

# **Process Instrumentation Valve and Manifold Solutions**

H Series Product Range

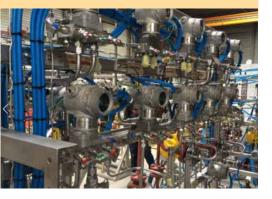


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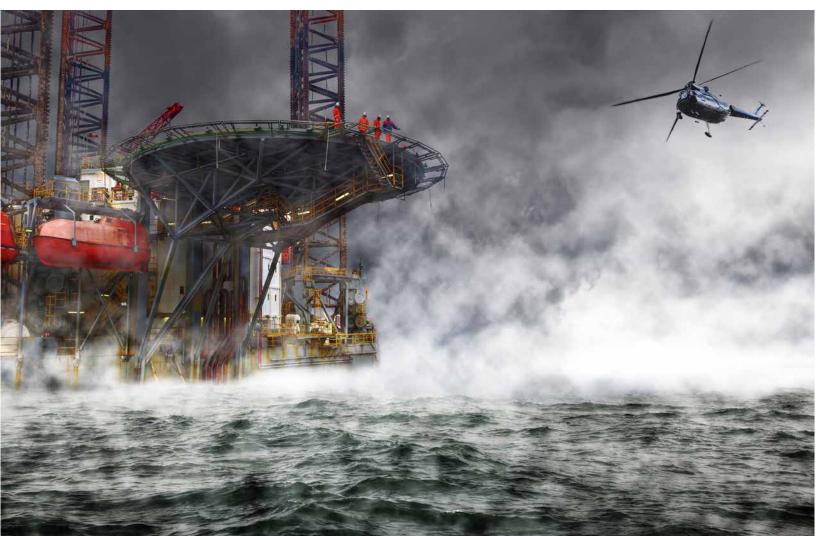
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# **PROCESS INSTRUMENTATION VALVE AND MANIFOLD** SOLUTIONS









# Introduction

Welcome to the Parker Superior Advantage for your process to instrument hook ups.

Wholly designed and manufactured from decades of development, experience and knowledge from within our ISO 9000 compliant UK facility, the Parker H-series valve and manifold solutions range enjoys world leading recognition for quality, reliability and value.

Selection can be made from a comprehensive range of bonnet assemblies, body configurations and styles with a variety of connections and material options to suit all your applications, optimising your installation and improving operation.

In addition to producing these valves and manifolds with your choice of connections, all the products offered in this catalogue are available (as standard) with the superior advantage of integrated tubing connections. The specification of the world renowned and universally acceptable Parker compression type connections will improve system performance, increase safety, reduce size and weight and simplify installation which ultimately reduces overall user costs.



# **Parker EHS Vision Statement:**

Parker recognizes, and believes, in the importance of safeguarding natural resources and the global environment. We are committed to our employees, our communities, and our customers: their health, safety and understanding of the need for environmental stewardship. We are committed to the concept of continuous improvement in environmental performance. Accordingly, we are committed to the following principles:

- We will seek to comply with environmental, health, and safety laws worldwide.
- We strive to minimize or eliminate the generation of waste.
- We will monitor compliance with environmental, health and safety regulations.

The top five target markets for Parker Instrumentation are shown below, but Parker manifold solutions are suitable for the widest range of process measurement and control applications in a diverse spectrum of industries.

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

All dimensions shown in this catalogue are approximate and subject to change.

Every effort is made to provide sufficient, clear and accurate information to allow the correct selection of product from this catalogue, but ultimately it is the system designer's or user's responsibility to ensure selected product is suitable for the intended application. Should you require further information please do not hesitate to contact your local Parker support.

With thousands of distributor outlets and stores worldwide, and hundreds of Parker personnel and locations, Parker also offers the superior advantage of supply and support in your locale.

# **General Technical Information**

# Design

All valves and manifolds are designed to meet the pressure and temperature ratings of ANSI B16.34 Class 2500/Class 4500 as applicable, limited only by selection of gland packing materials. Conformity to the recommendations of MSS SP-99 is also assured.

# Relevant codes, standards and specifications

Code/Specification	Description
DIN EN61518 / IEC 61518	Mating dimensions between differential pressure (type) measuring instruments
ASME B31.1	Process Piping Specification for Pipeline Valves
ASME B16.34	Valves - Flanged, Threaded and Welding End
ASME B16.5	Pipe Flanges and Flanged Fittings
NACE MR0175 / ISO 15156	Petroleum and Natural Gas Industries - Materials for use in H2S - containing Environments in Oil and Gas Production
API 598	Valves Inspection and Testing
ISO 5208	Industrial Valves - Pressure Testing of Metallic Valves
API 607 / ISO 10497	Fire Test of Soft-Seated Quarter Turn Valves Fire type-testing requirements
MSS SP-25	Standard Marking Systems for Valves, Fittings, Flange and Unions
MSS SP-61	Pressure Testing of Valves
MSS SP-99	Instrument Valves
ISO 15848	Industrial valves - Measurement, test and qualification procedures for fugitive emissions
TA Luft	TA-Luft 2002, Absatz 5.2.6.4 und VDI 2440 (Ausgabe Nov. 2000), Absatz 3.3.1.3 erfüllen

# Materials of construction

All materials are purchased from long standing reputable sources, conforming not only to recognised national/ international standards, but also to additional requirements imposed by Parker to assure suitability/usability across the widest spectrum of user applications.

A range of techniques and processes including PMI (Positive Material Identification) are used to validate all incoming material supplies, segregation, storage and maintenance of product quality.

# **Body material options**

Material Group	Material Designator	UNS No.	Werkst- off No.	Euronorm Equivalent	ASTM Material Grade	
Carbon Steel*	A105	UNS 1.0482	19Mn5	K03504	A105	
Austenitic Stainless Steel	316/316L Dual	UNS S31600	1.4401	X5CrNiMo17-12-2	A479 Gr 316	
	certified	UNS S31603	1.4404	X2CrNiMo17-12-2	A479 Gr 316L	
Super Austenitic Stainless Steel	6Mo	UNS S31254	1.4547	X1CrNiMoCuN20-18-7	A479/A276	
	Duplex 22Cr	UNS S31803	1.4462	X2CrNiMoN22 5 3	A479/A276	
Austenitic-Ferritic Steel	Duplex 25Cr	UNS S32750	1.4410	X2CrNiMoN25-7-4	A479/A276	
(Duplexes)		UNS S32760	1.4501	X2CrNiMoCuWN25-7-4	A479/A276	
Copper-Nickel Alloy	Monel 400	UNS N04400	2.436	NiCu30Fe	ASTM B164	
Nickel Alloy	Alloy 825	UNS N08825	2.4858	NiCr21Mo	ASTM B425	
Nickel Alloy	Alloy 625	UNS N06625	2.4856	NiCr22Mo9Nb	ASTM B446	
Nickel Alloy	Alloy C276	UNS N10276	2.4819	NiMo16Cr15W	ASTM B574	
Titanium	TitaniumGrade 2	UNS R50400	3.7075	Ti-II	ASTM B348	

All materials will meet (as applicable) the requirements of NACE MR0103/MR0175 and ISO 15156. They are further supplied as per NORSOK M650/M630 as required.

\* Carbon Steel may not be universally available, and if offered, may be restricted to body only. Other materials may be considered but any offer may also be restricted to body only. Please consult with your local Parker support.

# General information - materials of construction

Itom				Ma	aterial				
Item	St.St.	Monel	Duplex	Super Duplex	Hastelloy	Titanium	6MO	Incoloy	Inconel
ROOV	316 St.St ASTM A479	Monel M400	Duplex UNS 31803	Super Duplex UNS S32750/32760	Hastelloy C-276	Titanium GR-2	6MO	Incoloy 825	Inconel 625
Tip	17-4PH St.St.	Monel K500	Duplex UNS S.32750/32760	Inconel 625	Hastelloy B3		DUPLEX UNS S.32750/32760	Inconel 625	Inconel 718
	316 St.St. ASTM A479	Monel M400	6MO	Inconel 625	Hastelloy C-276	Inconel 825	6MO	Incoloy 825	Inconel 625
Packing		P.T.F.E. / Graphite	P.T.F.E. / Graphite	P.T.F.E. / Graphite	P.T.F.E. / Graphite		P.T.F.E. / Graphite	P.T.F.E. / Graphite	P.T.F.E. / Graphite
Thrust Bush	316 St.St	316 St.St	316 St.St	316 St.St	316 St.St	316 St.St	316 St.St	316 St.St	316 St.St
	316 St.St. ASTM A479	Monel M400	Duplex UNS 31803	Super Duplex UNS S32750/32760	Hastelloy C-276	Titanium GR-2	6MO	Incoloy 825	Inconel 625
		316 St.St. ASTM A479	316 St.St. ASTM A479	316 St.St. ASTM A479	316 St.St. ASTM A479		316 St.St. ASTM A479	316 St.St. ASTM A479	316 St.St. ASTM A479
Handle	316 St.St.	316 St.St.	316 St.St.	316 St.St.	316 St.St.	316 St.St.	316 St.St.	316 St.St.	316 St.St.
Grub Screw	A4-80 St.St.	A4-80 St.St.	A4-80 St.St.	A4-80 St.St.	A4-80 St.St.	A4-80 St.St.	A4-80 St.St.	A4-80 St.St.	A4-80 St.St.
Dust Can		LDPE - Coloured	LDPE - Coloured	LDPE - Coloured	LDPE - Coloured		LDPE - Coloured	LDPE - Coloured	LDPE - Coloured
Lock Nut	316 St.St.	316 St.St.	316 St.St.	316 St.St.	316 St.St.	316 St.St.	316 St.St.	316 St.St.	316 St.St.
	316 St.St. ASTM A479	Monel M400	Duplex UNS 31803	Super Duplex UNS S32750/32760	Hastelloy C-276	Titanium GR-2	6MO	Incoloy 825	Inconel 625

Max. Working Pressure	6,000 psig (414 barg)
High Pressure Range	10,000 psig (689 barg)
P.T.F.E. Packing	Max. 260°C (500°F)
Graphite Packing	Max. 583°C (1000°F)

# Standard and optional specification details

### **Standard Specification Details**

Seat orifice diameter - 4mm

Flow co-efficient (Cv) - 0.35

Metal to metal valve seat and stem tip

100% pressure test. All valves and manifolds are subjected hydrostatic pressure at 1.1x maximum working pressure for the seat and 1.5x maximum working pressure for the shell

All products supplied in a clean bur and grease free cond suitable for most liquid and gaseous applications

Bodies and bonnets are fully traceable to original material source (certification with unique trace code applied to the stock material.

Certification according to BS EN 10204 3.1 for material ar pressure test is available

All products are permanently marked as per example belo Manifolds include a line diagram describing the flow paths

Complementary to the marking, bonnet assemblies are a functionally colour coded by the dust caps

Number of turns open to close: 3.5

Gauge valves and manifolds do not include plugs as standard

Direct mount manifolds include applicable flange face sea and high tensile, zinc plated carbon steel mounting bolts

All manifolds include mounting holes suitable for bracket enclosure mounting

### Notes:

- Monel selection down-rates to 5,000 psig (345 barg)
- Titanium selection down-rates to 2,750 psig (190 barg)
  Other materials and option selections can also affect performance ratings. If in doubt, please consult your local Parker support.

	Optional Specification Details
	Seat orifice diameter - up to 6mm in some configurations/ styles. See page 14
	6mm: Flow co-efficient (Cv) - 0.5
	Alternative soft tip and tip materials. See page 14
ed to for	Alternative pressure test regimes applied to oxygen cleaned and/or low emission products. See page 17
	Your other pressure test requirements can be considered
lition	Cleaned suitable for oxygen service. Not every product option is suitable for oxygen service
ıl ə bar	Alternative levels of traceability and certification are available. Your other requirements can be considered
nd	Certification according to BS EN 10204 3.2 can be available at additional cost, please contact your local Parker support
ow. IS.	
all	
	6mm: Number of turns open to close: 3.3
	Various plugs are available to order. See page 60
eals S	Stainless steel mounting bolts are available. See page 48
ts or	A full range of mounting brackets and accessories are available. See pages 40, 48, 60 Mounting for selected hand valves and gauge valves is
	available

# **Connections**

# Introduction

Parker valve and manifold products are available with a wide array of connection types and sizes. These products are manufactured at the highest quality to applicable standards, utilising state of the art machinery and processes backed by decades of expertise.

The following pages detail the standard connections available. Other connection types can be considered. If you can't find the best connection for your application, please contact your local Parker support. Please note - not all connection types and sizes will be universally possible across the entire product range.

# Integral tubing connections – A Parker Superior Advantage

For the ultimate in safety, reliability, speed and ease of installation all valves and manifolds can be specified with solutions offering integral tube connection utilising Parker A-LOK® (Two Ferrule) or CPI<sup>™</sup> (Single Ferrule) compression fitting technology.

For full details of the A-LOK<sup>®</sup> and CPI<sup>™</sup> technologies, please see Catalogue ref. 4190-FMTG.

As standard, hand valves and gauge valves are offered with the traditional external thread and nut or inverted (internal thread) design to inlet and outlet connections. Other ports (such as vent) are offered with Parker unique PTFree connect<sup>™</sup> solution (see p. 10).



HNV series hand valve with traditional type fully integrated tube fitting connection.



HNV series hand valve with the unique Parker fully integrated inverted tube fitting connection.



HNV series gauge vent hand valve with inverted tube fitting to inlet and outlet connections with Parker PTFree connect<sup>™</sup> tube fitting connection to the vent.

As standard, manifolds are offered with PTFree connect<sup>™</sup> style solutions to the inlet connections for direct mount types and also to the outlet connections for remote mount types. Other ports (such as vent) are also offered with Parker Instrumentation's unique PTFree connect™ solution. Some manifold types can be offered with the inverted design to inlet and outlet connections as applicable.



5-valve direct mount manifold for differential pressure applications having inlet and vent connections provided through the use of PTFree connect™ tube fittings.

# Why the Superior Advantage of an integrated tube connection?

Consider the following simple example with a typical hand valve.

the installation.



Example shown is the Parker Superior Advantage fully integrated tube fitting connection.



# Integrated tube connections deliver:

- Average 25% saving on installed cost
- Average 55% saving on installation time



5-valve direct mount manifold having the Parker superior advantage input connections provided through inverted tube fitting connections. Vent can also be specified as threaded or PTFree connect<sup>™</sup>.

# Example shown is the widely utilised normal specification of a valve and individual tube fittings to achieve



Component	Cost
Needle valve	1x
Fittings (2)	1.1x
Sealant/Tape	0.01x
Labour	0.15x
TOTAL	2.26x

Component	Cost
Needle valve	1.6x
Fittings (2)	0x
Sealant/Tape	0x
Labour	0.05x
TOTAL	1.65x

- Zero rework
- Significantly improved safety and system integrity

# Connections

# Tube end dimensional data

	Inches								Milimeters					
Size No.	Tube O.D.	Straight Thread	tC	H Hex	E Dia.	†D Tube Ins. Depth	HEX	Size No.	Tube O.D.	Straight Thread	tC	H Hex	E Dia.	
1	1/16	10-32	.43	5/16	.052	.34	E E	2	2mm	5/16-20	15,3	12,0	1,7	
2	1/8	5/16-20	.60	7/16	.093	.50		3	3mm	5/16-20	15,3	12,0	2,4	
3	3/16	3/8-20	.64	1/2	.125	.54	CPITM	4	4mm	3/8-20	16,1	12,0	2,4	
4	1/4	7/16-20	.70	9/16	.187	.60	STRAIGHT	6	6mm	7/16-20	17,7	14,0	4,8	
5	5/16	1/2-20	.73	5/8	.250	.64	THREAD	8	8mm	1/2-20	18,6	15,0	6,4	
6	3/8	9/16-20	.76	11/16	.281	.67		10	10mm	5/8-20	19,5	18,0	7,9	
8	1/2	3/4-20	.87	7/8	.406	.90		12	12mm	3/4-20	22,0	22,0	9,5	
10	5/8	7/8-20	.87	1	.500	.96	HEX STRAIGHT	14	14mm	7/8-20	22,0	24,0	11,1	
12	3/4	1-20	.87	1-1/8	.625	.96		15	15mm	7/8-20	22,0	24,0	11,9	
14	7/8	1-1/8-20	.87	1-1/4	.750	1.03		16	16mm	7/8-20	22,0	24,0	12,7	
16	1	1-5/16-20	1.05	1-1/2	.875	1.24		18	18mm	1-20	22,0	27,0	15,1	
20	1-1/4	1-5/8-20	1.52	1-7/8	1.09	1.61		20	20mm	1-1/8-20	22,0	30,0	15,9	
24	1-1/2	1-15/16-20	1.77	2-1/4	1.34	1.96		22	22mm	1-1/8-20	22,0	30,0	18,3	
32	2	2-5/8-20	2.47	2-3/4	1.81	2.65	 ↓	25	25mm	1-5/16-20	26,5	35,0	21,8	

### Notes:

- Dimensions C and D are shown in the finger-tight position.
- + Average value
- Dimensions for reference only, subject to change.

# PTFree connect<sup>™</sup>



Many users desire the elimination of taper threads and their associated sealant.

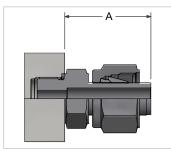
The PTFree connect<sup>™</sup> system enables users to assemble tube lines to any of the manifold ports without the need for PTFE tape or liquid sealant.

The PTFree connect<sup>™</sup> connection can be applied to any of the manifolds featured in this catalogue. These will be factory fitted, pin locked and pressure tested.

PTFree connect<sup>™</sup> enables angled tube connections to be swivelled to achieve optimum tube alignment. Assembly to the tube connector is achieved by tightening the standpipe nut one-quarter turn from the finger tight position.

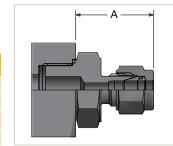
Manifolds can also be supplied with male connectors using the same thread form as the PTFree connect<sup>™</sup>. They are provided factory fitted, pin locked and tested.

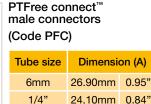
Some size restrictions may be necessary due to the close proximity of some connections and the across flat hexagon dimensions. As a guide, PTFree connect™ for inlet and outlet can be up to 1/2" or 12mm o/d., drain/bleed connections should be restricted to 1/4" or 6mm. For PTFree connect™ male connectors inlet and outlet should be restricted to 3/8" or 10mm and 1/4" or 6mm o/d for drain/bleed.



PTFree connect<sup>™</sup> tube stub (Code PF) Tube size Dimension (A) 22.26mm 0.88" 6mm 1/4" 24.80mm 0.98" 10mm/3/8" 26.40mm 1.04"

12mm/1/2" 32.10mm 1.26"





10mm/3/8" 27.70mm 1.09"

12mm/1/2" 30.30mm 1.20"

Dept

12.9

12,9

13,7

15,3

16,2

17,2

22,8

24,4

24,4

24.4

24,4

26.0

26,0

31.3



# **Tapered Pipe Threads - Male and Female**



**NPT Tapered Thread** NPT Tapered Thread conforming to ASME B1.20.1 with enhanced manufacturing tolerance for optimal assembly and inspected by three step gauging with Parker enhanced tolerancing to ANPT requirement per ASTM SAE AS71051.

# **Parallel Pipe Threads - Male and Female**



**BSP** Parallel Thread – Default standard (Code R) BSP Parallel Thread conforming to BS2779, ISO 228/1+2, DIN 3852. Not available on all product/ model types, please consult with vour local Parker support.

# Weld Connections

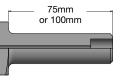
Socket Weld (Code SW/MSW) Female or male Socket Weld connection suitable for pipe conforming to ASME B16.11. EN12760.

- Notes:
- Valves with female socket weld connections will be of the same length as per the equivalent NPT pipe threaded variants.
- Valves with male socket weld connections will, as standard, have a stub length increase of 1/2" (13mm) when compared to the male pipe threaded equivalent variants

A	Pipe size	Dimension (A)
	4 (1/4" NB)	29
	6 (3/8" NB)	29
	8 (1/2" NB)	32
ſ	12 (3/4" NB)	35

**Optional lengths:** 

If requested, male socket welds or butt welds can be offered with stub length of 75mm or 100mm.



# **Flange Connections**



**Process Flange** Flange connections can be considered if conforming to ANSI B16.5 and executed in various ways. Please consult your local Parker support.

Not available on all product types.



**BSP** Tapered Thread (Code K) BSP Tapered Thread conforming to BS21, ISO7/1 (R 1/2 - Male. Rc  $\frac{1}{2}$  Female) with enhanced manufacturing tolerance for best optimal assembly and inspected using gauging system to BS21.





**BSP** Parallel Gauge connection type – Optional (Code RD) According to DIN 16284/16288/ DIN EN 837. Thread conforming to BS2779, ISO228/1+2, DIN 3852. Not available on all product/model types, please consult with your local Parker support.

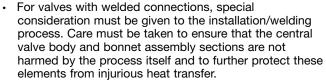


Butt Weld (Code BW) Butt Weld connection suitable for pipe conforming to ASME B16.25, EN12627.

# Notes:

Valves with butt weld connections will, as standard, be of the same length as per the equivalent male NPT pipe threaded variants.

Other Notes:



Connection ratings: Certain weld connections can impact published performance ratings of the manifold. Care should be taken in the selection of connections to ensure they meet application expectations for performance. For example: Butt weld or tube fitting connections with a thinner wall section, may result in a reduced pressure performance capability when compared to that of the published. Please consult relevant Parker publications or consult with your local Parker support.



# Instrument Flange (Code HK) DIN/IEC 61518 compliant

instrument (kidnev/oval) flange connections.

# **Connections**

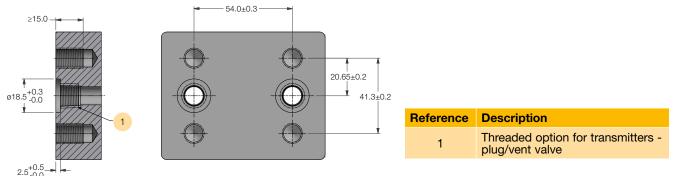
# Transmitter flange connections - DIN/IEC 61518

As standard, Parker manifolds have inlet and outlet interface connections in full accordance with DIN/IEC 61518. For the Manifold to Transmitter interface, the type B connection is standard – type A is optionally available.

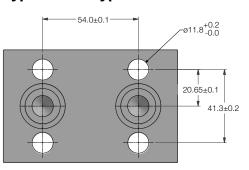
Within DIN/EN 61518 the manifold-transmitter interface is rated for maximum allowable working pressure of 413 bar (6,000 psi) and maximum allowable temperature of 120°C (248°F) for liquids,

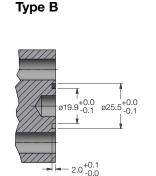
gas or vapours. The maximum allowable temperature of 120°C (248°F) considers the requirement that manifolds and transmitters need to be protected against undue heating by hot media. This requirement should be achieved by using adequate hook-ups or by instrument impulse lines with sufficient length. However, Parker confirms that H series manifolds can be used for temperatures up to 538°C (1,000°F) with graphite gland packing and up to 260°C (500°F) with PTFE gland packing.

