – ASTM A350 LF2 body material with BS970 316 S11/S31 barstock stainless steel trims, Inserts. End adaptors with PTFE seats and PTFE/Graphite seals and gland packings. Standard 1/4 turn lever 1/2 turn to vent. All end adaptors have BLOK-LOK protection against accidental disassembly.

DUPLEX STAINLESS STEEL

- Standard specification – ASTM A182 F51 body material with UNS S31803 barstock steel trims, Inserts, End adaptors with PTFE seats and PTFE/Graphite seals and gland packings. Standard 1/4 turn lever 1/2 turn to vent. All end adaptors have BLOK-LOK protection against accidental disassembly.

STAINLESS STEEL

Standard specification – ASTM A182 F316 body material with BS970 316S11/S31 barstock stainless steel trims, Inserts, End adaptors with PTFE seats and PTFE/Graphite seals and gland packings. Standard 1/4 turn lever 1/2 turn to vent. All end adaptors have BLOK-LOK protection against accidental disassembly.

STANDARD	
NACE:	Conformance to NACE MR-01-75 (latest revision). FIRESAFE: construction
FIRESAFE:	Firesafe construction.

HOKE® Valves and Manifolds Double Block & Bleed Dimension Tables

FLANGE TO PIPE (TABLE A)

BORE			7/32"		5.5mm	3/8"		10mm	9/16"		14mm	13/16"		20mm
SIZE	FLANGE CLASS	RF/RTJ FLANGE TYPE	N inch	mm	kg	D & F inch	mm	kg	D & F inch	mm	kg	D inch	mm	kg
1/2"	150	Y/N	5.88	149	3.4	6.69	170	3.4	–	–	–	–	–	–
	300	Y/Y	5.88	149	4	6.69	170	4	–	–	–	–	–	–
	600	Y/Y	5.88	149	4	6.69	170	4	–	–	–	–	–	–
	1500	Y/Y	6.25	159	5.2	7.06	179	5.2	–	–	–	–	–	–
	2500	Y/Y	6.5	165	6.4	7.31	186	6.4	–	–	–	–	–	–
3/4"	150	Y/N	5.88	149	4.2	6.69	170	4.2	8.19	208	7.2	–	–	–
	300	Y/Y	5.88	149	4.7	6.69	170	4.7	8.19	208	7.7	–	–	–
	600	Y/Y	5.88	149	4.7	6.69	170	4.7	8.19	208	7.7	–	–	–
	1500	Y/Y	6.25	159	5.6	7.06	179	5.6	8.56	218	8.6	–	–	–
	2500	Y/Y	6.5	165	6.7	7.31	186	6.7	8.81	224	9.7	–	–	–
1"	150	Y/Y	5.88	149	4.4	6.69	170	4.4	8.19	208	7.4	9.25	235	8.2
	300	Y/Y	5.88	149	4.8	6.69	170	4.8	8.19	208	7.8	9.25	235	8.6
	600	Y/Y	6.25	159	5.3	7.06	179	5.3	8.56	218	8.3	9.62	244	9.1
	1500	Y/Y	6.5	165	7.3	7.31	186	7.3	8.81	224	10.3	9.88	251	11.1
	2500	Y/Y	6.5	165	10.1	7.31	186	10.1	8.94	227	13.1	9.88	251	14.1
1 1/2"	150	Y/Y	5.88	149	5	6.69	170	5	8.19	208	8	9.25	235	8.8
	300	Y/Y	6.25	159	7.4	7.06	179	7.4	8.56	218	10.4	9.62	244	11.2
	600	Y/Y	6.25	159	7.4	7.06	179	7.4	8.56	218	10.4	9.62	244	11.2
	1500	Y/Y	6.5	165	9.1	7.31	186	9.1	8.81	224	12.1	9.88	251	12.9
	2500	Y/Y	7.06	179	13.5	7.87	200	13.5	9.38	238	16.5	10.43	265	17.3
2"	150	Y/Y	6.25	159	7.2	7.06	179	7.2	8.56	218	10.2	9.62	244	11
	300	Y/Y	6.25	159	7.4	7.06	179	7.4	8.56	218	10.4	9.62	244	11.2
	600	Y/Y	6.5	165	7.7	7.31	186	7.7	8.81	224	10.7	9.88	251	11.5
	1500	Y/Y	7.06	179	14.5	7.87	200	14.5	9.38	238	17.5	10.43	265	18.3
	2500	Y/Y	7.38	187	20	8.19	208	20	9.68	246	22.1	10.75	273	22.9