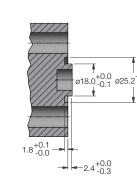
# Process inlet to manifold / transmitter interface DIN EN 61518 / IEC 61518



## Parker manifold outlet to transmitter interface DIN EN 61518 / IEC 61518 Type B and Type A Type A







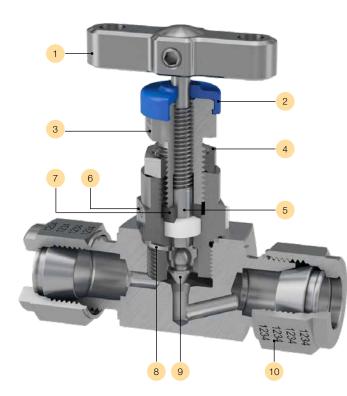
	Type B (S	Standard)	Type A (Optional)		
Max. Allowable Working Pressure	413 bar (	6,000 PSI)	413 bar (6,000 PSI)		
Temperature range	PTFE: -10°C to +80°C (14°F to 176°F)	Graphite: -40°C to +120°C (-40°F to 248°F)	PTFE: -10°C to +80°C (14°F to 176°F)	Graphite: -15°C to +120°C (5°F to 248°F)	
Seal ring	Flat Ring 25.4 x 20 x 2.7 Material: PTFE	Flat Ring 25.4 x 19.9 x 2.9 Material: Graphite	Flat Ring 24 x 17.7 x 2.7 Material: PTFE	Flat Ring 25.1 x 18.0 x 2.9 Material: Graphite	
Min. Thread Engagement	9n	nm		9mm	

Connection at the manifold acc. to DIN/IEC 61518.

- Important Note there are some exceptions to the IEC 61518 standard:
- Emerson Coplanar<sup>™</sup> transmitter design. Parker offers a full range of specifically suitable manifolds for this type. See 1. pages 55-60.
- There is a limited range of other higher working pressure transmitters by some manufacturers, where the interface is 2. proprietary by design (Example: Yokogawa EJX 440A/EJA 440E). Parker is able to provide manifold designs that are complementary to those products. Please consult your local Parker support.

# **Bonnet Assemblies**

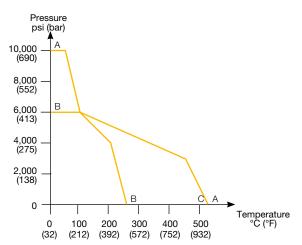
# Standard bonnet design Class 2500 (6,000 PSI) and Class 4500 (10,000 PSI) For safe, reliable and repeatable performance



Notes:

- •
- For products specified in optional materials, non-wetted parts will be 316 Stainless Steel as standard. •
- 6,000 PSI bonnet thread is M16; 10,000 PSI bonnet thread is M18.

# Pressure vs temperature



Reference	Description
1	Ergonomic 'T' bar style handle with positive retention
2	Dual purpose dust cap provides functional identification
3	Compensatory adjustable gland
4	Secure anti-vibration gland lock nut
5	Anti-blowout low torque back seating stem
6	All metal body bonnet seal
7	Gland thrust bush ensures uniform packing compression and tight sealing
8	Annealed sealing washer guarantees 100% sealing assurance
9	Self centering, non-rotating stem tip guarantees bubble tight shut off
10	Material traceability for major pressure containing components

As standard, all metallic parts are 316 Stainless Steel. Optional materials are available, please see page 6.

Reference	Description
A - A	Graphite packing
A - B	PTFE packing
B - B	6,000 PSI (414 bar) standard PTFE packing
B - C	6,000 PSI (414 bar) standard Graphite packing

Notes:

- Pressure and temperature ratings shown are maximum possible values. Continuous operation at the maximum ratings will reduce life expectancy.
- Pressure and temperature ratings can be derated by ٠ certain connection types or materials of construction.

# **Bonnet Assemblies**

# Larger bore bonnet design Class 2500 (6,000 PSI) and Class 4500 (10,000 PSI)



# Features

- 6mm seat orifice size, allowing the provision of larger 5mm or 6mm flow passages
- Ideal for applications with dirtier/denser service media and/or those prone to blocking in small bore installations
- Can enhance other aspects of performance and measurement accuracy
- Will result in the use of larger body material sizes
- Not possible for all styles and types of product
  All other technical information remains
- All other technical information remains unchanged from standard

# Soft seat tip bonnet design

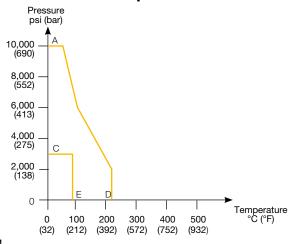


Reference	Description
A - D	PEEK tip
C - E	PCTFE tip - Temperature limit 150°C (302°F) at 3,000 psi (207 bar)

# Features

- Available in the 4mm orifice size only, this PEEK seat tip option is available for all product styles and types
- Ideal for clean gaseous or other services where tight bubble tight shut off with minimum effort is required
- Suitable for temperatures up to 204°C and pressures up to 10,000 psi at reduced temperature, as per graph
- For larger bore requirements Parker Instrumentation recommends Rising Plug valve

## **Pressure vs temperature**



# Fire safe bonnet design - Class 2500 (6,000 PSI)



# Power plant bonnet design Compliant to ANSI B31.1 – Class 2500 (6,000 PSI)



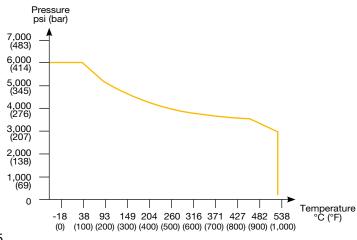
## Features

- Specifically designed & developed to meet exacting industry requirements, products incorporating this Bonnet Design conform to BS 6755 Part 2, API 6FA / API607. For further details contact your local Parker support.
- 100% fire safe design certified, many typical actual 3rd party test certificates are available for review
- Available for most product styles and types
- Some material selections are restricted

## Features

- Available in a select range of body styles and types. Please consult your local Parker support
- Designed specifically to meet the requirements of ANSI B31.1 (Power Plants) and B31.3 (Petrochemical Plants) including materials of construction, these bonnet assemblies are Graphite packed for higher temperature service
- Suitable for temperatures up to 538°C and pressures up to 6,000 psi at reduced temperature, as per graph
- Unique patented Tru-Loc<sup>®</sup> safety bonnet lock further enhances security in application

## Pressure vs temperature

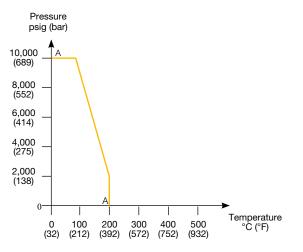


# **Bonnet Assemblies**

# Rising plug bonnet design



# Pressure vs temperature



# Features

- HRPV valve is unique to Parker and is patent protected
- Non-rotating plug/tip
- Dynamic response moulded seat insert with ٠ guaranteed alignment
- Standard straight through orifice size 1/4" (6.4mm)
- Rolled spindle operating threads
- Straight through flow path
- Standard multi-port gauge style available as standard
- Other styles can be considered please consult the factory
- **Bi-directional flow**
- Backstop spindle for blowout prevention and minimal atmospheric leakage
- Low torgue operating T bar handle
- Externally adjustable gland
- Full range of head options available
- Dust cap to prevent ingress of contamination to operating thread
- Bonnet locking pin fitted as standard
- Suitable for temperatures up to 204°C and pressures up to 10,000 psi at reduced temperature, as per graph

Description Reference A - A **PEEK Seat** 

# Tru-Loc<sup>®</sup> safety bonnet lock



Available as standard on ANSI/ASME B31.1 manifold versions, the unique Parker Tru-Loc<sup>®</sup> security locking system is applied to the body to bonnet interface but can also be applied to many other screwed component interfaces. Extensive tests have proven that threaded connection interfaces secured with Tru-Loc<sup>®</sup> guarantee 100% security in preventing movement between connected components. In the H series manifolds it prevents loosening or removal of the bonnet assembly by any means.

# Low emission bonnet design

# **TA-Luft compliant**

(Ausgabe Nov. 2000), Absatz 3.3.1.3 erfüllen.

# IS0 15848 compliant

From 2007 EU's IPPC directive 96/61/EC legislates for the minimisation of pollution from industrial sources (Many other regions and countries have similar legislation). An important part of this legislation is reducing Ultra-Low emissions. According to the IPPS, all plants and factories which fail to comply with the standards set by the directive, may face closure.

The legislation introduced a concept of Best Available Technique (BAT), urging plants to find the best available solution for reducing Ultra-Low emissions throughout all processes. With respect to valves, ISO 15848 parts 1 and 2 were developed to aid companies to meet the legislation.

Part 1 covers the classification system and Part 2 of the standard covers production acceptance qualification procedure for type testing of valves. The testing of valves. This production testing can standard specifies three tightness classes of leakage only be carried out to product which has already with respect to stem sealing diameter. These classes been approved to part 1 of the standard. Parker are class A, B and C; class A having the smallest Instrumentation can offer production testing and environmental leakage. Each class level is one certification to a sampling percentage specified by hundred fold lower than the class above i.e. a class the purchaser. A third party witnesses can also be B product may have a leakage of 100 times that of a considered. class A product. The standard also specifies the duty that the valve has been tested to.



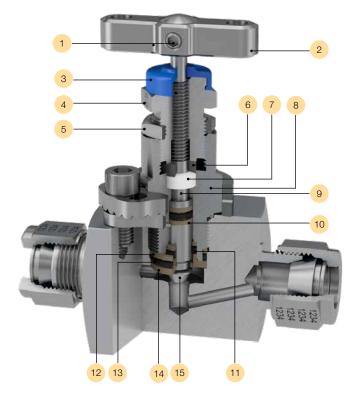
### As standard, products fitted with the Parker Instrumentation standard bonnet assembly are bubble tight in service and have been proven to meet the requirements of TA-Luft 2002, Absatz 5.2.6.4 und VDI 2440

Parker Instrumentation specifically developed an H series Bonnet Assembly design with class A approval to ISO 15848-1. Classed 'FE', products specified with these bonnet assemblies are certified as ISO FE AH-C01-SSA1-t(RT,180°C)-ANSI2500-ISO **15848-1.** These products are further classified as meeting the ISO 15848-1 standard with the following criteria:

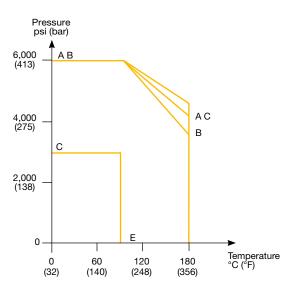
- Class A tested with Helium Endurance class C01 – a mechanical valve which has been tested throughout 500 mechanical actuations with two thermal cycles
- Temperature class RT-180°C fully thermal cycled and tested from -29°C to +180°C pressure class ANSI 2500 - 6000 psi in 316 stainless steel.

# **Bonnet Assemblies**

Low emission bonnet design



# **Pressure vs temperature**



### **Reference Description**

	· · · · · · · · · · · · · · · · · · ·
A - A	Graphite packing
A - B	PTFE packing
B - B	6,000 PSI (414 bar) standard PTFE packing
B - C	6,000 PSI (414 bar) standard Graphite packing
A - D	PEEK tip
C - E	PCTFE tip

Reference	Description
1	Positive handle retention
2	"T" bar
3	Dust cap
4	Gland packing adjuster
5	Gland adjuster lock nut
6	Thrust bush
7	Gland packing (adjustable)
8	Valve bonnet
9	Anti blow-out spindle
10	Anti extrusion ring
11	Elastomeric o-ring (stem seal)
12	Anti-extrusion ring
13	Elastomeric o-ring (body seal)
14	Bonnet end cap
15	Spindle tip

# Features

- Tightness class A≥1 x 10<sup>-6</sup> mg.s<sup>-1</sup>.m<sup>-1</sup>
- Maximum cold working pressure rating 6,000 • psig (414 barg)
- Temperature rating -29°C to 180°C (-20°F to 356°F) ٠
- ISO15848-1 prototype tested using global helium • vacuum method
- Performance class -٠ ISO FE AH-C01-SSA1-t(RT,180°C)-ANSI2500-ISO 15848-1
- Production testing and certification available on request)
- O ring material grade is Fluoroelastomer FKM • Tetrapolymer, specially formulated for explosive decompression (ED) resistance. These seals are qualified to the stringent NORSOK M-170 standard covering both ED resistance and sour gas (H2S) ageing tests
- Available for most product styles and types •
- Also meets the requirements per; • TA-Luft according to VDI 2440 as tested by TUV SUD Industrie Service GMBH performing better than a leakage rate of VDI 2440 = 10 -4 mbar .l /s . m

# Bonnet assembly options

Available as a factory fit or as retrofit, these useful bonnet assembly options are provided in all 316 Stainless Steel material. For locking options padlocks are not provided but the hole size in all cases is 6mm (0.24"). To obtain factory fit options your specified product part number must be suffixed with the additional option part numbers as below. Some options can be combined.



T bar handle locking			
Retrofit Kit Part Number	Factory Fitte Suffix		
KITTHL	HL		



	Retrofit Kit Part Number	Facto Fitted Suffix
/ith ey	KITAK	ATK
/ithout ev	KITAT	AT

Anti-tamper spindle

### Key

	Key only Part Number
·	ATHKEY

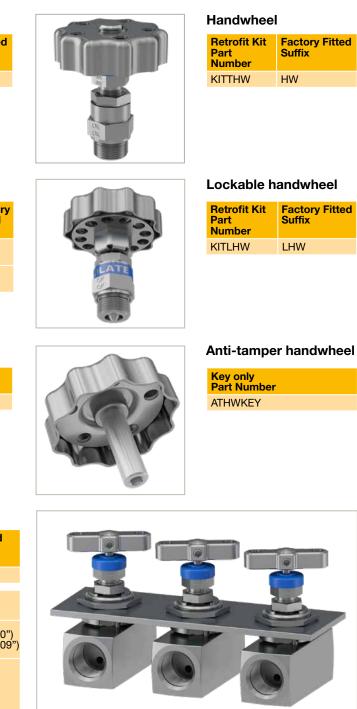
### Panel mounting







18



# Hand Valves & Gauge Valves

# Introduction

Following years of valve design and development, the Parker needle pattern hand and gauge valves range is one of the most comprehensive to be found. The valves are available to users from a wide market spectrum and suitable for all industries and applications.

In combination with Parker A-LOK<sup>®</sup> or CPI<sup>TM</sup> compression tube fitting technologies, a superior advantage is gained allowing users to eliminate threaded connections and reducing leak paths whilst offering superior installation and operational performance.



With their small ports and needle/plug stem tip, Parker hand valves allow precise regulation of flow in low flow applications for a wide variety of media.

These hand valves are widely used in situations where the flow must be gradually brought to a halt and at other points where precise adjustments of flow are necessary or where a small flow rate is desired. They can be used as both on/off valves and for throttling service.



Example shown is a Hand valve with Parker integral CPI<sup>™</sup> tube connections.

eference	Description
1	Locked grub screw
2	"T" bar handle
3	Dust cap
4	Gland packing adjuster
5	Gland adjuster lock nut
6	Valve bonnet
7	Integral A-LOK <sup>®</sup> connection
8	Body



Example shown: Multi-port gauge valve with Parker Superior Advantage integral A-LOK<sup>®</sup> tube fitting connections.

They are used in every industry in a wide range of applications - anywhere where accurate and secure control or metering of steam, air, gas, oil, water or other non-viscous liquids is required.

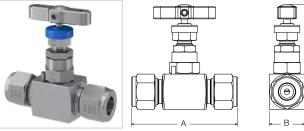
Utilising these same attributes, the Parker needle pattern gauge valves will be found controlling flow into a vast array of measurement and analysis instrumentation such as pressure gauges, transmitters, switches and more. With additional functionality these gauge valves also allow users to provide vent, drain or blow down routines to their process and/or the ability to attach additional instruments and accessories.

We are confident you will find a valve style, type and connection option to suit your applications, but should you require something different please contact your local Parker support.

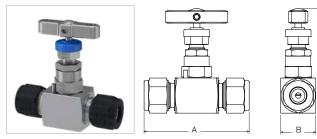
# Hand Valves - HNV Series

# Straight pattern

HNV\* - Integral A-LOK® connections - up to 6,000 PSI



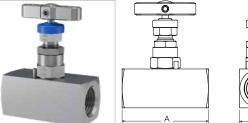
HNV\* - Integral CPI™ connections - up to 6,000 PSI



# Integral connections - up to 10,000 PSI

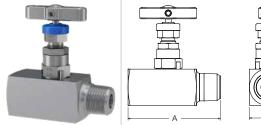
A limited range of integral connections for 10,000 PSI is available as tube selection can adversely affect overall product ratings. Please consult your local Parker support.

# HNV\* - Female threaded - NPT





# HNV\* - Male x Female threaded - NPT



Notes:

- Dimension "A" given for finger tight nuts and ferrules.
- Dimension "C" in open position.

	Inlet	Outlet		Dimension	
	A-LOK®	A-LOK®	A mm (inch)	B mm (inch)	C mm (inch)
c c	1/4"	1/4"	67.5 (2.66")	25.4 (1.00")	76.2 (3.00")
	1/2"	1/2"	76.2 (3.00")	25.4 (1.00")	76.2 (3.00")
	6mm	6mm	67.5 (2.66")	25.4 (1.00")	76.2 (3.00")
	12mm	12mm	76.2 (3.00")	25.4 (1.00")	76.2 (3.00")

	Inlet	Outlet	Dimension		
	CPI™	CPI™	A mm (inch)	B mm (inch)	C mm (inch)
c	1/4"	1/4"	67.5 (2.66")	25.4 (1.00")	76.2 (3.00")
]	1/2"	1/2"	76.2 (3.00")	25.4 (1.00")	76.2 (3.00")
	6mm	6mm	67.5 (2.66")	25.4 (1.00")	76.2 (3.00")
	12mm	12mm	76.2 (3.00")	25.4 (1.00")	76.2 (3.00")

Pressure	Inlet	Outlet	Dimension			
(PSI)	Female	Female	A mm (inch)	B mm (inch)	C mm (inch)	
	1/4" NPT	1/4" NPT	54.0 (2.13")	28.6 (1.13")	79.4 (3.13")	
6,000	3/8" NPT	3/8" NPT	54.0 (2.13")	28.6 (1.13")	79.4 (3.13")	
	1/2" NPT	1/2" NPT	63.5 (2.50")	28.6 (1.13")	79.4 (3.13")	
10,000	1/4" NPT	1/4" NPT	60.5 (2.38")	31.8 (1.25")	82.6 (3.25")	
	1/2" NPT	1/2" NPT	69.9 (2.75")	31.8 (1.25")	82.6 (3.25")	

Pressure	Inlet	Outlet	Dimension		
(PSI)	Male	Female	A mm (inch)	B mm (inch)	C mm (inch)
6,000	1/4" NPT	1/4" NPT	57.8 (2.27")	28.6 (1.13")	79.4 (3.13")
	1/2" NPT	1/2" NPT	73.0 (2.87")	28.6 (1.13")	79.4 (3.13")
10,000	1/4" NPT	1/4" NPT	62.8 (2.47")	31.8 (1.25")	82.6 (3.25")
10,000	1/2" NPT	1/2" NPT	76.2 (3.00")	31.8 (1.25")	82.6 (3.25")

# Hand Valves - HNAV Series

# Angle pattern

# HNAV\* - Integral A-LOK® connections - up to 6,000 PSI



<u>– В –</u>

Inlet	Outlet	Dimension			
A-LOK <sup>®</sup>	A-LOK®	A B mm (inch) mm (inch)		C mm (inch)	
1/4"	1/4"	53.5 (2.10)	25.4 (1.00)	94.0 (3.70)	
1/2"	1/2"	58.8 (2.32)	28.6 (1.13)	101.6 (4.00)	
6mm	6mm	53.5 (2.10)	25.4 (1.00)	94.0 (3.70)	
12mm	12mm	58.8 (2.32)	28.6 (1.13)	101.6 (4.00)	

## HNAV\* - Integral CPI<sup>™</sup> connections - up to 6,000 PSI



		(
Δ	B	

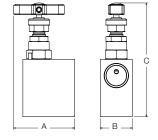
Inlet	Outlet	Dimension			
A-LOK®	A-LOK®	A mm (inch)	B mm (inch)	C mm (inch)	
1/4"	1/4"	53.5 (2.10)	25.4 (1.00)	94.0 (3.70)	
1/2"	1/2"	58.8 (2.32)	28.6 (1.13)	101.6 (4.00)	
6mm	6mm	53.5 (2.10)	25.4 (1.00)	94.0 (3.70)	
12mm	12mm	58.8 (2.32)	28.6 (1.13)	101.6 (4.00)	

# Integral connections - up to 10,000 PSI

A limited range of integral connections for 10,000 PSI is available as tube selection can adversely affect overall product ratings. Please consult your local Parker support.

## HNAV\* - Female threaded - NPT

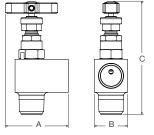




Inlet	Outlet	Dimension			
NPT	NPT	A B mm (inch) mm (inch)		C mm (inch)	
1/4" F	1/4" F	49.5 (1.95)	25.4 (1.00)	88.3 (3.47)	
1/2" F	1/2" F	54.3 (2.14)	28.6 (1.13)	101.0 (3.98)	

## HNAV\* - Male x Female threaded - NPT





Inlet	Outlet	Dimension			
NPT	NPT	A B mm (inch) mm (inch)		C mm (inch)	
1/4" M	1/4" F	49.5 (1.95)	25.4 (1.00)	91.7 (3.61)	
1/2" M	1/2" F	54.3 (2.14)	28.6 (1.13)	98.3 (3.87)	

### Notes:

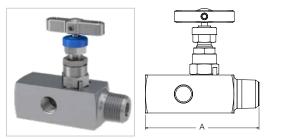
- Dimension "A" given for finger tight nuts and ferrules.
- Dimension "C" in open position.

# **Gauge Valves - HNVV Series**

# Single block gauge vent valves

Generally used in conjunction with the measuring instrument, these valves allow for the function of venting/draining any process media that may be trapped, following isolation of the instrument for maintenance and/or removal purposes.

## HNVV\* - Male x Female threaded - NPT

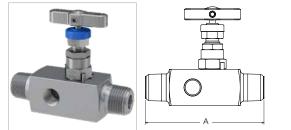


# HNVV\* - Female x Female threaded - NPT



# 

## HNVV\* - Male x Male threaded - NPT



### Notes:

- Dimension "A" given for finger tight nuts and ferrules.
- Dimension "C" in open position.
- For bleed/vent valves and plugs see page 61.

Products shown here can be supplied with integral swivel gauge adaptor as shown on page 24.



Example shown: HNVV single vent gauge valve with Parker Superior Advantage integral Inverted A-LOK<sup>®</sup> tube connections to inlet and outlet and with Parker PTFree connect<sup>™</sup> to the vent.

(

	Pressure	mer	Outlet	vent		Dimension	
(PSI)	Male	Female	Female	A mm (inch)	B mm (inch)	C mm (inch)	
	6.000	1/4" NPT	1/4" NPT	1/4" NPT	72.5 (2.85)	28.6 (1.13)	79.4 (3.13)
6,000	1/2" NPT	1/2" NPT	1/4" NPT	85.8 (3.38)	28.6 (1.13)	79.4 (3.13)	
		1/4" NPT	1/4" NPT	1/4" NPT	71.2 (2.80)	31.8 (1.25)	82.6 (3.25)
	10,000	1/2" NPT	1/2" NPT	1/4" NPT	85.6 (3.37)	31.8 (1.25)	82.6 (3.25)

	Pres (P
	6,0
<u>₩</u>	10,0

	Pressure		Outlet	Vent	Dimension		
(PSI)	Female	Female	Female	A mm (inch)	B mm (inch)	C mm (inch)	
		1/4" NPT	1/4" NPT	1/4" NPT	63.5 (2.50)	28.6 (1.13)	79.4 (3.13)
6,000	1/2" NPT	1/2" NPT	1/4" NPT	76.3 (3.00)	28.6 (1.13)	79.4 (3.13)	
		1/4" NPT	1/4" NPT	1/4" NPT	69.0 (2.71)	31.8 (1.25)	82.6 (3.25)
10,000	1/2" NPT	1/2" NPT	1/4" NPT	79.5 (3.13)	31.8 (1.25)	82.6 (3.25)	



Pressure	Inlet	Outlet	Vent		Dimension	
(PSI)	Male	Male	Female	A mm (inch)	B mm (inch)	C mm (inch)
6.000	1/4" NPT	1/4" NPT		76.2 (3.00)		
6,000	1/2" NPT	1/2" NPT	1/4" NPT	94.8 (3.73)	28.6 (1.13)	79.4 (3.13)
	1/4" NPT	1/4" NPT	1/4" NPT	76.2 (3.00)	31.8 (1.25)	82.6 (3.25)
10,000	1/2" NPT	1/2" NPT	1/4" NPT	94.8 (3.73)	31.8 (1.25)	82.6 (3.25)

# **Gauge Valves - HGV Series**

# Multi-port gauge valves

Parker's multi-port gauge valves are purpose designed valves for operation up to 6,000 psig (414 barg) and 10,000 psig (689 barg). Featuring standard PTFE gland packing and self-centering non-rotational tip provides bubble-tight seat shut off, giving the user the assurance of safety and performance.

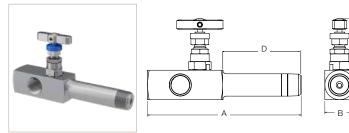


Example shown: Multi-port gauge valve with integral A-LOK<sup>®</sup> connections.

# HGV\* - Male x Female (3 outlets) threaded - NPT



## HGV\* - Male Extended x Female (3 outlets) threaded - NPT



Inlet	Outlet	Dimension			
Male	Female	A mm (inch)	B mm (inch)	C mm (inch)	
1/4"	1/4"	72.5 (2.85)	28.6 (1.13)	79.4 (3.13)	
1/2" NPT	1/2" NPT	92.0 (3.62)	28.6 (1.13)	79.4 (3.13)	
Male	Male	A mm (inch	B mm (inch)	C mm (inch)	
1/2" NPT	1/2" NPT	97.2 (3.82)	28.6 (1.13)	79.4 (3.13)	

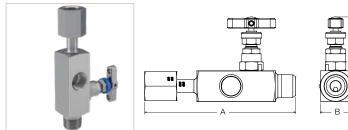
Inlet	Outlet	Dimension						
Male	Female	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)			
1/2" NPT	1/2" NPT	149.2 (5.87)	28.6 (1.13)	79.4 (3.13)	76.2 (3.00)'			

<sup>•</sup> Other extensions available on request. Please consult your local Parker support.

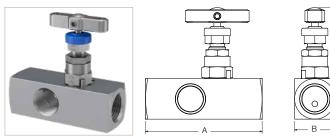
Outlet

Inlet

## HGVWG\* - Male x Female (2 outlets) threaded - NPT with integral swivel gauge adaptor



### HGV\* - Female x Female (3 outlets) threaded - NPT



Notes:

- Dimension "A" given for finger tight nuts and ferrules. •
- Dimension "C" in open position.

### facilities. With a straight through flow pattern and 100% repeatable bubble tight shut-off, the valves as standard with PEEK seat will perform up to 10,000 psig (689 barg) with low spindle operating torques.

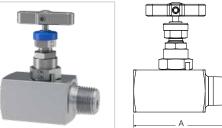
These unique, high quality, high performance,

low-torque rising plug soft-seated valves have been specifically designed to perform with fluids

containing high levels of contamination, such as

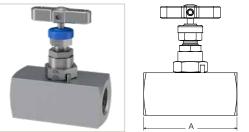
those frequently found in oil and gas processing

## HRPV\* - Male x Female threaded - NPT



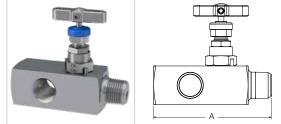


## HRPV\* - Female x Female threaded - NPT



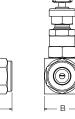


## HRPV\* - Male x Female (3 outlets) threaded - NPT



## egral A-LOK<sup>®</sup> connections





Notes:

- Dimension "A" given for finger tight nuts and ferrules.
- Dimension "C" in open position.

В Δ С Male Female mm (inch) mm (inch) mm (inch) 1/2" NPT Swivel gauge 140.8 (5.54) 28.6 (1.13) 79.4 (3.13)

Dimension

- Swivel adaptor to the outlet is provided through a socket weld, generally conforming to ANSI B16.11.
- Weld connection is a "commercial weld", completed by a qualified welder. Any specific qualification, certification, documentation or additional NDT, will require to be engineered and quoted extra please consult your local Parker support.
- Union nut dimensions generally conform to DIN 16284 as it applies to the union of nipple & nut themselves. Union nut also conforms generally to DIN EN 837 for the gauge connection itself, as it applies to the union of nipple and nut
- themselves.

Inlet	Outlet	Dimension					
Female	Female	A mm (inch)	B mm (inch)	C mm (inch)			
1/2" NPT	1/2" NPT	82.5 (3.25)	28.6 (1.13)	79.4 (3.13)			

and the second se
IRPV* - In



# Rising Plug Valves - HRPV Series



Example shown: Hand valve with integral A-LOK® connections.

Inlet	Outlet	Dimension					
Male	Female	A mm (inch)	B mm (inch)	C mm (inch)			
1/2" NPT	1/2" NPT	72.9 (2.87)	31.8 (1.25)	88.0 (3.46)			
3/4" NPT	1/2" NPT	72.9 (2.87)	31.8 (1.25)	88.0 (3.46)			

Inlet	Outlet	Dimension						
Female	Female	A mm (inch)	B mm (inch)	C mm (inch)				
1/4" NPT	1/4" NPT	60.5 (2.38)	31.8 (1.25)	88.0 (3.46)				
1/2" NPT	1/2" NPT	69.8 (2.75)	31.8 (1.25)	88.0 (3.46)				

Inlet	Outlet	Dimension					
Male	Female	A mm (inch)	B mm (inch)	C mm (inch)			
1/2" NPT	1/2" NPT	96.5 (3.80)	31.8 (1.25)	88.0 (3.46)			



Inlet	Outlet	Dimension					
A-LOK	A-LOK	A mm (inch)	B mm (inch)	C mm (inch)			
1/2"	1/2"	63.5 (2.50)	31.8 (1.25)	88.0 (3.46)			
12mm	12mm	63.5 (2.50)	31.8 (1.25)	88.0 (3.46)			

Products shown here can be supplied with integral swivel gauge adaptor as shown on page 24.







# Hand Valves and Gauge Valves

# Ordering information

Exa	ample 1: HNV	S8M8FHPL	HW			HNV	S	8M8F	HPLHW	> Straig	ght pattern needle valve, 316 Stainless Steel, PTFE packing, 10,00	00 PSI, 1/
Exa	ample 2: <b>HGV</b>	6MO12M8	3PBV	BMNC		HGV	6MO	12M8F3	PBVBMNC ······	> Multi Fema	i-ported Gauge valve, 6MO Super Austenitic Stainless Steel, confo ale outlets, with blank plug, bleed valve and base mounting holes.	prming to N
Exa	mple 3: HNV	VWGS8A8F	RPBM	NC		HNVVWG	S	8A8R	PBMNC		le ported Gauge valve with integral swivel gauge outlet connection fitted with blank plug and the valve has base mounting holes. Mat	
Exa	ample 4: <b>HGV</b>	6MOIM12A	PFCA	M6RTATK		HGV	6MO	IM12APFCAM6	RTATK	> Multi- male	-ported Gauge valve, 6MO Super Austenitic Stainless Steel with 1 connectors to the side ports. Other options are regulating tip with	2mm Inve
Series HNV HNAV HNVV	Hand valve a	• •					Î			High HP	TIONS h Pressure - 10,000 PSI (689 bar) option High Pressure <sup>10</sup>	<sup>10</sup> No
	Gauge valve	• .	vith Inte	gral Swivel Gaug	ne connection <sup>1</sup>					Glan 3	nd Packing Options Graphite <sup>11</sup>	<sup>11</sup> Not
HGV	Gauge valve			gra. errer adag	je comocilon					FS	Firesafe design <sup>12</sup>	<sup>12</sup> Not
HGVWG	Gauge valve	multi-ported w	ith Integ	gral Swivel Gaug	e connection <sup>1</sup>						ting Options - Needle Valves only	_
HRPV4	Rising plug v	alve								6S	6mm bore seat	
Integral w s 1/2" BS	velded swivel gau	ge adaptor for I	INVV & F	HGV model types st.	only as standard					RT	Regulating/Metering Tip Stellite Tip	
vailable ir	n 316SS as stand	ard. Consult yo	ir local P	Parker representati	ion for other					9	PCTFE Soft Tip <sup>13</sup>	<sup>13</sup> 3,0
naterial op	ptions.									PK	PEEK Soft Tip	
Material	s										g/Bleed Valve Options <sup>14</sup>	<sup>14</sup> Plu singl
<b>s</b> :	316/316L Stainle	ess Steel	HC	Hastelloy C276						PBV	Blank Plug Bleed Valve/Plug	Singi
	6MO Sup. Aust.	St.Steel		Titanium Gr. 2						PBV		
	Monel 400 Duplex 22 Cr. St			Inconel 825 Inconel 625						Оре	erator Options	
	Super Duplex 25			Carbon Steel <sup>2</sup>						HW		
	on Steel consult y									LHW		
										AT	Anti-Tamper <sup>15</sup>	<sup>15</sup> An
	t <mark>ions - Standard</mark> nlet	u Outlet		Inlet	Outlet					ATK		<sup>16</sup> An
	/4" NPT Fem. 1		4A	1/4" A-LOK <sup>3</sup>	1/4" A-LOK <sup>3</sup>	<sup>3</sup> For CPI <sup>™</sup> change		luce port is standard as 1//	NDT Form For other		IKEY Anti-Tamper Key <sup>17</sup>	<sup>17</sup> An
<b>FF</b> 3	3/8" NPT Fem. 3	3/8" NPT Fem.	6A	3/8" A-LOK <sup>3</sup>	3/8" A-LOK <sup>3</sup>	options, see be	ow.	lves, port is standard as 1/4		PM	unting Options Panel Mount	
	/2" NPT Fem. 1			1/2" A-LOK <sup>3</sup>	1/2" A-LOK <sup>3</sup>	<ul> <li>For multi-ported other options, s</li> </ul>		ves, ports (2x) are standard a	as 1/2" NPT Fem. For	BM	Base Mount	
	8/4" NPT Fem. 3			6mm A-LOK <sup>3</sup> 10mm A-LOK <sup>3</sup>	6mm A-LOK <sup>3</sup> 10mm A-LOK <sup>3</sup>					BK	Assembled with Carbon Steel bracketry & bolts <sup>18</sup>	<sup>18</sup> Av for fu
				12mm A-LOK <sup>3</sup>						BKS	,	
	3/8" NPT Male									OX	er Options Cleaned & lubricated for Oxygen use	
<b>M8F</b> 1	/2" NPT Male 1	1/2" NPT Fem.								NC	NACE MR-01-75 Compliant	
	3/4" NPT Male 1											
* <b>F</b> F *K E *R E *RD [ SW* /	BSPT BS21, ISO BSPP BS2779 -	on. Utilised wh 17/1 - British S British Standa 8/EN837 BSPF N12760 Fema	andard rd Parall 9 gauge e Socke	connection type	ad	length as per the e	es with Fen quivalent N	<ul> <li>thread is default.</li> <li>nale Socket Weld connection IPT pipe threaded variants.</li> <li>t weld pipe connections will</li> </ul>				
	Туре	Size		Schedule	Extension	per the equivalent	male NPT p	pipe threaded variants. Exter	ided body dimensions are			
		<b>4</b> 1/4'	NB *	(Thickness)			es with Mal	le socket weld connections v			ORTANT NOTES:	
MSW N	Butt Weld⁵ Aale Socket Weld	6 3/8' 8 1/2' 12 3/4'	NB NB NB	A Sch.160	* Default C 75mm D 100mm	valve. Extended bo	ody dimensi male socke	onnection) when compared t ions are also offered - see ta et weld connection with Sch.	bles and main catalogue.	•	For optimum results in integral tube connection tooling is highly recommended. For inverted sty	
	Connection an			Index/Control				n standard/default is selected	d/applied.		mandatory.	-
	verted Connectio		Unit M Metr	6 6mm ric <b>10</b> 10mm	Drain/Vent	<ul> <li>10mm A-LOK ir</li> <li>10mm CPI inver</li> <li><sup>8</sup> PTFree connect<sup>™</sup></li> </ul>	ted inlet/ou <sup>1</sup> option rec	t/outlet & 1/4" NPT Fem. ver utlet & 1/4" NPT Fem. vent/d commended for multi-port ar	rain = <b>IVZM104F</b>	•	Not all options/combinations are available in ea We reserve the right to review/revise this part not reason and the most suitable alternative part of	umber
tuk PFC PT	TFree connect be stub <sup>8</sup> TFree connect ale union <sup>8</sup>	A A-LOK Z CPI	I Impe	<b>12</b> 12mm <b>4</b> 1/4" <b>6</b> 3/8" <b>8</b> 1/2"	<b>4F</b> 1/4" NPT <sup>9</sup>	<ul> <li>10mm A-LOK tul</li> <li>3/8" CPI male ur</li> </ul>	oe stub con ion con. inl	n. inlet/outlet & 1/4" NPT Fer et/outlet & 1/4"NPT Fern. ve dard for bleed/vent/drain, son	nt/drain = <b>PFCZI64F</b>	• :	recommend the most suitable alternative part n Should your part number selection exceed 25 c please consult your local Parker representation If in any doubt, please consult your local Parker	charact

/2" NPT Male inlet, 1/2" NPT Female outlet with locking handwheel operation. NACE MR-01-75 latest revision, Graphite packing, 3/4" NPT Male inlet, 3 x 1/2" NPT

orts are 1/2" A-LOK tube, whilst outlet swivel connection is 1/2" BSPP. The side port in 1/4" construction is 316 stainless steel conforming to NACE and gland packing is PTFE. rerted A-LOK tube connections to inlet and outlet, having 6mm A-LOK PTFree connect mper operation and one key.

t necessary for HRPV models.

ot available for HRPV models. Not required when Firesafe design option (**FS**) selected. It available for PCTFE Soft tip (**9**), HRPV models or Oxygen cleaned product (**OX**).

000 PSI/207 BAR only. See main catalogue page.

lugs supplied loose in a packing box. Typically required with multi-port gauge valves and le vent hand valves. See main catalogue page.

ti-Tamper operation and no key.

nti-Tamper operation and one key supplied per manifold.

nti-Tamper key. Specify quantity required as separate line item.

ailable on  ${\rm HNVV}$  and  ${\rm HGV}$  /  ${\rm HGVWG}$  series only. Contact your local Parker representative urther support.

and valves and gauge valves, the use of Parker pre-assembly gral tube connections the use of Parker pre-assembly tooling is

gle product model type.

structure at any time. If necessary, we can refuse and/or r(s). We may also apply MOQ rules.

ters in length when completed, then it is likely to be incorrect, sistance.

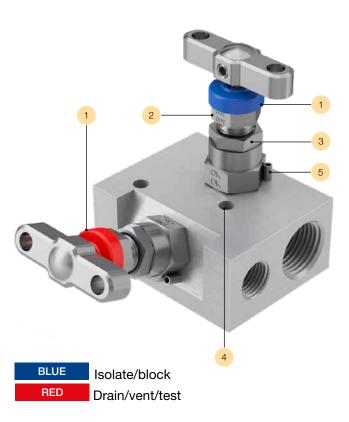
sentation.

# 2-Valve Manifolds - H Series

# Introduction

Combining two needle valves into one unitised block, the Parker 2-valve manifolds range is also referred to as Block and Bleed, Isolate and Calibrate or even Isolate and Vent/Drain. These manifolds are used primarily in applications requiring a pressure switch, pressure transmitter or gauge for Static Pressure Measurement. Other forms of sensing technology can be applied, and, in some circumstances, they can also be employed in the measurement of temperature or other process attribute.

In combination with Parker A-LOK<sup>®</sup> or CPI<sup>™</sup> compression tube fitting technologies, a superior advantage is gained allowing users to eliminate threaded connections and reduce leak paths, whilst offering superior installation and operational performance.



These 2-valve manifolds are widely used in situations where a static pressure measurement device requires maintenance, offering safe isolation to allow venting/ draining and calibration of the device. They also provide the means for removal and re-installation of an instrument in a live process situation. They are used in every industry in a wide range of applications - everywhere where accurate and secure pressure measurement of steam, air, gas, oil, water or other non-viscous liquids is required.

Available as remote (or line mount) they are also available in a direct mounting style for bolting to the face of static pressure transmitters with an array of input connection styles and types. The unique Parker superior advantage in this regard being the ability to create a thread less leak free hook up. Where additional operational security is required, a second isolate valve can be specified, thereby providing an enhanced Double Block and Bleed (DBB) solution.

eference	Description
1	Functional colour coded dust cap
2	Adjustable gland
3	Gland locknut
4	Bracket mounting holes
5	Bonnet locking pin



Example shown: 2-valve remote/line mount gauge valve, block and bleed (isolate and vent/drain) with Parker Superior Advantage fully integrated inverted A-LOK® tube fitting connections to inlet/outlet and Parker unique PTFree connect<sup>™</sup> tube fitting connection to vent/drain.

We are confident you will find a manifold style, type and connection option to suit your applications, but should you require something different or need assistance to make your selection, please contact vour local Parker support.



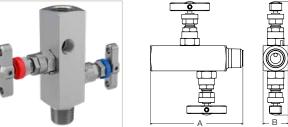
Example shown is application is use. HAL\*WG 2-valve remote/line mount gauge valve manifold assembled to a Gauge Pressure Transmitter through the integral Swivel Adaptor described on page 31. A Parker Superior Advantage for flexibility of application in use.

# 2-Valve Manifolds - HNL Series

# Remote/line mount - long pattern

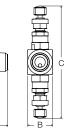
Combining two needle valves into one unitised block, these slimline long pattern Parker 2-valve manifolds are also referred to as Block and Bleed, Isolate and Calibrate or Isolate and Vent/Drain. These manifolds are ideal for standalone line mounting.

HNL\*2V - Male x Female threaded - NPT

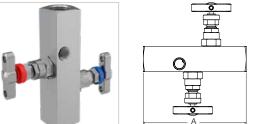


# HNL\*2V - Male x Male threaded - NPT



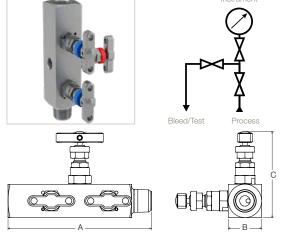


## HNL\*2V - Female x Female threaded - NPT

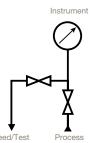


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Example shown: 2-valve integral block and bleed manifold with integral A-LOK® connections.

Pressure		Inlet	Outlet	Vent		Dimension	
	(PSI)	NPT	NPT	NPT	A mm (inch)	B mm (inch)	C mm (inch)
	6,000						130.2 (5.13)
	10,000	1/2" M	1/2" F	1/4" F	136.7 (5.38)	31.8 (1.25)	133.4 (5.25)

Pressure	Inlet Outlet		Vent	ent Dimension				
(PSI)		NPT	NPT	A mm (inch)	B mm (inch)	C mm (inch)		
6,000	1/2" M	1/2" M	1/4" F	108.5 (4.27)	28.6 (1.13)	130.2 (5.13)		
10,000	1/2" M	1/2" M	1/4" F	136.7 (5.38)	31.8 (1.25)	133.4 (5.25)		

Pressure	Inlet	Outlet	Vent			
(PSI)	NPT	NPT	NPT	A mm (inch)	B mm (inch)	C mm (inch)
6,000	1/2" F	1/2" F	1/4" F	117.6 (4.63)	28.6 (1.13)	130.2 (5.13)
10,000	1/2" F	1/2" F	1/4" F	117.6 (4.63)	31.8 (1.25)	133.4 (5.25)

Pressure	Inlet	Outlet	Vent		Dimension	
(PSI)	NPT	NPT	NPT	A mm (inch)	B mm (inch)	C mm (inch)
6,000	1/2" M	1/2" F	1/4" F	136.5 (5.37)	31.8 (1.25	82.6 (3.25)
10,000	1/2" M	1/2" F	1/4" F	136.5 (5.37)	31.8 (1.25	82.6 (3.25)
6,000	1/2" M	1/2" M	1/4" F	136.5 (5.37)	31.8 (1.25	82.6 (3.25)
10,000	1/2" M	1/2" M	1/4" F	136.5 (5.37)	31.8 (1.25	82.6 (3.25)
6,000	1/2" F	1/2" M	1/4" F	136.5 (5.37)	31.8 (1.25	82.6 (3.25)
10,000	1/2" F	1/2" M	1/4" F	136.5 (5.37)	31.8 (1.25	82.6 (3.25)

Products shown here can be supplied with integral swivel gauge adaptor as shown on page 31.

# 2-Valve Manifolds

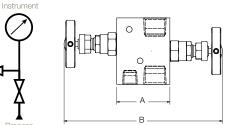
# Remote/line mount

Combining two needle valves into one unitised flat block, this Parker 2-valve manifolds range is also referred to as a Block and Bleed, Isolate and Calibrate or even Isolate and Vent/Drain. These manifolds are ideal for robust mounting to bracket work or other structure.

# HL\*2V - Female x Female threaded - NPT



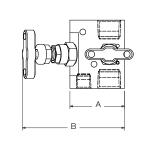
Example shown: 2-valve manifold with integral A-LOK<sup>®</sup> connections.