– not available

HOKE[®] Valves and Manifolds Double Block & Bleed Dimension Tables

FLANGE TO FLANGE (TABLE B)

BORE			3/8"		10mm	9/16"		14mm	9/16"		14mm	13/16"		20mm
SIZE	FLANGE CLASS	RF/RTJ FLANGE TYPE	D & F inch	mm	kg	D inch	mm	kg	F inch	mm	kg	D inch	mm	kg
1/2"	150	Y/N	9.25	235	5.4	–	–	–	–	–	–	–	–	–
	300	Y/Y	9.25	235	6.6	–	–	–	–	–	–	–	–	–
	600	Y/Y	9.25	235	6.6	–	–	–	–	–	–	–	–	–
	1500	Y/Y	10	254	9	–	–	–	–	–	–	–	–	–
	2500	Y/Y	10.5	267	11.4	–	–	–	–	–	–	–	–	–
3/4"	150	Y/N	9.25	235	7	9.25	235	9	10.5	267	10	–	–	–
	300	Y/Y	9.25	235	8	9.25	235	10	10.5	267	11	–	–	–
	600	Y/Y	9.25	235	8	9.25	235	10	10.5	267	11	–	–	–
	1500	Y/Y	10	254	9.8	10	254	11.8	10.5	267	12.8	–	–	–
	2500	Y/Y	10.5	267	12	10.5	267	14	11	279	15	–	–	–
1"	150	Y/Y	9.25	235	7.4	9.25	235	9.4	10.5	267	10.4	9.25	235	9.4
	300	Y/Y	9.25	235	8.2	9.25	235	10.2	10.5	267	11.2	9.25	235	10.2
	600	Y/Y	10	254	9.2	10	254	11.2	10.5	267	12.2	10	254	11.2
	1500	Y/Y	10.5	267	13.2	10.5	267	15.2	11	279	16.2	10.5	267	15.2
	2500	Y/Y	10.5	267	18.8	10.75	273	20.8	11	279	21.8	10.75	273	20.8
1 1/2"	150	Y/Y	9.25	235	8.6	9.25	235	10.6	10.5	267	11.6	9.25	235	10.6
	300	Y/Y	10	254	13.4	10	254	15.4	10.75	273	16.4	10	254	15.4
	600	Y/Y	10	254	13.4	10	254	15.4	11	279	16.4	10	254	15.4
	1500	Y/Y	10.5	267	16.8	10.5	267	18.8	11	279	19.8	10.5	267	18.8
	2500	Y/Y	12.38	314	25.6	13.13	334	27.6	13.13	334	27.6	13.13	334	27.6
2"	150	Y/Y	10	254	13	10	254	15	10.75	273	16	10	254	15
	300	Y/Y	10	254	13.4	10	254	15.4	10.75	273	16.4	10	254	15.4
	600	Y/Y	10.5	267	14	10.5	267	16	11	279	17	10.5	267	16
	1500	Y/Y	12.38	314	27.6	13.13	334	29.6	13.13	334	29.6	13.13	334	29.6
	2500	Y/Y	13.13	334	38	13.13	334	40	13.13	334	40	13.13	334	40

– not available

HOKE® Valves and Manifolds How to Order

HOW TO ORDER DOUBLE BLOCK & BLEED VALVES

Standard items in bold

Typical Ordering Part Number

HLDBB7V 8 F 316 AB

SIZE

4 = 1/4" NPT

8 = 1/2" NPT

CONNECTION

F = Female

ALLOY

YL = **316/316L**
 HC = HASTELLOY® C276
 M = MONEL®
 D50 = Super Duplex
 TI = Titanium
 TB = Titanium Blue Anodized
 DX3 = Duplex
 625 = 625 INCONEL®
 825 = 825 INCONEL®
 6MO = 6% Mo
 E = Carbon Steel

OPTIONS

AB = Anti Tamper Vent(s)
 AC = Lockable Vent(s)
 AO = Norsok M-650 Material Required

Note: Keys are not included and are sold separately. Order part number HLATHDL-316 for key.

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.

NOTES

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