Pressure	Inlet	Outlet	Bleed/test Dimension				
(PSI)	NPT	NPT	NPT	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)
6,000	1/2" F	1/2" F	1/4" F	50.8 (2.00)	152.4 (6.00)	28.6 (1.13)	63.5 (2.50)
10,000	1/2" F	1/2" F	1/4" F	50.8 (2.00)	152.4 (6.00)	31.8 (1.25)	69.8 (2.75)

## HAL\*2V - Female x Female threaded - NPT





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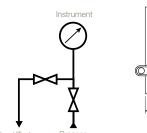
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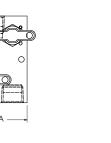
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Pressure	Inlet	Outlet	Bleed/test		Dimension					
(PSI)	NPT	NPT	NPT	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)		
6,000	1/2" F	1/2" F	1/4" F	50.8 (2.00)	100.5 (3.96)	28.6 (1.13)	63.5 (2.50)	79.4 (3.13)		
10,000	1/2" F	1/2" F	1/4" F	63.5 (2.50)	114.3 (4.50)	31.8 (1.25)	69.8 (2.75)	82.6 (3.25)		

# HLTF\*2V - Female x Female threaded - NPT

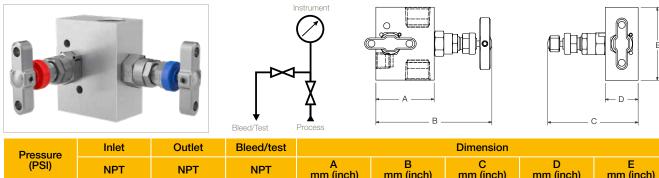






Pressure	Inlet	Outlet	Bleed/test	Dimension					
(PSI)	NPT	NPT	NPT	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)		
6,000	1/2" F	1/2" F	1/4" F	50.8 (2.00)	79.4 (3.13)	28.6 (1.13)	85.0 (3.35)		
10,000	1/2" F	1/2" F	1/4" F	55.7 (2.19)	82.6 (3.25)	31.8 (1.25)	88.9 (3.50)		

## HLLHV\*2V - Female x Female threaded - NPT

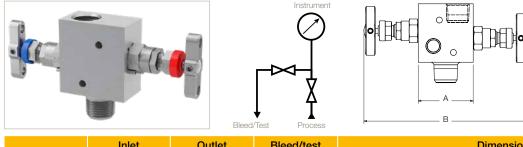


HL\*2V8M8F4F - Male x Female threaded - NPT

1/2" F

1/2" F

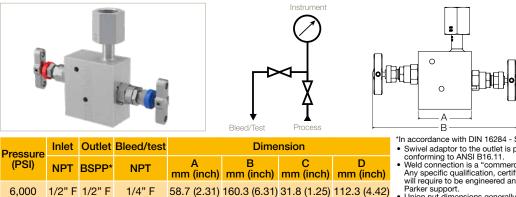
6,000



1/4" F

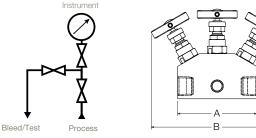
Pressure	Inlet	Outlet	Bleed/test	Dimension					
(PSI)	NPT	NPT	NPT	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)		
6,000	1/2" M	1/2" F	1/4" F	50.8 (2.00)	152.4 (6.00)	28.6 (1.13)	73.0 (2.88)		
10,000	1/2" M	1/2" F	1/4" F	50.8 (2.00	152.4 (6.00)	31.8 (1.25)	76.2 (3.00)		

# HLWG\*2V - Female threaded - NPT with integral swivel gauge adaptor



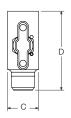
## HL\*3DBB - Female threaded - NPT

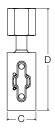




Pressure	Inlet	Outlet	Bleed/test Dimension					
(PSI)	NPT	NPT	NPT	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)
6,000	1/2" F	1/2" F	1/4" F	88.9 (3.50)	148.3 (5.84)	28.6 (1.13)	50.8 (2.00)	101.6 (4.00)
10,000	1/2" F	1/2" F	1/4" F	88.9 (3.50)	148.6 (5.85)	31.8 (1.25)	57.2 (2.75)	107.7 (4.25)

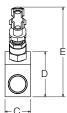
		Dimension		
A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)
50.8 (2.00)	101.6 (4.00)	79.4 (3.13)	28.6 (1.13)	63.5 (2.50)





\*In accordance with DIN 16284 - Swivel BSPP 1/2" Female

- In accordance with DIN 16284 Swivel BSPP 1/2" Female
  Swivel adaptor to the outlet is provided through a socket weld, generally conforming to ANSI B16.11.
  Weld connection is a "commercial weld", completed by a qualified welder. Any specific qualification, certification, documentation or additional NDT, will require to be engineered and quoted extra please consult your local Parker support.
  Union nut dimensions generally conform to DIN 16284 as it applies to the union of nipple and nut themselves.
  Union nut also conforms generally to DIN EN 837 for the gauge connection itself, as it applies to the union of nipple and nut themselves.



# 2-Valve Manifolds - Remote/Line Mount

# Ordering information

			-									
Exan	nple 1 (Default): <b>F</b>	ILS2V		HL	S	<b>2V</b>					nck & bleed/islolate & calibrate/vent/drain, short pattern flant to both inlet & outlet and a 1/4" NPT fem. bleed/vent/dr	
Exan	nple 2: <b>HLS2V4R</b>	M8RF4F3P		HL	S	<b>2V</b>	4RM8RF4F	3P		2-valve bloc connection	nck & bleed/islolate & calibrate/vent/drain, long pattern fla n to inlet & 1/2" BSPP Fem. outlet with 1/4" NPT Fem. ve	at barsto
			OVNO	HNLWG	-	3DBB	8M8R4F	POXNC		3-valve blog	ck-bleed-block/double isolate & bleed/vent/drain, long p	battern k
	nple 3: HNLWGS		JANC		S					ieni. outiet	connection via integral welded swivel and 1/4" NPT fém. gle head block & bleed/isolate & calibrate/vent/drain, sho	
Exan	nple 4: HALS2VI	/AM126ATK		HAL	S	<b>2V</b>	IVM126	ATK		con. to inle	et and outlet. The bleed/vent/drain is also an inverted A-L	_OK tub
Exan	nple 5: HNL6MO	2VM12ATHLNC		HNL	6MO	<b>2V</b>	M12A	THLNC			ick & bleed, long pattern manifold, manufactured from 6N 6mm CPI PTFree connect male union to bleed/vent/drair	
Exam	nple 6: <b>HLS3DBE</b>			HL	S	3DBB	IVZI84F	ΡΟΧ		3-valve blog	ck-bleed-block/double isolate & calibrate vent/drain, flat	barsto
										3-valve blog	tegral CPI tube connections and a 1/4" NPT fem. vent/dr ock-bleed-block/double isolate & calibrate vent/drain, flat	barstoo
Exan	nple 7: <b>HL6MO3</b> [	DBBIVAM12PFC	AM6NC	HL	6MO	3DBB	IVAM12PFCAM6	NC		Advantage	12mm inverted integral A-LOK tube connections to inlet the manifold complies to NACE.	t and ou
				▲	. ▲	<b></b>	<b></b>	<b></b>				
Series			-								NS	
HNL		auge valves, long pat									essure - 10,000 PSI (689 bar) option	
HNLWG	Gauge connection <sup>1</sup>	auge valves, iong par	tern with Integral Swivel	<sup>1</sup> Available as						HP Olevel De	High Pressure	
HL		valves, short patter		standard with 1/2" BSPP (8						Gland Pa	acking Options Graphite <sup>14</sup>	
HLWG	Flat barstock gauge connection <sup>1</sup>	e valves, short patter	n with Integral Swivel Gauge	1/4" BSPP ( <b>4</b>	R) by					FS	Firesafe design <sup>15</sup>	
HAL	Angled barstock ga	uge valves, short pat		special reque Available only	in					Seating	Options - Needle Valves only	
HALWG	Angled barstock ga Gauge connection <sup>1</sup>	uge valves, short pat	tern with Integral Swivel	316SS. Cons vour local Par	ult					6S	6mm bore seat <sup>16</sup>	
HLTF	U	valves with valves c	n top face	support for of						RT	Regulating/Metering Tip	
HLLHV	Flat barstock gauge	valves, short patter	n with valves at 90 degree	potential mate options.	erial					ST 9	Stellite Tip	
	and left hand orient	ation		options.						PK	PCTFE Soft Tip <sup>17</sup> PEEK Soft Tip	
Materials S 3	<b>s</b> 316/316L Stainless St	teel <b>HC</b> Has	stelloy C276								eed Valve Options <sup>18</sup>	
	MO Sup. Aust. St.St		anium Gr. 2 <sup>2</sup>	<sup>2</sup> This material	selection					Р	Blank Plug	
	Monel 400 <sup>2</sup>		onel 825	down-rates m						BV	Bleed Valve/Plug	
<b>D1</b>	Duplex 22 Cr. Steel	625 Inc	onel 625	<sup>3</sup> For Carbon consult your I		r					or Options <sup>19</sup>	
<b>D2</b> S	Super Duplex 25 Cr. S	Steel <b>C</b> Car	bon Steel <sup>3</sup>	representation						HW	Handwheel for all valves	
	ion Configuration									LHW	Handwheel Locking for all valves T Bar Locking for all valves	
2V		bleed/vent/drain, iso								AT	Anti-Tamper for all valves <sup>20</sup>	
3DBB 3DBB1			drain, block-bleed-block⁴ drain, block-block-bleed⁴	<sup>4</sup> Available on	HL and H	NL series or	nly.			ATK	Anti-Tamper for all valves with Key <sup>21</sup>	-
	ions - Standard Opt									ATHKEY	Anti-Tamper Key <sup>22</sup>	
Connect	Inlet	Outlet	Vent								g Options	
*	1/2" NPT Fem.	1/2" NPT Fem.	1/4" NPT Fem.	* Default conr	ection, no	designator	required.			BK	Assembled with Carbon Steel bracketry & bolts	
4N	1/4" NPT Fem.	1/4" NPT Fem.	1/4" NPT Fem.							BKS	Assembled with Stainless Steel bracketry & bo	olts
4K	1/4" NPT Fem.	1/4" NPT Fem.	1/4" NPT Fem.							Other Op OX	Cleaned & lubricated for Oxygen use	
4R	1/4" BSPP Fem.	1/4" BSPP Fem.								NC	NACE MR-01-75 Compliant	
8K 8R	1/4" BSPT Fem. 1/2" BSPP Fem.	1/4" BSPT Fem. 1/2" BSPP Fem.										
4M4F4F		1/4" NPT Fem.	1/4" NPT Fem.									
8M8F4F		1/2" NPT Fem.	1/4" NPT Fem.									
	3/4" NPT Male	1/2" NPT Fem.	1/4" NPT Fem.									
4A	1/4" A-LOK⁵	1/4" A-LOK⁵	1/4" NPT Fem.	5 Available on								
6A	3/8" A-LOK⁵	3/8" A-LOK⁵	1/4" NPT Fem.	For CPI™ (sin 1/4" NPT Fen	gle ferrule Lis defaul	tube fitting) t standard	connection change A to Z. some model types may be avail	ulable with oth	er			
8A	1/2" A-LOK⁵	1/2" A-LOK⁵	1/4" NPT Fem.	connections.		, -						
M6A M10A	6mm A-LOK⁵ 10mm A-LOK⁵	6mm A-LOK⁵ 10mm A-LOK⁵	1/4" NPT Fem. 1/4" NPT Fem.									
M12A	12mm A-LOK⁵	12mm A-LOK⁵	1/4" NPT Fem.									
	onnection Options <sup>6</sup>						no additonal designators. Exa IPT Fem. vent = <b>HL*2V</b> (as exa		PT Fem.			
	n. NPT connection. U						nections must be designated.					
	e NPT connection. U			<ul> <li>1/4" NPT Ma</li> <li>1/2"RSPR Fc</li> </ul>	e (4M) inlet	, 1/2" NPT Fe	m. ( <b>8F</b> ) outlet, 1/4" NPT Fem. vent P Fem. ( <b>8RF</b> ) outlet & 1/4"NPT Fe	it (4F) = 4M8F4F				
			nd specifications vary	<ul> <li>1/2"BSPP Fe</li> </ul>			P Fem. (8RF) outlet & 1/4"BSPT F					
			nd specifications vary	8RF8RF4KF * Insert size d	esignator							
	BSPT BS21, ISO7/1 BSPP BS2779 - Brit			# Insert speci		( <b>R/RD</b> ).				IMPOR	TANT NOTES:	
	DIN 16284/16288/EN						ocket Weld connections will be	e of the same I	length as	-	optimum results in integral tube connec	tions
	ME B16.11, EN12760		d <sup>7</sup>	per the equiva <sup>8</sup> Available on		•	u vanants.				ommended. For inverted style integral tu	
Butt Wel	d and Male Socket		edule Extension	* No designat	or required						t all options/combinations are available ir	
Туре			ckness) Extension				pipe connections will be of the				reserve the right to review/revise this pa	
BW B	utt Weld <sup>9</sup>	4 1/4" NB *	Sch.80 * Default	offered - see	ables and	main catalo					ommend the most suitable alternative pa	
	lale Socket Weld <sup>10</sup>	8 1/2" NB B	Sch.160 C 75mm Sch.XXS D 100mm				Ket Weld conn. will have 1/2" ( compared to equivalent threa				ould your part number selection exceed 2	
		12 3/4 NB		body dimensi	ons are als	o offered - s	see tables and main catalogue.	. Example:			ase consult your local Parker representat	
	Connection and PT		Blood/Vent/		ocket weld	conn. with Sc	h.XXS wall pipe and 100mm body	y extension = M	SW12BD.	•		
Туре		itting Unit	Inlet/Outlet Bleed/Vent/ Drain	<ul> <li><sup>11</sup> Examples:</li> <li>10mm A-LC</li> </ul>	K inverted i	nlet/outlet & 1	1/4" NPT Fem. vent/drain = IVAM1	104F		• II III	n any doubt, please consult your local Pa	ureii
	verted Connection be OD <sup>11</sup>	M Motrie	6 6mm	<ul> <li>10mm CPI i</li> </ul>			' NPT Fem. vent/drain = IVZM104					
	Free connect	A A-LOK	10 10mm 12 12mm	<ul> <li><sup>12</sup> Examples:</li> <li>10mm A-LOł</li> </ul>	tube stub	con. inlet/outl	let & 1/4" NPT Fem. vent/drain = F	PFAM104F				
tuk	be stub <sup>12</sup>		4 1/4" 4F 1/4" NPT <sup>13</sup>	<ul> <li>3/8" CPI mal</li> </ul>	e union con.	inlet/outlet &	a 1/4"NPT Fem. vent/drain = PFC2	ZI64F				
	Free connect	I Imperial	6 3/8" 8 1/2"				I for bleed/vent/drain, some mo	odel types ma	y be			
ma	ale union <sup>12</sup>		U1/2	available with	other coni	IECTIONS						

parstock manifold, manufactured from 316 Austenitic Stainless Steel material, having 1/2" NPT Fem. connection. Gland packing is PTFE.

arstock manifold, manufactured from 316 Austenitic Stainless Steel material, having 1/4" BSPP Male drain connection. Gland packing is Graphite and a 1/4" NPT blanking plug is supplied. ern barstock manifold, manufactured from 316 Aust.St.St., with 1/2" NPT male inlet connection, 1/2" BSPP int/drain/bleed. A 1/4" NPT blanking plug is supplied. Suitable for oxygen service and complies to NACE. ent/oran/biedd. A 1/4 "NPT blanking plug is supplied. Suitable for oxygen service and complies to NACE. pattern flat barstock manifold, 316 Aus.St.St. material with Parker Superior Advantage 12mm inverted tube ( tube con. suitable for 6mm tube. Gland packing is PTFE. Anti-Tamper operation and a single key. super austenitic stainless steel material with Parker A-LOK 12mm CPI integral tube connections to inlet and Manifold is also fitted with locking T bar handle operation and is compliant to NACE. rstock manifold manufactured from 316 Austenitic Stainless Steel material having Parker Superior 1/2" //bleed. Gland packing is PTFE. A 1/4" NPT blanking plug is supplied. Suitable for oxygen service. rstock manifold manufactured from 6MO Super Austenitic Stainless Steel material having Parker Superior id outlet with 6mm integral PTFree male union A-LOK tube connection to vent/drain/bleed. Gland packing is

<sup>14</sup> Not required when Firesafe design option (FS) selected. <sup>15</sup> Not available for PCTFE Soft Tip (9) or Oxygen use (OX).

<sup>16</sup> 6mm bore seat and other flow passages not available on all selections. Please consult your local Parker support.

<sup>17</sup> 3,000 PSI/207 BAR only. See main catalogue page.

<sup>18</sup> Plugs supplied loose in a packing box. See main catalogue page.

<sup>19</sup> These options can be specified to independent valves:

- Add I to specify specify assembly to Isolate valves. Add V to specify specify assembly to Vents/Drains/Bleeds.
- Examples:
- ATI = Anti-Tamper to Isolate valve.
- **HWV** = Handwheel to Vents/Drains/Bleeds.
- <sup>20</sup> Anti-Tamper operation and no Key.
   <sup>21</sup> Anti-Tamper operation and one Key supplied per manifold. <sup>22</sup> Specify quantity required as separate line item.

ns on manifolds, the use of Parker pre-assembly tooling is highly e connections the use of Parker pre-assembly tooling is mandatory. ach single product model type.

number structure at any time. If necessary, we can refuse and/or number(s). We may also apply MOQ rules.

characters in length when completed, then it is likely to be incorrect, for assistance.

r representation.

# **Mounting Brackets**

# Brackets for remote/line mount manifolds and gauge valves

It is essential to fully support impulse/pressure measurement tubing lines, manifolds and instruments. For this reason, all Parker manifolds are designed to accommodate bracket mounting and support.

A full range of bracket mounting kits can be supplied fully assembled to the manifolds, or supplied separately for on-site installation. Available in either all carbon or all stainless steel, they are specifically matched to Parker manifolds to ensure the clearance

needed to efficiently operate all handles and are also designed to offer maximum rigidity and support in horizontal or vertical orientations on panels, walls or 2" NB pipe stands.

Parker is also able to offer all other items necessary to complete your installations, including the 2"NB pipe stands, tubing clamps, cable/tube trays, populated enclosure solutions and much more. For further information please contact your local Parker support.

# Brackets for 2-valve remote mount manifolds - BKT1

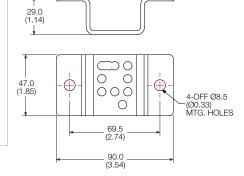


Image shown: Part No.: HLS2VBK

How to order:



Image shown: Part No.: BKT1SSB1



	Part	Number		
Item	Bracket material: Carbon Steel	Bracket material: Stainless Steel	Suitable for Manifold Type	
Bracket with M8 'U' Bolt and manifold Bolt Kit (Nuts and washers: M5 x 45 Bolt (2-OFF)	BKT1CSB1	BKT1SSB1	HL*2V HL*2V8M8F4F HAL*2V HLLHV*2V	

# Brackets for 2-valve remote mount manifolds and 3-valve DBB manifolds - BKT2



Image shown: Part No.: HLS3DBBBK

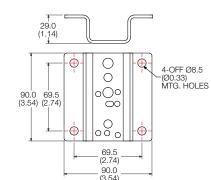


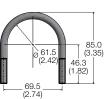
Image shown: Part No.: BKT2SSB2

How to order:					
	Part N				
Item	Bracket material: Carbon Steel	Bracket material: Stainless Steel	Suitable for Manifold Type		
Bracket with M8 'U' Bolts and manifold Bolt Kit (Nuts and washers: M5 x 45 Bolt (2-OFF)	BKT2CSB1	BKT2SSB1	HAL*2VHP HLTF*2V		
Bracket with M8 'U' Bolts and manifold Bolt Kit (Nuts and washers: M10 x 12 Bolt (2-OFF)	BKT2CSB2	BKT2SSB2	HL*3DBB HL*3DBB1		

34

'U' bolt with nuts and washers for 2" NB standpipe



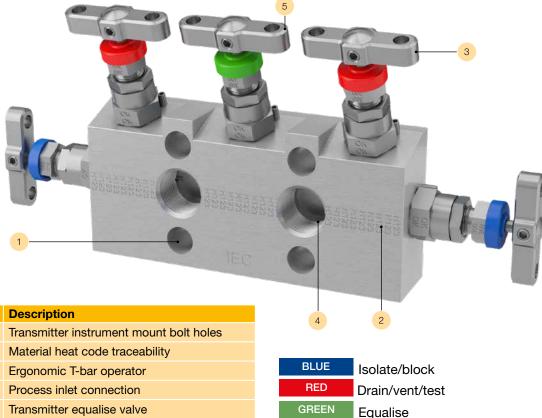


# 3 and 5-Valve Manifolds - H Series

# Introduction

Combining three or five bonnet assemblies into one block, this Parker 3 and 5-valve manifolds range is primarily used in applications requiring Differential Pressure Transmitters, Gauges and/or Chart Recorders mainly for the purpose of flow measurement. In some circumstances, differential pressure measurement will also be used in other applications, such as level or filtration.

In combination with Parker A-LOK<sup>®</sup> or CPI<sup>™</sup> compression tube fittings and PTFree connect<sup>™</sup> technologies, a superior advantage is gained allowing users to eliminate threaded connections and reduce leak paths, whilst offering superior installation and operational performance.



Description
Transmitter instrument mount bolt holes
Material heat code traceability
Ergonomic T-bar operator
Process inlet connection
Transmitter equalise valve

These manifolds are widely used in situations where a differential pressure measurement device requires maintenance, offering safe isolation to allow venting/ draining and calibration of that device. They also provide the means for removal and re-installation of an instrument in a live process situation. They are used in every industry in a wide range of applications - everywhere where accurate and secure pressure measurement of steam, air, gas, oil, water or other non-viscous liquids is required.

Available as remote (or line mount) they are also available in a direct mounting style for bolting directly to the face of Differential Pressure Transmitters with an array of input connection styles and types. The unique Parker superior advantage in this regard is being the ability to create a threadless leak-free hook up. Where additional operational security or functionality is required, a number of differing flow path configurations and additional ports are available to allow purging upstream or downstream of the isolation valves.

We are confident you will find a manifold style, type and connection option to suit your applications, but should you require something different or need assistance to make your selection, please contact vour local Parker support.



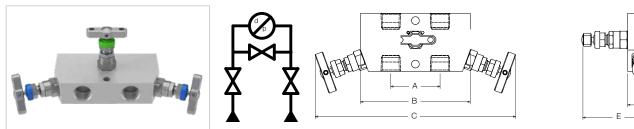
Example shown: 3-valve direct mount manifold with NPT connections and additional test/purge ports.

# **3-Valve Manifolds - H Series**

# Remote/line mount

These 3-valve remote mount manifolds combine three needle valves into one unitised block to create Isolation for the instrument impulse lines and an Equalisation feature to assist in installation and maintenance of the remotely connected instrument(s). They are truly flexible having a multitude of available connection options.

## HL\*3M - Female x Female threaded - NPT



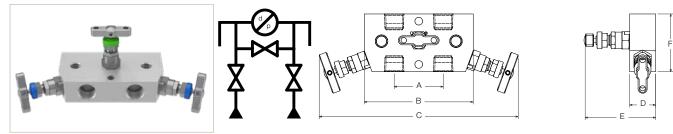
Example shown: 3-valve remote/line mount manifold

featuring the Parker A-LOK® Superior Advantage

inverted integral tube fitting connections.

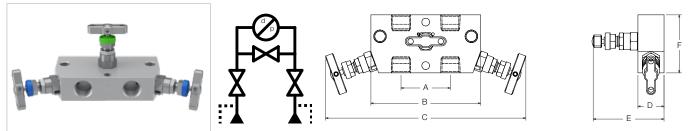
Pressure		<b>.</b>		Dimension								
PSI	Inlet	Outlet	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)				
6,000	1/2" NPT	1/2" NPT	54.0 (2.125)	120.0 (4.72)	220.0 (8.66)	28.6 (1.13)	79.4 (3.13)	63.5 (2.50)				
10,000	1/2" NPT	1/2" NPT	54.0 (2.125)	132.0 (5.20)	232.0 (9.14)	31.8 (1.25)	82.6 (3.25)	63.5 (2.50)				

# HL\*3MDTP - Female x Female threaded - NPT with downstream test ports



Prossuro	Inlet	Outlet	Drain/Bleed/ Test	Dimension							
Pressure PSI				A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)		
6,000	1/2" NPT	1/2" NPT	1/4" NPT	54.0 (2.125)	120.0 (4.72)	220.0 (8.66)	28.6 (1.13)	79.4 (3.13)	63.5 (2.50)		

## HL\*3MUPP - Female x Female threaded - NPT with upstream purge ports



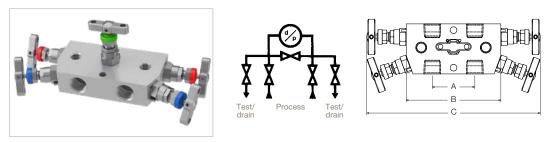
Pressure			Drain/Bleed/ Test			Dime	nsion		
PSI	Inlet	Outlet		A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)
6,000	1/2" NPT	1/2" NPT	1/4" NPT	54.0 (2.125)	120.0 (4.72)	220.0 (8.66)	28.6 (1.13)	79.4 (3.13)	63.5 (2.50)

# 5-Valve Manifolds - H Series

# Remote/line mount

These 5-valve remote mount manifolds combine five needle valves into one unitised block to create Isolation for the instrument impulse lines and an Equalisation feature to assist in installation and maintenance of the remotely connected instrument(s). They also incorporate vent/drain or calibration valves and ports. These manfolds are truly flexible, having a multitude of available connection options and are suitable for use in many applications including those utilising Differential Pressure Gauges.

# HL\*5M - Female x Female threaded - NPT



Pressure		Outlet	Bleed			Dime	nsion		
PSI	Inlet	Outlet	/test	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)
6,000	1/2" NPT	1/2" NPT	1/4" NPT	54.0 (2.125)	120.0 (4.72)	221.6 (8.72)	28.6 (1.13)	79.4 (3.13)	63.6 (2.50)
10,000	1/2" NPT	1/2" NPT	1/4" NPT	54.0 (2.125)	132.0 (5.20)	233.6 (9.20)	31.8 ((1.25)	82.6 (3.25)	76.2 (3.00)

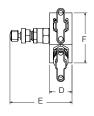
# HL\*5MCT - Female x Female threaded - NPT



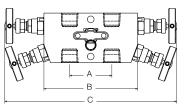
Pressure		Outlot	Bleed	Dimension								
PSI	Inlet	Outlet	/test	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)			
6,000	1/2" NPT	1/2" NPT	1/4" NPT	54.0 (2.125)	120.0 (4.72)	221.6 (8.72)	28.6 (1.13)	79.4 (3.13)	63.6 (2.50)			

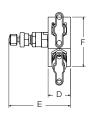


Example shown: 5-valve remote/line mount manifold featuring the Parker A-LOK® Superior Advantage Inverted integral tube fitting connections for the impulse line and NPT ported connections for the vent/ drains.









# 3 and 5-Valve Manifolds - Remote/Line Mount

# Ordering information

Ex	ample 1 (Default):	HLS5M			HL	S	5M			>		ote mount, thread to thread 6,000 PSI manifold, manufactured s to vents. Gland packing is PTFE.	from 316 Sta
Ex	ample 2: HL6MO	3M4NHP	PATEBK	SNC	HL	6MO	3M	4N	<b>HPPATEBKSNC</b>	·····>	3-valve rem Manifold ha	note mount, thread to thread 10,000 PSI manifold, manufact as Anti-tamper operation to the equalise valve, is fitted to a s	tured from 6N
Fx	ample 3: HL6MO		FAI44Pk	POX	HI	6MO	<b>3MUPP</b>	PFAI44	РКРОХ		3-valve rem	note mount, tube to tube manifold, manufactured from 6MO	material havi
	1								3PATKVBKNC		5-valve rem	eam test ports - 1/4" NPT blanking plugs supplied. Gland pa note mount, 6,000 PSI manifold manufactured from 316 SS	material havir
	ample 4: HLS5MS				HL	S	5M	SW8			packing is ( tamper key	Graphite. Manifold also includes Anti-tamper operation to the and two 1/4" NPT blanking plugs are also supplied.	e vent valves,
Ex	ample 5: HLS5M0	CTPFCAN	M126ATI	KE	HL	S	5MCT	PFCAM126	ATKE	<b>```</b>	5-valve rem	note mount manifold manufactured from 316 SS having Park to the vents/drains/bleeds. Gland packing is PTFE. Manifold	ker Superior a
Ex	ample 6: HL6MO	5MIVAM1	2PFCA	M6	HL	6MO	5M	IVAM12	PFCAM6	·····>		o te mount, tube to tube manifold, manufactured from 6MO d outlets with 6mm A-LOK PTFree male union connections :	
0													
Series		line mount	(nina ta nir	o/throad to throad mani	foldo							essure - 10,000 PSI (689 bar) option	
HL		me mount/	hihe in hit	pe/thread to thread mani							HIGH Pre	High Pressure	
Materi S	als 316/316L Stainless S	Steel	HC Ha	astelloy C276								acking Options	
6MO	6MO Sup. Aust. St.S			anium Gr. 2 <sup>1</sup>							3	Graphite <sup>7</sup>	7 Not requ
M	Monel 400 <sup>1</sup>			conel 825							FS	Firesafe design <sup>8</sup>	<sup>8</sup> Not avai
D1	Duplex 22 Cr. Steel			conel 625							Seating	Options - Needle Valves only	
D2	Super Duplex 25 Cr.	Steel		arbon Steel <sup>2</sup>							6S	6mm bore seat <sup>9</sup>	<sup>9</sup> 6mm bo
<sup>1</sup> This m	aterial selection down-ra	tes manifold.									RT	Regulating/Metering Tip	Parker su
<sup>2</sup> For Ca	arbon Steel consult your	local Parker	r representa	ation.							ST	Stellite Tip	
	ation Configuration										9 PK	PCTFE Soft Tip <sup>10</sup> PEEK Soft Tip	<sup>10</sup> 3,000 P
3M	3-valve, isolate and											ed Valve Options <sup>11</sup>	<sup>11</sup> Plugs si
				eam vent/drain/bleed/tes	st ports						P	Blank Plug	T lugs st
5M	P 3-valve, isolate and 5-valve, isolate, equ										BV	Bleed Valve/Plug	
											PBV	Blank Plug and Bleed Valve/Plug	
5MCT	Transfer application	S		ed suitable for Custody							Operato	r Options <sup>12</sup>	<sup>12</sup> These of Add <b>E</b> t
Conne	ections - Standard Op	tions									HW	Handwheel for all valves	Add E t
	Inlet	Outlet		Vent							LHW	Handwheel Locking for all valves	Add V t
*	1/2" NPT Fem.	1/2" N	PT Fem.	1/4" NPT Fem.				ator required.			THL	T Bar Locking for all valves	Exampl • HWV
4N	1/4" NPT Fem.	1/4" N	PT Fem.	1/4" NPT Fem.					signators. Example: 1/2" NPT vent = <b>HL*5M</b> (as above)		AT	Anti-Tamper for all valves <sup>13</sup>	• ATE =
4K	1/4" BSPT Fem.	1/4" B	SPT Fem.	1/4" BSPT Fem.					e designated. Examples:		ATK	Anti-Tamper for all valves with Key <sup>14</sup>	<sup>13</sup> Anti-Tar
4R	1/4" BSPP Fem.	1/4" B	SPP Fem.	1/4" BSPP Fem.				P Fem. outlet & 1/4"NP			ATHKEY		<sup>14</sup> Anti-Tai
8K	1/2" BSPT Fem.	1/2" B	SPT Fem.	1/4" BSPT Fem.	• 1/2"E	SPP Fem. i	nlet & 1/2"BSPI	P Fem. outlet & 1/4"BSI	PT Fem. vent = 8R4K		Mounting		<sup>15</sup> Specify
8R	1/2" BSPP Fem.	1/2" B	SPP Fem.	1/4" BSPP Fem.							BK	Assembled with Carbon Steel bracketry & bolts	
SW8	1/2" NB Fem. SW <sup>3</sup>	1/2" N	B Fem. SW	/ <sup>3</sup> 1/4" NPT Fem.				ale Socket Weld con PT pipe threaded vari	nections will be of the same		BKS	Assembled with Stainless Steel bracketry & bolts	
Option	nal Connections				, in the second	as per the		i pipe illieaded vali	ants.		Other Op OX	Cleaned & lubricated for Oxygen use	
Туре		Fitting	Unit	Inlet/Outlet Bleed/V	<sup>/ent/</sup> ⁴Exam	ples:					NC	NACE MR-01-75 Compliant	
IV	Inverted Connection			6 6mm				et & 1/4" NPT Fem. ver & 1/4" NPT Fem. vent/c					
	Tube OD <sup>4</sup>		M Metric	10 10mm				et & 6mm vent/drain = I					
	PTFree connect	A A-LOK		<b>12</b> 12mm <b>4F</b> 1/4			rted inlet/outlet	& 1/4" vent/drain = IV/	A184				
	tube stub⁵	Z CPI		<b>4</b> 1/4"	° Exan		a atula ana inte	t/autiat 8 1/4" NDT Fai					
	PTFree connect male union <sup>5</sup>		I Imperia	l 6 3/8" 8 1/2"	• 3/8" (	CPI male un	on con. inlet/or	utlet & 1/4"NPT Fem. ve					
	IPT Fem. is default stand le with other connection		d/vent/draiı	n, some model types may		n A-LOK ma	le union con. ir	let/outlet & 6mm A-LO	K vent/drain = <b>PFCAM126</b>				
											_	TANT NOTES:	
											<ul> <li>For</li> </ul>	optimum results in integral tube connectio	ns on mar

- Not all options/combinations are available in each single product model type.
- recommend the most suitable alternative part number(s). We may also apply MOQ rules.
- ٠ please consult your local Parker representation for assistance.
- If in any doubt, please consult your local Parker representation. •

Stainless Steel material having 1/2" NPT Fem. connections to inlets and outlets with 1/4" NPT Fem.

6MO material having 1/4" NPT Fem. connections to inlets and outlets. Gland packing is PTFE. eel mounting bracket assembly and complies to NACE.

aving 1/4" A-LOK PTFree tube stub con. to inlets and outlets. There are 2 additional 1/4" NPT TFE. Valves are fitted with PEEK soft tip stems; manifold is cleaned suitable for oxygen service. aving 1/2" NB Fem. socket weld con. to inlets and outlets with 1/4" NPT Fem. vent ports. Gland es, is fitted with a Carbon S mounting bracket assembly and complies to NACE. One Anti-

or advantage 12mm A-LOK PTFree male union con. to inlets and outlets with 6mm PTFree male ith Anti-tamper operation to the equalise valve and suppled with one Anti-tamper key. alless Steel material having Parker Superior Advantage 12mm A-LOK inverted tube connections s. Gland packing is PTFE.

equired when Firesafe design option (FS) selected. vailable for PCTFE Soft Tip (9) or Oxygen use (OX).

bore seat and other flow passages not available on all selections. Please consult your local support.

PSI/207 BAR only. See main catalogue page.

supplied loose in a packing box. See main catalogue page.

e options can be specified to independent valves:

to specify assembly to Equalise valve only.

to specify assembly to Isolate valves. I to specify assembly to Vents/Drains/Bleeds.

ples:

**W** = Handwheel to Vents/Drains/Bleeds. **E** = Anti-Tamper to Equalise valve.

Tamper operation and no Key.

Tamper operation and one Key supplied per manifold.

ify quantity required as separate line item.

For optimum results in integral tube connections on manifolds, the use of Parker pre-assembly tooling is highly recommended. For inverted style integral tube connections the use of Parker pre-assembly tooling is mandatory.

We reserve the right to review/revise this part number structure at any time. If necessary, we can refuse and/or

Should your part number selection exceed 25 characters in length when completed, then it is likely to be incorrect,

# **Mounting Brackets**

# Brackets for remote/line mount manifolds and gauge valves

# Brackets for 3 and 5-valve remote mount manifolds - BKT2

- Universal manifold mounting bracket, suitable for all remote mount manifolds •
- Allows 90 degree positioning enabling total installation flexibility and prevents handle obstruction
- Can be wall, standpipe or base mounted ٠





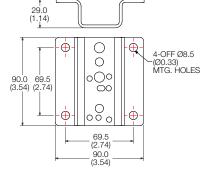


Image shown: Part No.: HLS5MBK

Image shown: Part No.: BKT2SSB5

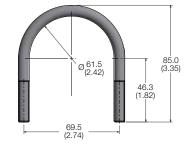
## How to order:

	Part	Number	
Item	Bracket material: Carbon Steel	Bracket material: Stainless Steel	Suitable for Manifold Type
Bracket with M8 'U' Bolt and manifold Bolt Kit (Nuts and washers: M8 x 45 Bolt (2-OFF)	BKT2CSB5	BKT2SSB5	HL*3M HL*3MDTP HL*5M HL*5MCT HL*5MHP

## 'U' bolt with nuts and washers for 2" NB standpipe



Bracket kits include U bolts with nuts and washers.

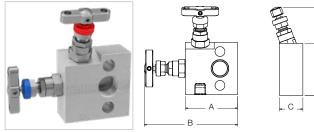


# 2-Valve Manifolds - H Series

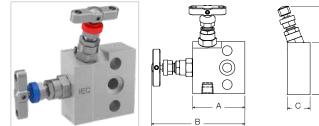
# Direct mount

Combining two needle valves into one unitised block, this 2-valve manifolds range is also referred to as a Block and Bleed, Isolate and Calibrate or even Isolate and Vent/Drain. These manifolds are specifically designed for direct connection to absolute/gauge pressure transmitters, having bolted interface conforming to DIN IEC61518 Type B as standard, and type A available by request. With additional mounting holes and a wide range of bracketry, these manifolds can also be utilised as support for the instrument within any installation.

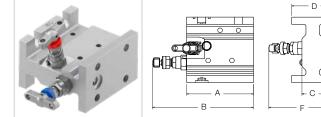
# HD\*2M- Female threaded - NPT x Flanged



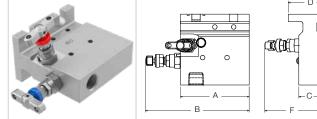
# HD\*2MFF - Flanged x Flanged (straight through bolted flange)



# HEH\*2 - Flanged x Flanged



# HET\*2 - Female threaded - NPT x Flanged





Example shown: 2-valve manifold with inverted integral A-LOK<sup>®</sup> connections.

Î				Outlet		Dimension						
	E	Pressure (PSI)	Inlet		Bleed /test	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)		
 D 		6,000	1/2" NPT	Flanged	1/4" NPT	63.5 (2.50)	114.3 (4.50)	28.6 (1.13)	63.5 (2.50)	107.6 (4.24)		

Î	_					D	imensio	on	
   E	Pressure (PSI)	Inlet	Outlet	Bleed /test	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)
	6,000	Flanged	Flanged	1/4" NPT	63.5 (2.50)	114.3 (4.50)	28.6 (1.13)	63.5 (2.50)	107.6 (4.24)

-1		ra Blaad		Dimension						
	Pressure (PSI)	Inlet	Outlet	Bleed /test	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)
	6,000	Flanged	Flanged	1/4" NPT	98.5 (3.88)	149.3 (5.88)	31.8 (1.25)	62.0 (2.44)	96.4 (3.80)	95.8 (3.77)

<u> </u>							Dime	nsion		
	Pressure (PSI)	Inlet	Outlet	Bleed /test		B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)
	6,000	1/2" NPT	Flanged	1/4" NPT	98.5 (3.88)	149.3 (5.88)	31.8 (1.25)	62.0 (2.44)	101.6 (4.00)	80.7 (3.18)

# **3-Valve Manifolds - H Series**

# Direct mount

These 3-valve direct mount to differential pressure transmitter manifolds combine three needle valves into one unitised block to create Isolation for the instrument impulse lines and an Equalisation feature to assist in installation and maintenance. They comply fully with IEC 61518 and have a multitude of advantageous connection & application options.

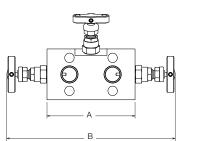


THE

Example shown: 3-valve manifold with PTFree connect<sup>™</sup> connection.

## HD\*3M - Female threaded - NPT x Flanged

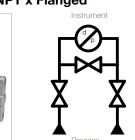


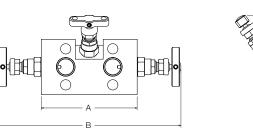


		Dimension								
Inlet	Outlet	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)				
1/2" NPT	Flanged	110.0 (4.33)	211.6 (8.33)	28.6 (1.13)	63.5 (2.50)	107.6 (4.24)				

# HD\*3MA - Female threaded - NPT x Flanged



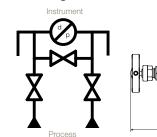


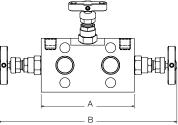


	Outlet	Dimension					
Inlet		A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	
1/2" NPT	Flanged	110.0 (4.33)	211.6 (8.33)	28.6 (1.13)	63.5 (2.50)	91.0 (3.58)	

# HD\*3MDTP - Female threaded - NPT x Flanged with downstream test ports



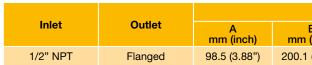




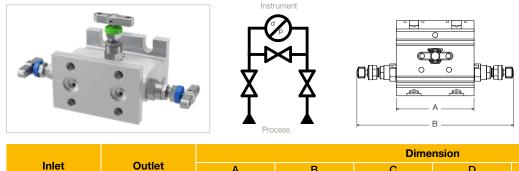
		Outlet	Dimension						
Inlet	Inlet		A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)	
	1/2" NPT	For 3051	33.0 (1.30)	110.0 (4.33)	211.6 (8.33)	28.6 (1.13)	63.5 (2.50)	107.6 (4.24)	

HET\*3 - Female threaded - NPT x Flanged





# HEH\*3 - Flanged x Flanged

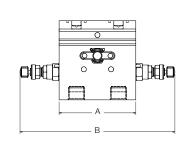


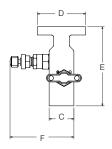
Inlet Α mm (inch) mm 98.5 (3.88") 200.1 Flanged Flanged

# Recognising and understanding the direct mount transmitters\*

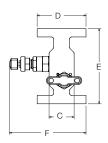


\* Not Emerson Coplanar<sup>™</sup> types – For Coplanar<sup>™</sup> please see page 55.





B (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)
(7.88")	31.8 (1.25")	62.0 (2.44")	101.6 (4.00")	82.6 (3.25")



B (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)
(7.88")	31.8 (1.25")	62.0 (2.44")	96.4 (3.80")	97.7 (3.85")



Typical installation

Manifolds mount to this IEC compliant interface

• Pressure applications utilise 2-valve manifolds bolted with 2 bolts Differential applications utilise 3 or 5-valve manifolds bolted with 4 bolts

Connection centres are 2 1/8" (54mm)

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- Bolt hole centres are 2 1/8" (54mm) x 1 5/8" (41mm)
```

# **5-Valve Manifolds - H Series**

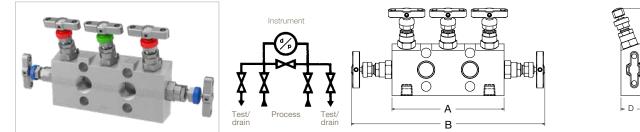
# Direct mount

These 5-valve direct mount to differential pressure transmitter manifolds combine five valves into one block, creating Isolation for the instrument impulse lines and an Equalisation feature to assist in installation & maintenance. They additionally offer independent vent/ drain/bleed/calibration facilities with their own individual ports. These manifolds comply fully with IEC 61518. They also feature multitude of advantageous connection & application options.

## HD\*5M - Female threaded - NPT x Flanged

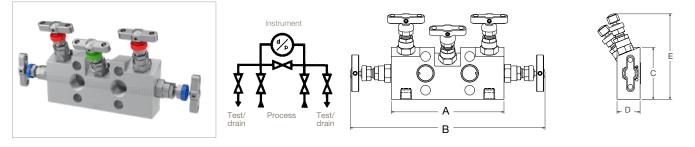


Example shown: 5-valve extruded direct mount manifold with Parker Superior Advantage fully integrated inverted A-LOK® tube fitting connections.



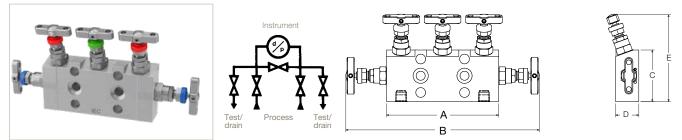
Inlet		Outlet Bleed/test	Dimension					
	Outlet		A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	
1/2" NPT	Flanged	1/4" NPT	138.0 (5.43)	239.6 (9.43)	63.5 (2.50)	28.6 (1.13)	107.6 (4.24)	

## HD\*5MA - Female threaded - NPT x Flanged



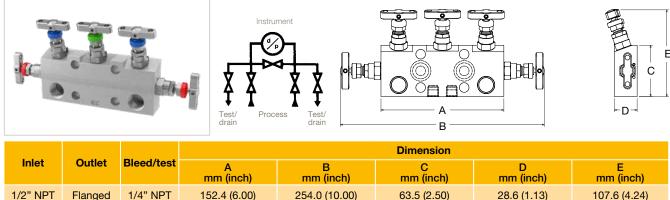
	Inlet Out					Dimension		
		Outlet	Bleed/test	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)
	1/2" NPT	Flanged	1/4" NPT	138.0 (5.43)	239.6 (9.43)	63.5 (2.50)	28.6 (1.13)	104.7 (4.12)

## HD\*5MFF - Flanged x Flanged (straight through bolted flange)

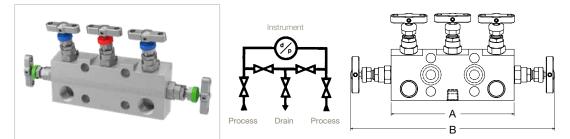


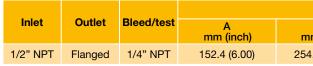
Inlet	Outlet	utlet Bleed/test	Dimension					
			A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	
Flanged	Flanged	1/4" NPT	138.0 (5.43)	239.6 (9.43)	63.5 (2.50)	28.6 (1.13)	107.6 (4.24)	

HD\*5 - Female threaded - NPT x Flanged

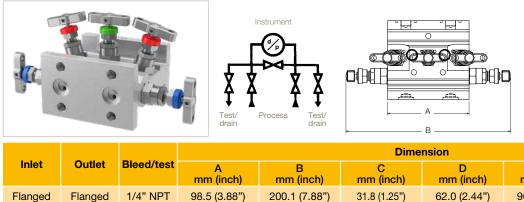


HD\*5CT - Female threaded - NPT x Flanged

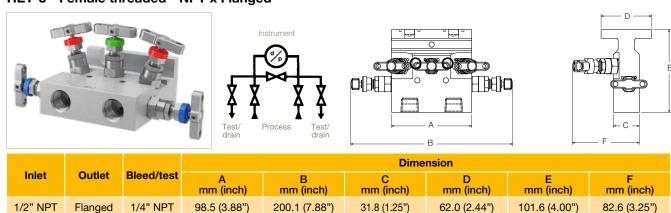




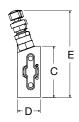
HEH\*5 - Flanged x Flanged



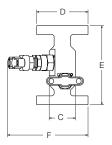
HET\*5 - Female threaded - NPT x Flanged



	Dimension		
B Im (inch)	C mm (inch)	D mm (inch)	E mm (inch)
4.0 (10.00)	63.5 (2.50)	28.6 (1.13)	107.6 (4.24)



	Dimension		
B m (inch)	C mm (inch)	D mm (inch)	E mm (inch)
4.0 (10.00)	63.5 (2.50)	28.6 (1.13)	107.6 (4.24)



	Dime			
ch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)
88")	31.8 (1.25")	62.0 (2.44")	96.4 (3.80")	97.7 (3.85")

	Dime	nsion		
nch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)
.88")	31.8 (1.25")	62.0 (2.44")	101.6 (4.00")	82.6 (3.25")

# 2, 3 and 5-Valve Manifolds - Direct Mount

# Ordering information

Example 1 (Default): HDS5M Example 2: HDS5MASB3PBKSNC Example 3: HDM5MADA Example 4: HDS5M4NDAATKVOXNC Example 5: **HEHS3DTP3ATE** Example 6: HETS5CTP Example 7: HETS5DAIVAM104F3PBKS Example 8: HDM5MADAPFCAM126PKNC

Series	; ;							
	Flat barstock direct				to flange manifolds			
HD <sup>1</sup>	<ul> <li>Process connection</li> <li>Process connection</li> </ul>							
HET <sup>1</sup>					hread to flange manifold	s		
		Extruded H-section direct mount, flange to flange manifolds						
Defaul	t standard connections	s for pipe/thread	d to flang	ge are: 1	2" NPT Fem. inlet with DI	٧		
	utlet transmitter face w pecified.	vith 1/4" NPT Fe	em. vent	s/drains/	bleeds/purge or test ports	-		
Defaul ransmi	standard connections	for flange to fla EC B outlet wit	ange are h 1/4" N	: DIN IE0 PT Fem.	C 61518 inlet to manifold/ vents/drains/bleeds/purge	) or		
Mater	ials					-		
S	316/316L Stainles	s Steel	НС	Hastel	oy C276			
6MO	6MO Sup. Aust. S	t.Steel	т	Titaniu	m Gr. 2 <sup>3</sup>			
М	Monel 400 <sup>3</sup>		825	Incone	l 825			
D1	Duplex 22 Cr. Stee	el	625	Incone	l 625			
D2	Super Duplex 25 C	Cr. Steel	С	Carbo	n Steel⁴			
	aterial selection dowr							
For Ca	arbon Steel consult yo	ur local Parker	r represe	entation.				
	er of Valves/Config					-		
2	2-valve, block & bl	eed/isolate &	calibrat	e/vent/c	Irain			
3	3-valve, isolate & e							
5	5-valve, isolate, ec	ualise & calib	rate/ble	ed/vent	drain for DP application	s		
For Fl	at Barstock Manifol	ds only (HD S	Series)					
М	Process Connection	ons 54.0 mm (	2 1/4") (	CTRS				
Applic	ation Configuration	1				-		
A	Inclined equalise v - Eg. Yokogawa E.		obstruct	tion with	transmitter		<sup>5</sup> For flat barsto	
FF	Flange to flange co							
ст	Suitable for fiscal r	metering/custo	ody tran	sfer ap	olications <sup>6</sup>		<sup>6</sup> For 5-valve m	
DTP	Downstream test p	oorts <sup>7</sup>					<sup>7</sup> For 3-valve m	
Conne	ections - Standard (	Options				-		
	Inlet	Outlet			Vent/Drain/Bleed/Test Purge	/		
*	1/2" NPT Fem.	DIN IEC B FI	ange Int	terface	1/4" NPT Fem.		* Default stand	
**	DIN IEC	DIN IEC B FI	0		1/4" NPT Fem.		** Default stand	
4N	1/4" NPT Fem.	DIN IEC B FI	ange In	terface	1/4" NPT Fem.		Default standa	
4K	1/4" BSPT	DIN IEC B FI	ange In	terface	1/4" BSPT Fem.		inlet & DIN IE As connection	
4R	1/4" BSPP Fem.	DIN IEC B FI	ange In	terface	1/4" BSPP Fem.		<ul> <li>1/2"BSPP Fe</li> </ul>	
8K	1/2" BSPT	DIN IEC B FI	0		1/4" BSPT Fem.		<ul> <li>1/2"BSPP Fe</li> </ul>	
BR	1/2" BSPP	DIN IEC B FI	ange In	terface	1/4" BSPP Fem.		8 As standard,	
SW8	1/2" NB Fem. SW8	DIN IEC B FI	ange Int	terface	1/4" NPT Fem.		as per the equ	
DA	1/2" NPT Fem.	DIN IEC A FI	ange Int	terface	1/4" NPT Fem.		<sup>9</sup> Examples:	
Optio	nal Connections						<ul> <li>10mm A-LO</li> </ul>	

Optic	onal Connections					
Туре		Fitting	Unit	Inlet	Bleed/Vent/ Drain	
IV PF	Inverted Connection Tube OD <sup>9</sup> PTFree connect	A A-LOK	M Metric	6 6mm 10 10mm 12 12mm		1
	PTFree connect male union <sup>10</sup>	Z CPI	I Imperial	<b>4</b> 1/4" <b>6</b> 3/8" <b>8</b> 1/2"	<b>4F</b> 1/4" NPT <sup>11</sup>	• 1 8

HD	S	5	Μ				
HD	S	5	Μ	Α		SB3PBKS	
HD	Μ	5	Μ	Α	DA		
HD	S	5	Μ		4NDA	ATKVOXNC	
HEH	S	3		DTP		<b>3ATE</b>	
HET	S	5		СТ		Р	
HET	S	5			DAIVAM104F	3PBKS	
HD	Μ	5	Μ	Α	DAPFCAM126	PKNC	·····
<sup>5</sup> For flat b <sup>6</sup> For 5-val <sup>7</sup> For 3-val * Default :	ve ma	anifolo anifolo	ds onl ds onl	y. y.	pipe/thread to flange mar	nifolds; no designator r	equired
" Default s Default st	standa andai	ard co rd ma	onnec anifolo	tion for fla ds require	pipe/thread to flange mar ange to flange manifolds; e no additonal designatc NPT Fem. vent = <b>HD*5N</b>	no designator required ors. Example: 1/2" NPT	j.

5-valve direct mount, flat barstock, thread to DIN IEC B flanged 6,000 PSI manifold, manufactured from 316 SS material having 1/2" NPT Fem. inlet connections and 1/4" NPT Fem. connections to vents. Gland packing is PTFE.

3-valve direct mount extruded H-section, flange to flange 6,000 PSI manifold, manufactured from 316 SS material having DIN IEC process/inlet interface and IEC B outlet/ instrument flange connections. Gland packig is Graphite. Manifold has additional 1/4" NPT downstream test ports and is fitted with Anti-Tamper operation to the equalise valve. Instrument hange connections. Gland packig is Graphite. Manifold has additional 1/4 NPT downstream test ports and is fitted with Anti-hamper operation to the equalise valve. 5-valve direct mount extruded T-section, pipe/thread to flange 6,000 PSI manifold, manufactured from 316 SS material having 1/2" NPT Fem. inlet and IEC B outlet/instrument flange with 1/4" NPT Fem. bleed/vent/drain. Gland packig is PTFE. Manifold is suitable for use in fiscal metering/custody transfer applications; 1/4" NPT blanking plug is supplied. 5-valve direct mount extruded section, tube to DIN IEC A flanged 6,000 PSI manifold, manufactured from 316 SS material having Parker Superior Advantage 10mm Inverted style A-LOK tube connections to the inlet and 1/4" NPT Fem. bleed/vent/drain. Gland packing is Graphite; 1/4" NPT blanking plugs supplied; fitted with SS mounting bracket assembly. 5-valve direct mount, flat barstock, tube to DIN IEC A flanged 5,000 PSI manifold, manufactured from Monel 400 CRA material having Parker Superior Advantage 10mm Inverted style A-LOK connections to inlet and 6mm PTFree A-LOK male stud union connections to vent/drain/bleed. Gland packing is PTFE. Manifold has further inclined equalise valve to avoid obstruction with the transmitter; fitted PEEK soft stem tip and conforms to NACE.

OPTION	S
nstrumen	t Bolt Options
SB	316 Stainless Steel bolt <sup>11</sup>
СВ	3" long Carbon Steel bolt <sup>12</sup>
CSB	3" long 316 Stainless Steel bolt12
Gland Pac	king Options
3	Graphite <sup>13</sup>
FS	Firesafe design <sup>14</sup>
Seating O	ptions - Needle Valves only
RT	Regulating/Metering Tip
ST	Stellite Tip
9	PCTFE Soft Tip <sup>15</sup>
PK	PEEK Soft Tip
Plug/Blee	d Valve Options <sup>16</sup>
P	Blank Plug
3V	Bleed Valve/Plug
PBV	Blank Plug and Bleed Valve/Plug
Operator (	Options <sup>17</sup>
IW	Handwheel
.HW	Handwheel Locking
THL	T Bar Locking
AT*	Anti-Tamper <sup>18</sup>
ATK*	Anti-Tamper with Key <sup>19</sup>
ATHKEY	Anti-Tamper Key <sup>20</sup>
Mounting	Options
ЗК	Assembled with Carbon Steel bracketry & bolts
BKS	Assembled with Stainless Steel bracketry & bolts
Other Opt	ions
XC	Cleaned & lubricated for Oxygen use
NC	NACE MR-01-75 Compliant

C B outlet with 1/4" NPT Fem. vent = HD\*5M (as example above). on choices vary, all connections must be designated. Examples:

em, inlet & DIN IEC B outlet with 1/4"NPT Fem, vent = 8R4F em. inlet & DIN IEC B outlet with 1/4"BSPT Fem. vent = 8R4K

I, valves with Female Socket Weld connections will be of the same length uivalent NPT pipe threaded variants.

- OK inverted inlet & 1/4" NPT Fem. vent/drain = IVAM104F
- 10mm CPI inverted inlet & 1/4" NPT Fem. vent/drain = IVZM104F
- 12mm A-LOK inverted inlet & 6mm vent/drain = IVAM126
- 1/2" A-LOK inverted inlet & 1/4" vent/drain = IVAI84 <sup>10</sup> Examples:
- 10mm A-LOK tube stub con. inlet & 1/4" NPT Fem. vent/drain = PFAM104F
- 3/8" CPI male union con. inlet & 1/4"NPT Fem. vent/drain = PFCZI64F
- 12mm A-LOK male union con. inlet & 6mm A-LOK vent/drain = PFCAM126
- <sup>11</sup> 1/4" NPT Fem. is default standard for bleed/vent/drain, some model types may be available with other connections.

# **IMPORTANT NOTES:**

- For optimum results in integral tube connections on manifolds, the use of Parker pre-assembly tooling is highly
- Not all options/combinations are available in each single product model type. •
- ٠ recommend the most suitable alternative part number(s). We may also apply MOQ rules.
- please consult your local Parker representation for assistance.
- If in any doubt, please consult your local Parker representation.

5-valve direct mount, flat barstock, thread to DIN IEC B flanged 6,000 PSI manifold, manufactured from 316 SS material having 1/2" NPT Fem. inlet con. and 1/4" NPT Fem. con. to vents. 316 SS bolts. Gland packing is Graphite. Manifold has further inclined equalise valve; fitted with SS mounting bracket assembly; 1/4" NPT blanking plugs supplied. 5-valve direct mount, flat barstock, thread to DIN IEC A flanged 5,000 PSI manifold, manufactured from Monel 400 CRA material having 1/2" NPT Fem. inlet connections and 1/4" NPT Fem. connections to vents. Gland packing is PTFE. Manifold has further inclined equalise valve to avoid obstruction with the transmitter. 5-valve direct mount, flat barstock, thread to DIN IEC A flanged 6,000 PSI manifold, manufactured from 316 SS material having 1/4" NPT Fem. inlet connections and 1/4" NPT Fem. connections to vents. Gland packing is PTFE. Manifold has further inclined equalise valve to avoid obstruction with the transmitter. 5-valve direct mount, flat barstock, thread to DIN IEC A flanged 6,000 PSI manifold, manufactured from 316 SS material having 1/4" NPT Fem. inlet con. and 1/4" NPT Fem. vent cons. Gland packing is PTFE. Vent/drain/bleed valve's operation is Anti-Tamper. One Anti-Tamper key is supplied and the manifold is cleaned suitable for use in Oxygen applications, NACE compliant.

### Carbon Steel bolt as standard. No designator required.

Extra length bolts to be specified when utilising these manifolds with Emerson Coplanar™ pe transmitter with the traditional adaptor flange.

Not required when Firesafe design option (FS) selected. Not available for PCTFE Soft Tip (9) or Oxygen use (OX).

3,000 PSI/207 BAR only. See main catalogue page.

Plugs supplied loose in a packing box. See main catalogue page.

These options can be specified to independent valves:

Add E to specify assembly to Equalise valve only.

Add I to specify assembly to Isolate valves

Add V to specify assembly to Vents/Drains/Bleeds

Examples **HWV** = Handwheel to Vents/Drains/Bleeds.

ATE = Anti-Tamper to Equalise valve.

Anti-Tamper operation and no Key.

Anti-Tamper operation and one Key supplied per manifold.

Specify quantity required as separate line item.

recommended. For inverted style integral tube connections the use of Parker pre-assembly tooling is mandatory.

We reserve the right to review/revise this part number structure at any time. If necessary, we can refuse and/or

Should your part number selection exceed 25 characters in length when completed, then it is likely to be incorrect,

# **Mounting Brackets**

# Brackets for direct mount manifolds

# Brackets for 2, 3 and 5-valve direct mount manifolds - BKT3

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





Image shown: Part No.: HDS2MBK



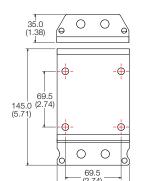


Image shown: Part No.: BKT3CSB2

## How to order:

	Part	Number	Suitable for Manifold Type		
Item	Bracket material: Carbon Steel	Bracket material: Stainless Steel	2-valve	3 & 5-valve	
Bracket with M8 'U' Bolts and manifold Bolt Kit (Nuts and washers: M10 x 12 Bolt (2-OFF)	BKT3CSB2	BKT3SSB2		HD*3M HD*3MDTP HD*3MFF HD*3 HD*5M HD*5MFF	
Bracket with M8 'U' Bolts and manifold Bolt Kit (Nuts and washers: M10 x 12 Bolt (1-OFF) M6 x 12 Bolt (1-OFF)	BKT3CSB3	BKT3SSB3	HD*2M HD*2MFF		

## 'U' bolt with nuts and washers for 2" NB standpipe



Bracket kits include U bolts with nuts and washers.

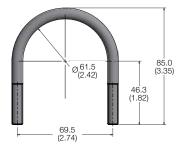


Image shown: Part No.: HDS5MBK

# Brackets for 5-valve direct mount HD\*5 style manifolds with increased process centres - BKT5

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





Image shown: Part No.: HDS5BK

Image shown: Part No.: BKT5CSB6

## How to order:

	Part N			
Item	Bracket material: Carbon Steel	Bracket material: Stainless Steel	Suitable for Manifold Type	
Bracket with M8 'U' Bolts and manifold Bolt Kit (Nuts and washers: M6 x 12 Bolt (4-OFF)	BKT5CSB6	BKT5SSB6	HD*5CT HD*5	

# Brackets for 2, 3 and 5-valve direct mount extruded manifolds - BKT4

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





Image shown: Part No.: HEHS2BK

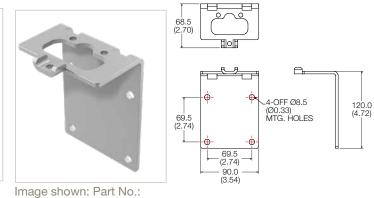
Image shown: Part No.: HEHS5BK

## How to order:

	Part	Number	Suitable for Manifold Type		
Item	Bracket material: Carbon Steel	Bracket material: Stainless Steel	2-valve	3 & 5-valve	
Bracket with M8 'U' Bolt and manifold Bolt Kit (Nuts and washers: M6 x 45 Bolt (3-OFF)	BKT4CSB4	BKT4SSB4	HEH*2 HET*2	HET*3 HEH*3 HET*5 HET*5CT HEH*5 HEH*5CT	

48

4-OFF Ø8.5 (Ø0.33) MTG, HOLES 145.0

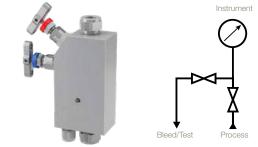


BKT4CSB4

# **Base Connected Manifolds Especially Suited For Enclosure Mounting**

# Introduction

Suitable for vertical or horizontal installation, these base connection, base mounted manifolds can be utilised in stand-alone applications, but are especially suited for installation with transmitters within an instrument protection enclosure. They offer many benefits, including the ability to complete all connections outside of the enclosure itself. Combined with Parker's own instrument enclosure solutions and specified with the Parker Superior Advantage integral tube fitting connections, these represent the simplest, most efficient and reliable installation solutions available when protection is required.



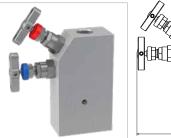
Example shown: 2-valve base mounted manifold especially suited for use within enclosures, having Parker Superior Advantage fully integrated inverted style tube connections to inlet, outlet and vent/drain/bleed.

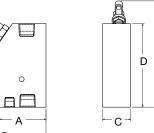
## HL\*2EXT - Female x Female threaded - NPT

'AQ r

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- A -

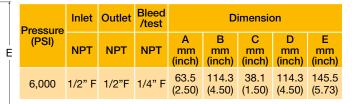




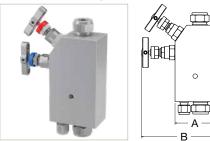
D

Ì٢

- C -

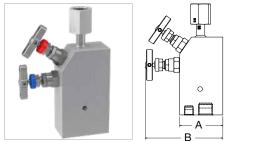


## HL\*2EXT - Integral A-LOK® connections



		Pressure (PSI)	Inlet	Outlet	Bleed /test	Bleed Dimension							
E	Ξ			A-LOK	A-LOK		B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch			
		6,000	1/2" 12mm	1/2" 12mm	1/4" 6mm	63.5 (2.50)	114.3 (4.50)	38.1 (1.50)	114.3 (4.50)	145.9 (5.73			

## HL\*2EXTWG - Female threaded - NPT with integral swivel gauge adaptor



Pressure	Inlet	Outlet	Bleed /test	on				
(PSI)	NPT	BSPP*	NPT	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)
6,000	1/2" F	1/2"F	1/4" F	63.5 (2.50)	114.3 (4.50)	38.1 (1.50)	114.3 (4.50)	162.8 (6.40)
*In accordance with DIN 16284 - Swivel BSPP 1/2" Female								

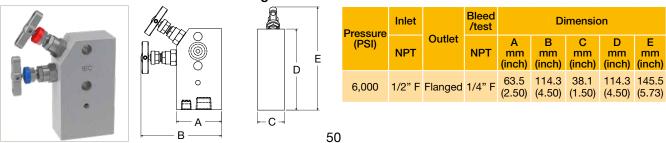
• Swivel adaptor to the outlet is provided through a socket weld, generally conforming to ANSI B16.11.

- · Weld connection is a "commercial weld", completed by a qualified welder. Any specific qualification, certification, documentation or additional NDT, will require to be engineered and quoted extra - please consult your local Parker support.
- Union nut dimensions generally conform to DIN 16284 as it applies to the union of nipple and nut themselves.

-c-

Union nut also conforms generally to DIN EN 837 for the gauge connection itself, as it applies to the union of nipple and nut themselves.

## HD\*2EXT - Female threaded - NPT x Flanged



HD\*3EXT - Female threaded - NPT x Flanged

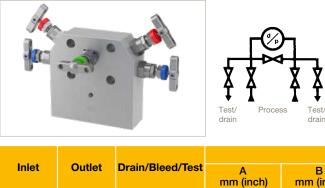


		Drain/Bleed/	Dimension									
Inlet	Outlet	Test	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)					
1/2" NPT	Flanged	Optional	114.3 (4.50)	215.9 (8.50)	88.9 (3.50)	38.1 (1.50)	114.3 (4.50)					

215

114.3 (4.50)

# HD\*5EXT - Female threaded - NPT x Flanged

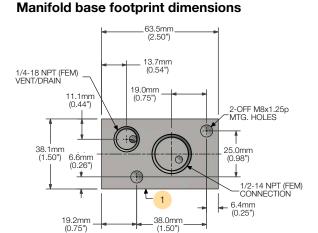


1/4" NPT



Flanged

1/2" NPT



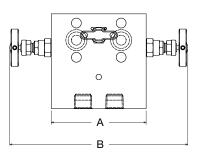
Manifold footprint for 2-valve manifolds. Example shown: HDS2EXT

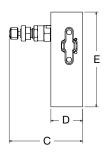
### Description Item

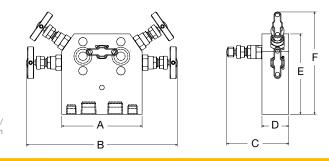
1 Manifold outlet to transmitter interface

Notes:

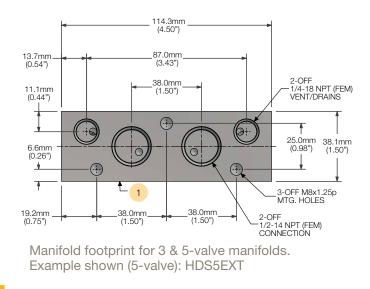
- Recommended base enclosure plate thickness to suit above footprints: 3-5mm. •
- footprint dimensions for the 2-valve equivalents do vary. For further details see page 55.







Dimension												
B Im (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)								
5.9 (8.50)	88.9 (3.50)	38.1 (1.50)	114.3 (4.50)	145.5 (5.73)								



Optional variations of these manifold types include compatibility for Emerson Coplanar™ transmitters. Please note,

# **Base Connected Manifolds Especially Suited For Enclosure Mounting**

# Ordering information

														E contra trans	to all here a many stand second field for all so the second sectors to
Exam	nple 1 (Default): H	IDS5EXT				HD	S	5	EXT				·····>	DIN IEC B o	tock base mounted manifold for direct connection to utlet flange and 1/4" NPT Fem. vent/drain/bleed. Gla
Example 2 (Default): HDS2EXT			HL	S	2	EXT				>	2-valve bars DIN IEC B o	tock base mounted manifold for direct connection to utlet flange and 1/4" NPT Fem. vent/drain/bleed. Glar			
	nple 3: <b>HD6MO3</b> I					HD	6MO	3	EXT	DTE		<b>3ATE</b>		3-valve bars	tock base mounted manifold for direct connection to B outlet flange. Gland packing is Graphite. Additiona
Example 4: HDM5EXT4NDAATKVOXNC				HD	M	5	EXT		4NDA	ATKVOXNC		5-valve bars	tock base mounted manifold for direct connection to utlet flange and 1/4" NPT Fem. vent/drain/bleed. Glar		
			ANC					5						the vent valv	es have Anti-tamper operation with keys.
Exan	nple 5: <b>HLS2EXT</b>	WGP				HL	S	2	EXT	WG		Р		BSPP outlet	tock base mounted manifold for remote connection to connection to instrument (with integral welded swive
Exam	nple 6: HLS2EXT	IVZI83BVATE				HL	S	2	EXT		IVZI8	<b>3BVATE</b>	▶	2-valve bars style 1/2" Cl	tock base mounted manifold for remote connection to PI tube connections to process inlet and instrument o
Exan	nple 7: HDS5EXT	DAPFCAM12	<b>PKNO</b>	0		HD	S	5	EXT		DAPFCAM126	PKNC		equalise valv	ve and a 1/4" NPT bleed valve plug is supplied. tock base mounted manifold for direct connection to
												•		connectors :	to the process inlet connections, with DIN IEC A outle p and materials are compliant to NACE.
						Î	Ī	Ē	Ť	Ī	Ť	Ť		I LEIKOOIK I	
Serie	S														S
HL	Pipe to pipe/Thread													Instrume	nt Bolt Options
HD	Pipe/Thread to IEC	C flange connection	2											SB	316 Stainless Steel bolt <sup>10</sup>
	ve manifolds only. It standard connections	for pipe/thread to fla	inde are:	1/2" NPT Fem. inle	t with DIN IEC	;								CB CSB	3" long Carbon Steel bolt <sup>11</sup> 3" long 316 Stainless Steel bolt <sup>11</sup>
B outle specifie	et transmitter face with 1.	/4" NPT Fem. vents/	drains/ble	eeds/purge or test p	ports - where										cking Options
· .						_								3	Graphite <sup>12</sup>
Mate S	rials 316/316L Stainless	s Stool	Hact	allov C276		_								FS	Firesafe design <sup>13</sup>
S 6MO	6MO Sup. Aust. St			elloy C276 hium Gr. 2 <sup>3</sup>											Options - Needle Valves only
M	Monel 400 <sup>3</sup>	825		nel 825										RT ST	Regulating/Metering Tip Stellite Tip
D1	Duplex 22 Cr. Stee	el 625	Incor	nel 625										9	PCTFE Soft Tip <sup>14</sup>
D2	Super Duplex 25 C	Cr. Steel C	Carb	oon Steel⁴										PK	PEEK Soft Tip
	naterial selection down-		aantatia											-	ed Valve Options <sup>15</sup>
	Carbon Steel consult yo		esentatio	on.		_								P	Blank Plug
Numl 2	ber of Valves/Configu		ato/vont	t/drain										BV PBV	Bleed Valve/Plug Blank Plug and Bleed Valve/Plug
2	2-valve, block & bl 3-valve, isolate & e														Options <sup>16</sup>
5	5-valve, isolate, eq				plications									HW	Handwheel
				16.1.1										LHW	Handwheel Locking
EXT	Mandatory designation	ator for Base Mour	ited Mar	nifolds					<u> </u>					THL	T Bar Locking
	ication Configuration													AT* ATK*	Anti-Tamper <sup>17</sup> Anti-Tamper with Key <sup>18</sup>
	Integral swivel gauge				••									ATHKEY	
	Suitable for fiscal me Downstream test por	• •			versions only	/)								Other Op	
5	Downstream test por	IS - 1/4 INFI OILIY	J-vaive	versions only										ОХ	Cleaned & lubricated for Oxygen use
ANS • Weld quali and • Unio and • Unio	vel adaptor to the outlet il B16.11. d connection is a "commi- ification, certification, d quoted extra – please d n nut dimensions gene nut themselves. n nut also conforms ge ies to the union of nipp	mercial weld", comp documentation or ac consult your local P erally conform to DIN enerally to DIN EN 8	oleted by Iditional I arker sup I 16284 a 37 for the	a qualified welder. NDT, will require to oport. as it applies to the	Any specific be engineer union of nipp	ed								NC	NACE MR-01-75 Compliant
	ections - Standard C														
	Inlet			utlet		t/Drain/E	Bleed/	*	Default s	standard	d connection; no designa	tor required.			
*		HL Remote S	•	HD Direct Style		t/Purge		E	xamples	: HLS2	EXT, HDS5EXT.				
* 4N	1/2" NPT Fem. 1/4" NPTFem.	1/2" NPT Fem 1/4" NPT Fem		DIN IEC B Flang	,	' NPT Fer ' NPT Fer					lections vary, further desi	gnation is required.			
4N 4K	1/4" BSPT Fem.	1/4" INFT Fem 1/4" BSPT Fer		DIN IEC B Flang		BSPT Fe			<ul> <li>xamples</li> <li>1/2"BSF</li> </ul>		inlet, 1/2" BSPT outlet & 1/4	1" BSPT Fem. vent/			
4R	1/4" BSPP Fem.	1/4" BSPP Fer		DIN IEC B Flang		BSPP F			drain/bl	leed = 8F	R8K4K				ANT NOTES
8K	1/2" BSPT Fem.	1/2" BSPT Fer		DIN IEC B Flang		BSPT F				SPP Fem. leed = <b>8F</b>	. inlet, DIN IEC B outlet & 1/4 <b>R4F</b>	4" NPT Fem. vent/		-	
8R	1/2" BSPP Fem.	1/2" BSPP Fer		DIN IEC B Flang		BSPP F			As stand	lard, val	ves with Female Socket \				optimum results in integral tube conne
	1/2" NB Fem. SW <sup>6</sup> 1/2" NPT Fem.	1/2" NB Fem.	S₩⁰	DIN IEC B Flang		NPT Fer			/ill be of t hreaded v		e length as per the equiv	alent NPT pipe			ommended. For inverted style integral t
DA	onal Connections	N/A		DIN IEC A Flang	je 1/4	' NPT Fer	n.								all options/combinations are available
• • • •				Ou	tlet		. (5)		<ul> <li>Example</li> <li>10mm A</li> </ul>		verted inlet & 1/4" NPT Fem	vent/drain =			reserve the right to review/revise this p
Туре	•	Fitting Unit	Inlet		HD Direct	Vent/Dra Test/Pur	in/Bieed ge		IVAM10	04F					mmend the most suitable alternative p
IV	Inverted Connection			Style	Style						ted inlet & 1/4" NPT Fem. ve verted inlet & 6mm vent/dra				uld your part number selection exceed
IV	Inverted Connection Tube OD <sup>7</sup>	M Metri		6 6mm 0mm <b>10</b> 10mm	DINUES			8	Example	es:					se consult your local Parker represent
PF	Fillee connect	A A-LOK		2mm <b>12</b> 12mm	DIN IEC Flange	<b>4F</b> 1/4" N	PT Fem		10mm A- PFAM10		be stub con. inlet & 1/4" NPT	rem. vent/drain =		- 11 111	any doubt, please consult your local P
PEC	tube stub <sup>®</sup> PTFree connect	Z CPI		/4" <b>4</b> 1/4"				•	12mm A-	-LOK ma	ale union con. inlet & 6mm A	-LOK vent/drain =			
	male union <sup>8</sup>	I Imper	8 1	3/8" 6 3/8" /2" 8 1/2"				9		Γ Fem. is	s default standard for bleed				

<sup>9</sup> 1/4" NPT Fem, is default standard for bleed/vent/drain, some model types may be available with other connections.

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n to instrument, manufactured from 316 Stainless Steel material having 1/2" NPT Fem. process inlet connections with Gland packing is PTFE.

to instrument, manufactured from 316 Stainless Steel material having 1/2" NPT Fem. process inlet connections with Gland packing is PTFE.

n to instrument, manufactured from 6MO Super Aust. St. St. material having 1/2" NPT Fern. process inlet connections tional 1/4" NPT Fern. downstream test con. are provided and there is Anti-tamper operating for the equalise function. n to instrument, manufactured from Monel 400 CRA material having 1/4" NPT Fern. process inlet connections with Gland packing is PTFE. Materials are compliant with NACE, the manifold is cleaned suitable for Oxygen service and

on to instrument, manufactured from 316 St. St. material having 1/2" NPT Fem. process inlet connections with 1/2" wivel gauge) and 1/4" NPT Fem. vent/drain/bleed. Gland packing is PTFE and a 1/4" NPT blanking plug is provided. on to instrument, manufactured in 316 St. St. material having Parker Superior Advantage fully integrated, inverted int outlet, with 1/4" NPT Fem. vent/drain/bleed. Gland packing is Graphite; there is Anti-tamper operation to the

n to instrument, manufactured from 316 St. St. material having Parker Superior Advantage, 12mm PTFree male tube butlet flange and 6mm PTFree male tube connectors to vent/drain/bleed. Gland packing is PTFE, the valves have a

<sup>10</sup> Carbon Steel bolt as standard. No designator required.

<sup>11</sup> Extra length bolts to be specified when utilising these manifolds with Emerson Coplanar™ type transmitter with the traditional adaptor flange.

<sup>12</sup> Not required when Firesafe design option (FS) selected. <sup>13</sup> Not available for PCTFE Soft Tip (9) or Oxygen use (OX).

14 3,000 PSI/207 BAR only. See main catalogue page.

<sup>15</sup> Plugs supplied loose in a packing box. See main catalogue page.

<sup>16</sup> These options can be specified to independent valves:

Add **E** to specify assembly to Equalise valve only. Add **I** to specify assembly to Isolate valves.

Add V to specify assembly to Vents/Drains/Bleeds. Examples:

• **HWV** = Handwheel to Vents/Drains/Bleeds.

• ATE = Anti-Tamper to Equalise valve.

<sup>17</sup> Anti-Tamper operation and no Key.

<sup>18</sup> Anti-Tamper operation and one Key supplied per manifold.

<sup>19</sup> Specify quantity required as separate line item.

nections on manifolds, the use of Parker pre-assembly tooling is highly al tube connections the use of Parker pre-assembly tooling is mandatory. le in each single product model type.

part number structure at any time. If necessary, we can refuse and/or e part number(s). We may also apply MOQ rules.

ed 25 characters in length when completed, then it is likely to be incorrect, ntation for assistance.

Parker representation.

# **Instrument Enclosure Solutions**

# Introduction

As either stand-alone or as complementary to the EXT style manifolds, Parker instrument enclosure solutions consist of a comprehensive range to suit a wide array of instrumentation applications. The enclosures have a shiny gel-coat external finish that is the same as used in the construction of boats and marine vessels. This enables Parker enclosures to withstand the demands of hostile environments.

Fully assembled systems can be supplied based on your specific project or site requirements. They can be fitted with various pressure or flow measuring instruments and manifolds and a host of other features and accessories.

For full details of this range and accessories see catalogue ref. 4190-ENC.

Item	Description
1	Parker Enclosure
2	Identification Label
3	Thermostat
4	Finned Space Heater
5	Viewing Window
6	Mounting Hub (for 2" NB Pipe Stand)
7	Propstay
8	Junction Box
9	Transmitter
10	

- 10 Parker Manifold
- 11 Instrument and Signal Cable Gland

# Manifolds for 2051/3051 Coplanar<sup>™</sup> **Transmitters**

# Introduction

These are the only direct mount manifolds in the range not to comply with the IEC standard. These Parker 'integral' style manifolds are uniquely designed for connection to the non-traditional Emerson/ Rosemount<sup>™</sup>Coplanar<sup>™</sup> transmitter models and are not suitable for use with the traditional IEC compliant models of this, or other brands.

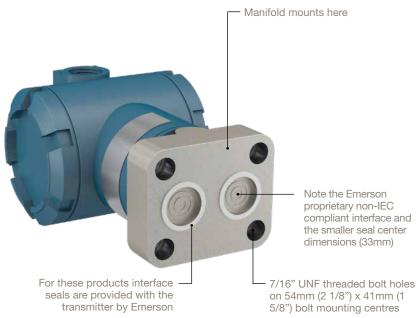
In this scenario, the assembled manifold/transmitter combination has the advantage of more compact overall dimensions and reduced weight. Typically, these assemblies are wall-mounted or mounted utilising a 2" NB pipestand.

Compatibility of the Parker integral manifold is assured, having been designed and rigorously tested with all the Emerson/Rosemount<sup>™</sup> Coplanar<sup>™</sup> transmitters, such as 2051 and 3051 models.

# Recognising and understanding the Emerson specific Coplanar<sup>™</sup> transmitter







3051 DP transmitter, shown with the Emerson flange adapter in lieu of a manifold. A directly mounted Parker Coplanar<sup>™</sup> manifold, replaces this,

removed.



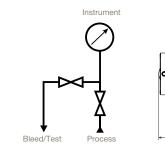
Example shown: 2-valve block and bleed direct mount manifold suitable for Emerson/Rosemount<sup>™</sup> Coplanar<sup>™</sup> transmitter with Parker Superior Advantage fully integrated inverted A-LOK<sup>®</sup> tube fitting connections.

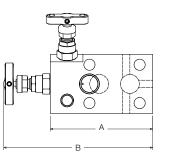
3051 DP transmitter, shown with the Emerson flange adapter

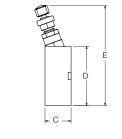
# Manifolds for 2051/3051 Coplanar™ **Transmitters**

## HD\*2MCP - Female threaded - NPT x Flanged









HAR

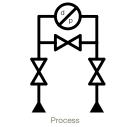
HIHHH

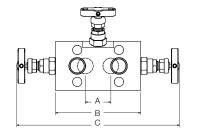
0

Inlet					Dimension		
	Outlet	Bleed/Test	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)
1/2"NPT	Flanged	1/4" NPT	110.0 (4.33)	160.8 (6.33)	28.6 (1.13)	63.5 (2.50)	107.6 (4.24)

# HD\*3MCP - Female threaded - NPT x Flanged



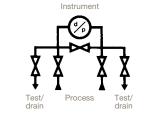


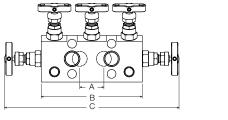


	Inlet	Outlet		Dimension								
			Bleed/Test	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)			
	1/2" NPT	For 3051	Optional	33.0 (1.30)	110.0 (4.33)	211.6 (8.33)	28.6 (1.13)	63.5 (2.50)	107.6 (4.24)			

# HD\*5MCP - Female threaded - NPT x Flanged

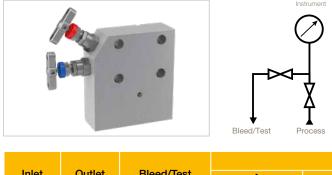






				Dimension								
Inlet	Outlet	Bleed/Test	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)				
1/2" NPT	Flanged	1/4" NPT	33.0 (1.30)	138.0 (5.43)	239.6 (9.43)	28.6 (1.13)	63.5 (2.50)	107.6 (4.24)				

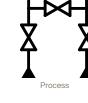
# HD\*2MCPEXT - Female threaded - NPT x Flanged



	Inlet			Dimension								
		Outlet	Bleed/Test	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)				
	1/2"NPT	Flanged	1/4" NPT	101.6 (4.00)	151.8 (5.98)	38.1 (1.50)	114.3 (4.50)	145.5 (5.73)				

# HD\*3MCPEXT - Female threaded - NPT x Flanged



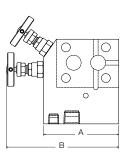


	Outlet	Drain/Bleed/	Dimension								
Inlet		Test	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)				
1/2" NPT	Flanged	Optional	114.3 (4.50)	215.9 (8.50)	88.9 (3.50)	38.1 (1.50)	114.3 (4.50)				

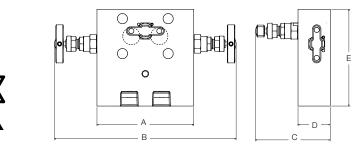
# HD\*5MCPEXT - Female threaded - NPT x Flanged

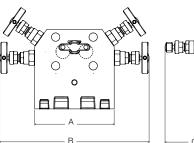


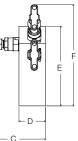
		Drain/Bleed/			Dimension			
Inlet	Outlet	Test	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)
1/2" NPT	Flanged	1/4" NPT	114.3 (4.50)	215.9 (8.50)	88.9 (3.50)	38.1 (1.50)	114.3 (4.50)	145.5 (5.73)











# Manifolds for 2051/3051 Coplanar<sup>™</sup> **Transmitters**

Ordering information

Example 1 (Defau	lt): HDS5N	ICP			E State	HD	S	5	MCP						·····>	5-valve bars	stock manifold for direct connection to instrument, manufactu compliant outlet flange and 1/4" NPT Fem. vent/drain/bleed.	ired from
Example 2: HD6I		хтотрз	BATE			HD	6MO	3	MCP	EXTDT	P		<b>3ATE</b>			3-valve bars	stock manifold suitable for base mounting and for direct conn	ection to
								-		ЕЛТВТ	-	411				valve has Ar	t connections and 2051/3051 Coplanar™ compliant outlet fla nti-tamper operation and 1/4" NPT Fem. vent/drain/bleed.	ange. Mar
Example 3: HDM	bMCP4NA	IKVOX	NC			HD	Μ	5	MCP			4N	ATKVOX		·····>	5-valve bars	stock manifold for direct connection to instrument, manufactu compliant outlet flange and 1/4" NPT Fem. vent/drain/bleed.	ired from
Example 4: HDS	<b>MCPPFC</b>	AM126P	<b>KNC</b>		E E	HD	S	5	MCP		PFC	AM126	PKNC			valves are A	nti-tamper operation with key	
							Î	Î	Ť	Î		Î	Ť			PTFE, the va	tock manifold for direct connection to instrument, manufactu t connectons with 2051/3051 Coplanar™ compliant outlet fla alve complies with NACE and all valves have PEEK soft tip se	ange. Ven ange. ven eating.
Series						2							L				IS	
	ock direct mou <sup>™</sup> style outlet f		rument mar	nitolds with 2	2051/3051											Instrume	nt Bolt Options	
<sup>1</sup> Default standard conne	,	0	ango aro: 1/	2" NDT Form	iplot with 2051/2051	1										SB	316 Stainless Steel bolt <sup>8</sup>	<sup>8</sup> Car
Coplanar <sup>™</sup> outlet flance					Iniel with 2051/305	I										СВ	3" long Carbon Steel bolt <sup>9</sup>	<sup>9</sup> Extr
																CSB	3" long 316 Stainless Steel bolt <sup>9</sup>	trans
Materials				0070		_											cking Options	
S 316/316L St		нс		oy C276												3	Graphite <sup>10</sup>	<sup>10</sup> No
6MO 6MO Sup. A	ist. St.Steel	T		m Gr. 2 <sup>2</sup>												FS	Firesafe design <sup>11</sup>	11 No
M Monel 400 <sup>2</sup>		825														Seating C	Options - Needle Valves only	
D1 Duplex 22 C		625														RT	Regulating/Metering Tip	
D2 Super Duple	25 Cr. Steel	С	Carbor	n Steel <sup>3</sup>												ST	Stellite Tip	
<sup>2</sup> This material selection																9	PCTFE Soft Tip <sup>12</sup>	<sup>12</sup> 3,0
<sup>3</sup> For Carbon Steel con	ult your local F	Parker repre	resentation.													PK	PEEK Soft Tip	
Number of Valves/C	onfiguration															Plug/Blee	ed Valve Options <sup>13</sup>	<sup>13</sup> Plu
2 2-valve, bloc	k & bleed/isola	ate & calibi	orate/vent/d	Irain												Р	Blank Plug	
	te & equalise															BV	Bleed Valve/Plug	
5 5-valve, isola	te, equalise &	calibrate/b	bleed/vent/	drain for DF	P applications											PBV	Blank Plug and Bleed Valve/Plug	
Mandatory	esignator defi	ning bareto	ock manifo	ld with tradi	tional inlet centres											Operator	Options <sup>14</sup>	<sup>14</sup> Th
MCP and 2051/30	51 Coplanar™	transmitte	er interface	flange	tional infet centres											HW	Handwheel	Ad Ad
Application Configu	ration			Ũ												LHW	Handwheel Locking	Ad
EXT Extended body			llu quitable	far analaa w												THL	T Bar Locking	Exa
CT Suitable for fise		0 1														AT*	Anti-Tamper <sup>15</sup>	• •
DTP Downstream te					versions only											ATK*	Anti-Tamper with Key <sup>16</sup>	• /
DIP Downstream te	st ports. 3-van	ve versions	s only. 1/4	INPT ONly												ATHKEY	Anti-Tamper Key <sup>17</sup>	<sup>15</sup> Ant <sup>16</sup> An
<b>Connections - Stan</b>																Mounting	Options <sup>18</sup>	<sup>17</sup> Sp
Inlet	Outle				Bleed/Test/Purge											BK	Assembled with Carbon Steel bracketry & bolts	<sup>18</sup> Mc
* 1/2" NPT Fem		/3051 Cop		1/4" NPT Fei					d connect	tion; no desig	nator requi	red. Examp	les: HDS2MCF	Р,		BKS	Assembled with Stainless Steel bracketry & bolts	
<b>4N</b> 1/4" NPTFem		/3051 Cop		1/4" NPT Fei			S5CPE									Other Op	tions	
<b>4K</b> 1/4" BSPT Fe		/3051 Cop		I/4" BSPT F						ary, further d			Example: in/bleed = 8R4F			ОХ	Cleaned & lubricated for Oxygen use	
<b>4R</b> 1/4" BSPP Fe		/3051 Cop		I/4" BSPP F		1/2	DOFFF	em. n	iet, 2001/3	UST COpiariar d	XI/4 INFIF	em. veni/ura	lii / bieeu = on4r			NC	NACE MR-01-75 Compliant	
<b>8K</b> 1/2" BSPT Fe		/3051 Cop		I/4" BSPT F														
<b>8R</b> 1/2" BSPP Fe		/3051 Cop		I/4" BSPP F														
<b>SW8</b> 1/2" NB Fem. SW <sup>4</sup> 2051/3051 Coplanar 1/4" NPT Fem.					m.					Female Socke nt NPT pipe th			ill be of the san	ne				
Optional Connectio	Optional Connections						• •		equivalei	it NFT pipe ti	liteaueu va	lants.						
Type Fitting Onit Inlet Outlet Bleed/Test/Po				Vent/Drain/ Bleed/Test/Purge	<ul> <li><sup>5</sup>Examples:</li> <li>• 10mm A-LOK inverted inlet &amp; 1/4" NPT Fem. vent/drain = IVAM104F</li> <li>• 10mm CPI inverted inlet &amp; 1/4" NPT Fem. vent/drain = IVZM104F</li> </ul>													
	Tube OD <sup>5</sup> M Metric <b>10</b> 10mm 2051/									t & 6mm vent/o								
PF PTFree connec	A A-LO	K	<b>12</b> 12m	maari		6 🖛	xamples											
tube stub <sup>6</sup>	Z CPI		<b>4</b> 1/4"	Coplanar	. <b>4F</b> 1/4" NPT Fem.	<b>'</b> •1	0mm A-L	.OK tu		n. inlet & 1/4" N								
PFC PTFree connect		I Imperia				<ul> <li>12mm A-LOK male union con. inlet &amp; 6mm A-LOK vent/drain = PFCAM126</li> </ul>												
male union <sup>6</sup> 8 1/2"										eed/vent/dr	ain, some m	odel types may	/					
be available with other connections.																		

- **IMPORTANT NOTES:**
- Not all options/combinations are available in each single product model type.
- recommend the most suitable alternative part number(s). We may also apply MOQ rules.
- ٠ please consult your local Parker representation for assistance.
- If in any doubt, please consult your local Parker representation. •

om 316 Stainless Steel material having 1/2" NPT Fem. process inlet connections with 2051/3051 packing is PTFE. to instrument, manufactured from 6MO Super Austenitic St. St. material having 1/2" NPT Fem. Manifold also has 2 1/4" NPT Fem. downstream test ports. Gland packing is Graphite and the equalise om Monel 400 CRA material having 1/4" NPT Fem. process inlet connections with 2051/3051 I packing is PTFE, materials comply to NACE; manifold is cleaned suitable for oxygen service and vent om 316 St. St. material having Parker Superior Advantage 12mm A-LOK PTFree male union style /ent/bleed/drain connections are also PTFree male union style but of 6mm size. Gland packing is

### Carbon Steel bolt as standard. No designator required.

Extra length bolts to be specified when utilising these manifolds with Emerson Coplanar™ type ansmitter with the traditional adaptor flange.

Not required when Firesafe design option (FS) selected. Not available for PCTFE Soft Tip (9) or Oxygen use (OX).

3,000 PSI/207 BAR only. See main catalogue page.

Plugs supplied loose in a packing box. See main catalogue page.

These options can be specified to independent valves:

Add E to specify assembly to Equalise valve only.

Add I to specify assembly to Isolate valves. Add V to specify assembly to Vents/Drains/Bleeds.

Examples:

• HWV = Handwheel to Vents/Drains/Bleeds.

• ATE = Anti-Tamper to Equalise valve.

Anti-Tamper operation and no Key.

Anti-Tamper operation and one Key supplied per manifold.

Specify quantity required as separate line item. Mounting Options available on **EXT** option.

• For optimum results in integral tube connections on manifolds, the use of Parker pre-assembly tooling is highly recommended. For inverted style integral tube connections the use of Parker pre-assembly tooling is mandatory.

We reserve the right to review/revise this part number structure at any time. If necessary, we can refuse and/or

Should your part number selection exceed 25 characters in length when completed, then it is likely to be incorrect,

# Manifolds for 2051/3051 Coplanar™ Transmitters

Brackets for direct mount manifolds

# Brackets for 2, 3 and 5-valve direct mount manifolds - BKT3

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







Image shown: Part No.: HDS3MCPBK



Image shown: Part No.: HDS5MCPBK

# **Essential Manifold Accessories**

# Introduction

To complement the entire manifold range and provide complete solutions for all applications, we offer the following accessory products. These are in addition to the wide range of brackets and mounting solutions found elsewhere in this catalogue (see pages 34, 40, 48, 49, 60).

Parker can also offer a diverse portfolio of tube fitting solutions and other products, all manufactured to the same exacting standards. Please consult your local Parker representative for further details and information.

# Pressure Blanking Plug (Code HPH)

Threaded high quality pressure blanking plug used in manifolds for the blanking off the vent/drain/bleed/test calibration ports, but also available separately for use where any female port requires to be closed off. Other thread type and sizes may be available.

## Ordering information:

Size	Part Number	Materials						
1/4"	HPH*4M	S	316/316L Stainless Steel	HC	Hastelloy C276			
1/2"	HPH*8M	6MO	6MO Sup. Aust. St.Steel	Т	Titanium Gr. 2			
* Specify mate	erial	М	Monel 400	825	Inconel 825			
		D1	Duplex 22 Cr. Steel	625	Inconel 625			
		D2	Super Duplex 25 Cr. Steel					

# Pressure Bleed Plug (Code HBV)

Threaded high quality pressure blanking plug, incorporating bleed screw and directional spout; widely used directly in association with the manifolds for the closure of vent/drain/bleed/test calibration ports, but allows the safe & controlled bleed/vent of enclosed process media. These compact bleed plugs are also available separately for use where any female port requires to be closed off and enclosed media is required to be bled off or vented.

The bleed screw itself is captive within the plug, cannot be removed and cannot be ejected in proper use.

Other thread type and sizes may be available.

## Ordering information:

Size	Part Number	Mater	Materials					
1/4"	HBV*4M	S	316/316L Stainless Steel	HC	Hastelloy C276			
1/2"	HBV*8M	6MO	6MO Sup. Aust. St.Steel	т	Titanium Gr. 2			
Specify m	aterial	М	Monel 400	825	Inconel 825			
* Specify material		D1	Duplex 22 Cr. Steel	625	Inconel 625			
		D2	Super Duplex 25 Cr. Steel					

# **Compact Gauge Syphon**

A discrete range of compact gauge syphons available in 1/2" NPS only - please consult your local Parker support.



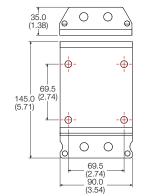


Image shown: Part No.: BKT3SSB2

## How to order:

	Part	Number	Suitable for Manifold Type		
Item	Bracket material: Carbon Steel Stainless Steel		2-valve	3 & 5-valve	
Bracket with M8 'U' Bolts and manifold Bolt Kit (Nuts and washers: M10 x 12 Bolt (2-OFF)	BKT3CSB2	BKT3SSB2	HD*2MCP	HD*3MCP HD*5MCP	







# **Essential Manifold Accessories**

Parker's range of swivel gauge adaptors has been designed to provide 360° rotational movement enabling maximum positional orientation of installed gauges and measuring instruments. A fully contained sealing mechanism ensures total system integrity and offers the user up to 10.000 psig (690 barg) working pressure. Silver plated swivel nut thread and bearing area prevent threat galling of stainless steel threads and allow trouble free

## **Features**

## **Specification**

•

•

•

•

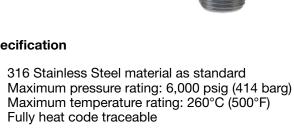
- Silver plated swivel thread and bearing surface to prevent thread galling and maximising re-make opportunities
- Variety of thread options •

**Swivel Gauge Adaptors** 

Compact design •

repeatable re-assembly.

Fully contained and retained sealing mechanism •



65.0 73.4 (2.89)(1.25) 19.0 (0.75

## **Ordering information:**

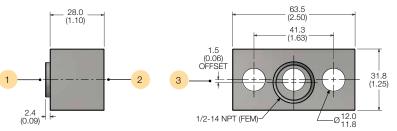
_					00	•		
Exar	nple 1: SGS8M8F3HP				SG	S	8M8F	3HP
Exar	nple 2: SGS8RDM8RF	NC			SG	S	8RDM8RF	NC
Series	6					Т	Ť	T
SG	Swivel gauge adaptor							
Mater	ials							
S	316/316L Stainless Steel	H	Hastelloy C276					
6MO	6MO Sup. Aust. St.Steel	т	Titanium Gr. 2					
М	Monel 400	82	5 Inconel 825					
D1	Duplex 22 Cr. Steel	62	5 Inconel 625					
D2	Super Duplex 25 Cr. Steel <sup>1</sup>							
Conne	ections - Standard							
	Inlet		Outlet					
4M	1/4" NPT Male	4F	1/4" NPT Fem.					
6M	3/8" NPT Male	6F	3/8" NPT Fem.					
8M	1/2" NPT Male	8F	1/2" NPT Fem.					
4M	1/4" NPT Male	4M	1/4" NPT Male					
6M	3/8" NPT Male	6M	3/8" NPT Male					
8M	1/2" NPT Male	8M	1/2" NPT Male					
	Connection Options							
	Fem. connection			* Insert size designato				
	Male connection	inh Ohr	dend Ten en Die e diene ed	# Insert specification	( <b>n/ H/ HU</b> ).			
	<ul> <li>K BSPT BS21, ISO7/1 - Brit</li> <li>R BSPP BS2779 - British St</li> </ul>							
	RD DIN 16284/16288/EN837							
Optio		5						
3	Graphite Seal option <sup>1</sup>			<sup>1</sup> Interface seal material PTFE as standard. Graphite seal optional.				
HP	High Pressure 10,000 PSI of	option		Both in accordance with DIN IEC 61518 Type A.				
NC	NACE option	00000						
	<b></b> option							

# Instrument Flange Adaptors (Kidney/Oval Flanges)





Example shown with traditional 1/2" NPT Fem. connection.



connection

Example of the instrument flange adaptor with 1.5mm offset connection (Code OS) which accommodates variation of impulse line centres between 51-57mm.

## **Ordering information:**

Example 1: HKSM12ASB3 Example 2: HK6MOIM12ASB3 Example 3: HKD18FOSSB Example 4: HKSBW83 Example 5: HK625BW8AXSB3

Series								
HK	Kidney I	Flange						
Materi								
S		L Stainle	ss Ste	el	нс	На	stelloy C276	
6MO		p. Aust. S					anium Gr. 2	
M	Monel 4			-	825	Inc	conel 825	
D1	Duplex 2	22 Cr. Ste	el1		625	Ind	conel 625	<sup>1</sup> Not available
D2	Super D		eel					
Conne								
4F		PT Fem.	<b>I4A</b>		1/4" A-L	LOI	K Inverted	
6F	3/8" N	PT Fem.	16A		3/8" A-L	LOI	K Inverted	
8F	1/2" N	PT Fem.	18A		1/2" A-L	LOI	K Inverted	
4A	1/4" A-	IM6	۹.	6mm A-	-LC	<sup>2</sup> For CPI <sup>™</sup> ch		
6A	3/8" A-	IM10	)A	10mm A-LOK Inverted				
8A	1/2" A-	1/2" A-LOK <sup>2</sup>			12mm A	۹-L	OK Inverted	
M6A	6mm A	-LOK <sup>2</sup>						
M10A	10mm	A-LOK <sup>2</sup>						
M12A	12mm	A-LOK <sup>2</sup>						
Butt W	eld - Pip	e						
Ту	pe	Size	•		chedule hickness		Extension	
BW Butt Weld			IB IB	B * Sch.80 * 25mm A Sch.160 Y 75mm B Sch XXS V 100mm			<b>Y</b> 75mm	* No designate
Option								
os		1.5mm oj						<sup>3</sup> Offset option
SB		ss Steel I		·	n⁴			line centres be
3		te Seal of	otion⁵					<sup>4</sup> Bolt material IEC 61518.
NC	NACE	option						<sup>5</sup> Interface sea
OTUER	IEC 61518 Typ							

### **OTHER NOTES:**

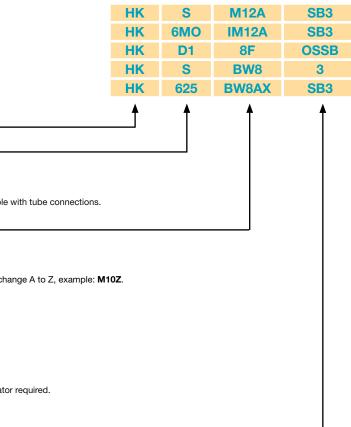
- Tube connection selection as per Parker recommended tube guides.
- Flange interface connection to DIN IEC 61518 Type A.
- Inverted A-LOK® connections supplied with Socket Cap Head bolts. All other connections supplied with Hex Head bolts.
- Not all options/combinations are necessarily available in each single product model type. Care should be taken to consult the main catalogue. If in doubt, please consult your local Parker representation.

Example shown with integral A-LOK®



Example shown with inverted integral A-LOK<sup>®</sup> connection.

ltem	Description
1	IEC A connection to manifold
2	1/2" NPT Fem. connection to process inlet
3	1.5mm (0.06") offset



on only available on Fem. threaded connection; accommodates variation of impulse between 51-57mm. See diagram above. al as standard HT Carbon Steel. Stainless Steel optional. Both in accordance with

eal material PTFE as standard. Graphite seal optional. Both in accordance with DIN ype A.

# **Other Manifold Products**

Introduction

## **Proportional Relief Valves - HPRV Series**

This range of exceptional Pressure Relief Valves (HPRV) provides an automatic protection mechanism for process instrumentation systems. CE-marked and certified to the highest Category-IV level of the Pressure Equipment Directive (PED), the HPRV valve's design provides users with accurate and consistent cracking and resealing operation. For full details see Catalogue ref. 4190-HPRV.



## **Check Valves - Hi-Check Series**

These rugged high performance non-return valves offer the user a cold working pressure rating up to 10,000 psi. The true metal-sealed twopiece design ensures potential leakage points are kept to a minimum.

As with our manifold range, we can offer the Parker Superior Advantage of integral tube connections. This further avoids system contamination, reduces potential leakage, weight, space and installation cost.

For full details see Catalogue ref. 4190-CV.



## Needle Valves 20,000 PSI

This highest performing H-Series needle valve has been purpose designed for operation with any fluid up to 20,000 psi (1379 bar) rating. Complete with standard PTFE gland packing and non-rotational tip, it gives the user assurance of total in-service sealing security.

100% repeatable bubble tight shut off and Tru-Loc® gland adjuster security are key features of this design. A range of end connections is offered and includes the innovative Phastite® ferrule-less tube fitting or the market-leading Parker Autoclave Medium Pressure Cone & Thread the ultimate Parker Superior Advantage combination. Additional options include NACE compatibility and heat code traceable materials.

For full details see Catalogue ref. 4190-HH/20K.

## Large Bore Needle Valves

Another rugged high performer, this safe, reliable product was developed to operate across a wide pressure and temperature range, in dirty or hydrate service conditions. This Large Bore Needle / Globe Isolation Valves provide reliable bubble tight isolation, with significantly reduced risk of blocking compared to conventional needle valves. This full 1/2" (12.7mm) bore metal seated globe style needle isolation hand valve is available in 316L Stainless Steel or Duplex materials. It complies with ASME VIII ASME/ANSI B16.34 piping class specifications and is ruggedly constructed with a bolted body & bonnet interface. For full details see Catalogue ref. 4190-HH/LBV.





## **Distribution Manifolds - HCDM Series**

Based exclusively around the H series needle valve design, this compact distribution manifold offers operating pressures up to 6,000 psi for a wide selection of process media. It is available as standard in 316L Stainless Steel material with five or ten outlets, and is ideal for use where high performance is required and space is limited. Bore size through the valves is 4mm as standard: operation is with anti-tamper key, which further enhances the compact design.

For full details see Catalogue ref. 4190-DM.

## **Distribution Manifolds - HDM**

Based entirely around the H-series complete bonnet assemblies, this distribution manifold offers operating pressures up to 6.000 psi for a wide selection of process media. It is available as standard in 316L Stainless Steel material and offers a choice of outlets from 4 to 20. Bore size through the valves is 4mm.

For further details consult your local Parker support.

## **Condensate Pots**

Primary used to increase the accuracy of flow measurement in steam pipelines, these condensate pots provide an interface between the vapour phase and the condensed phase in the impulse lines. These condensate pots are available in a range of materials and have been designed in accordance with ASME VIII Div 1, and are produced in an ASME coded workshop. All condensate pots are CE-marked to PED 2014/68/EU for use with Group 2 gases. Typical industry applications include: refineries, power plants, chemical and petrochemical, steel plants and other process industries.

For full details see Bulletin ref. 3010-CP.

# **Close Coupled Instrument Mounting Systems - CCIMS**

These ultimate complete manifold system solutions have been developed to meet constant demand for higher performance in flow measurement. They represent a standardised, yet radical breakthrough for direct coupling of pressure transmitters to pipelines. CCIMS offers the following benefits:

- Reduced installation •
- Reduced ownership cost ٠
- Increased safety •
- Lower maintenance

Dramatically increased process measurement accuracy. For full details see Catalogue ref. 4190-CCIMS.

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# **Customer Specific Manifold Solutions**

# Introduction

This catalogue describes the most versatile and comprehensive range of instrumentation manifolds available on the market today. We also understand certain customers and projects can often require custom solution to suit particular needs and we welcome requests in this regard for our consideration. In some circumstances, this can result in an entirely bespoke product range and catalogues. We are pleased to present the following examples.



# Shell

As an EFA (Enterprise Frame Agreement) holder to Shell, we offer a complete range of manifolds and accessories, including all components for the Shell modular mounting system, fully conforming to the Shell MESC (Material and Equipment Standards and Code) specifications. For fully detailed information please refer to Catalogue ref. 4190-MESC or contact your local Parker representation.













### Catalogue ref. 4190-MESC

Shell MESC Compliant Slimline Monoflange, Monoflange (Ball) and Instrument Manifolds EFA: PT3740

# Total Refining and Chemical

Totally compliant to Total RC's Contract GLOB-0560 and featuring innovative leak-free technologies through the use of Parker Superior Advantage integral tube fitting connections, as well as all welded flanged assemblies, we are proud to offer this unique manifold solutions range and all necessary associated equipment and accessories. These product solutions save significant engineering and installation costs for this demanding user of process instrumentation systems. For fully detailed information please refer to Catalogue ref. 4190-Total or contact your local Parker representation.





Parker



Catalogue ref. 4190-Total Manifolds Class 600 and 1500. Total RC THR RC INS 920. Contract: GLOB-0560



# **Complementary Products for Complete Installation Solutions**

## Modular Valves - Pro-Bloc® Series

Designed to replace conventional multiple-valve installations currently in use for process measurement interfaces, these single-piece products combine multiple valve types into a single manifold. Potential leak paths are reduced and the mass of the system is lowered, reducing the stresses from loading and vibration. Additionally, these products also improve installation and operational safety factors, together with positive installation cost savings.



For full details see Catalogue ref. 4190-FP.

### **Monoflange Manifolds**

More compact than Pro-Bloc<sup>®</sup> and adding to further space and weight saving, these monoflanges have primary, secondary and bleed valves assembled on the periphery of the flange. The manifold body can incorporate both O.S.&Y. and instrument needle valves as a mixture or all of the same type. These monoflanges are available from forged or bar stock material and can be certified as being of Firesafe design.

For full details see Catalogue ref. 4190-FP.

## **Ball Valves and Manifolds Hi-Pro Series**

These high performance bi-directional Ball Valves & Manifolds offer the user full cold working pressure ratings up to 10,000 psi (689 bar), giving 100% bubble tight shut off and continuous repeatable performance. These products are suitable for the most demanding applications in the oil, gas and process control industries. All valves also meet the requirements of ANSI B31.1 for use in power plants. The design reduces potential body leakage paths to a minimum. With the added opportunity to select Parker Superior Advantage integral compression ends the user can eliminate the use of taper threads and thread sealant, thus avoiding system contamination, reducing leakage paths, installation costs, weight and space.

For full details see Catalogues ref. 4190-HBV and 4190-HBM.

## Air Header Distribution Manifolds - LPAHM Series

These air header distribution manifolds are designed to distribute air from the compressor to the actuators on pneumatic instruments, such as steam flow meters, pressure controllers and valve positioners. They are widely used in industrial chemical processing, plastic processing and energy industries and are approved for low pressure applications up to 275 psi. Manufactured from AISI 316 Stainless Steel material, the air header distribution manifolds offer complete customer system compatibility that reduces installation time and potential leak paths. The coded welded construction with non-destructive tested design minimises the number of potential leak paths, rather than fabricating with instrumentation connections with tubing, therefore reducing labour costs. These manifolds are designed for use with air only and are supplied with a number of lockable ball valves on opposite sides, right side or left side only to prevent unauthorized access. For full details see Catalogue ref. 4190-DM.





## Air Header Distribution Manifolds - HPAHM Series

These distribution manifolds are designed for applications that use liquid or gas, low temperature steam and hydraulic actuation. The pressure rating of these manifolds is dictated by the inlet/outlet Flange Class or the thread connection. These distribution manifolds feature an ergonomic vinyl sleeve on the valve handle to provide positive grip and to ensure ease of operation. Each nut has an innovative domed design, which prevents ingress of moisture and contamination of the thread, therefore preventing corrosion. They feature a part-welded construction, with all welds carried out by coded welders, providing assurance of their robustness and performance. These manifolds are NDT (Non-Destructive Testing) applied, giving the customer greater assurance. For full details see Catalogue ref. 4190-DM.

### **Hi-Pro Modular Distribution Manifold**

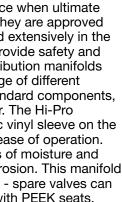
Unique to Parker, these manifolds are the ideal choice when ultimate flexibility is required within a distribution manifold. They are approved to operate at pressures up to 6,000 psi and are used extensively in the oil, gas, chemical and petrochemical industries to provide safety and performance. These innovative Hi-Pro modular distribution manifolds can be easily arranged in a layout to suit a wide range of different applications to distribute liquid or gas. They use standard components, therefore making it more affordable for the customer. The Hi-Pro modular distribution manifolds feature an ergonomic vinyl sleeve on the valve handle to provide positive grip and to ensure ease of operation. Each nut is domed in shape, which prevents ingress of moisture and contamination of the thread, which could cause corrosion. This manifold is available with up to 20 valves (even numbers only - spare valves can be blanked off). Temperature range is up to 232°C with PEEK seats. For full details see Catalogue ref. 4190-DM.

## Lapped Joint Tube Adaptor

Available in the full range of fitting materials and sizes up to 1/2" (M12) as standard, these lapped joint tube adaptors are suitable for applications involving small flanged process valves and offer a simple, safe and effective conversion to instrument lines.

## Flange Connector - Flange to Parker Tube Fittings

Offered in a range of materials and with either A-LOK<sup>®</sup> or CPI<sup>™</sup> tube fitting technology, these flange connectors deliver huge flexibility in terms of offering. Tube connections up to 1" (25mm), flange connections up to 2" NB and pressures to ANSI Class 2500 (6,000 PSI Nom.). The one-piece integral connection adaptors allow the safe, easy and efficient transition from process to instrumentation in just one step.











# **Complementary Products for Complete** Installation Solutions

### **Parker Tube Ended Pressure Gauges**

Parker Tube Ended Pressure Gauges monitor vacuum, compound, and positive system pressures up to 1000 psig. Available in lower mount and center back mount configurations, these 360°-positionable gauges are perfect for applications where space is at a premium. Not only do our Tube Ended Gauges do away with additional fittings, they completely eliminate the need for tape and sealants, making installation cleaner and quicker.

For full details see Bulletin ref. 4150-TEG.



### **Baumer Safety Pressure Gauges**

Baumer's safety pressure gauge MEP5 is specially designed for use in corrosive atmospheres and fluids. The gauge has a diameter of 100 mm and can measure pressures from -1...0 to 0...1600 bar at gauge working temperatures of -20...70 °C. The MEP5 has a stainless-steel housing, sensing element, and fully welded process connection. It complies with protection class IP67.

For further details consult your local Parker support.



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8. User Responsibility. The user, through its own analysis and testing, is solely responsible for making the final selection of the system and Product 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 and follow applicable industry standards and Product information. If Seller provides Product or system options, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the Products or systems.

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Such special tooling shall be and remain Seller's property (30) days written notice of termination. In addition, Seller may notwithstanding payment of any charges by Buyer. In no by written notice immediately terminate this agreement for event will Buyer acquire any interest in apparatus belonging the following: (a) Buyer commits a breach of any provision of to Seller which is utilized in the manufacture of the Products, this agreement (b) the appointment of a trustee, receiver or even if such apparatus has been specially converted or custodian for all or any part of Buyer's property (c) the filing of adapted for such manufacture and notwithstanding any a petition for relief in bankruptcy of the other Party on its own charges paid by Buyer. Unless otherwise agreed, Seller shall behalf, or by a third party (d) an assignment for the benefit of have the right to alter, discard or otherwise dispose of any creditors, or (e) the dissolution or liquidation of the Buyer. special tooling or other property in its sole discretion at any 18. Governing Law. This agreement and the sale and time.

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