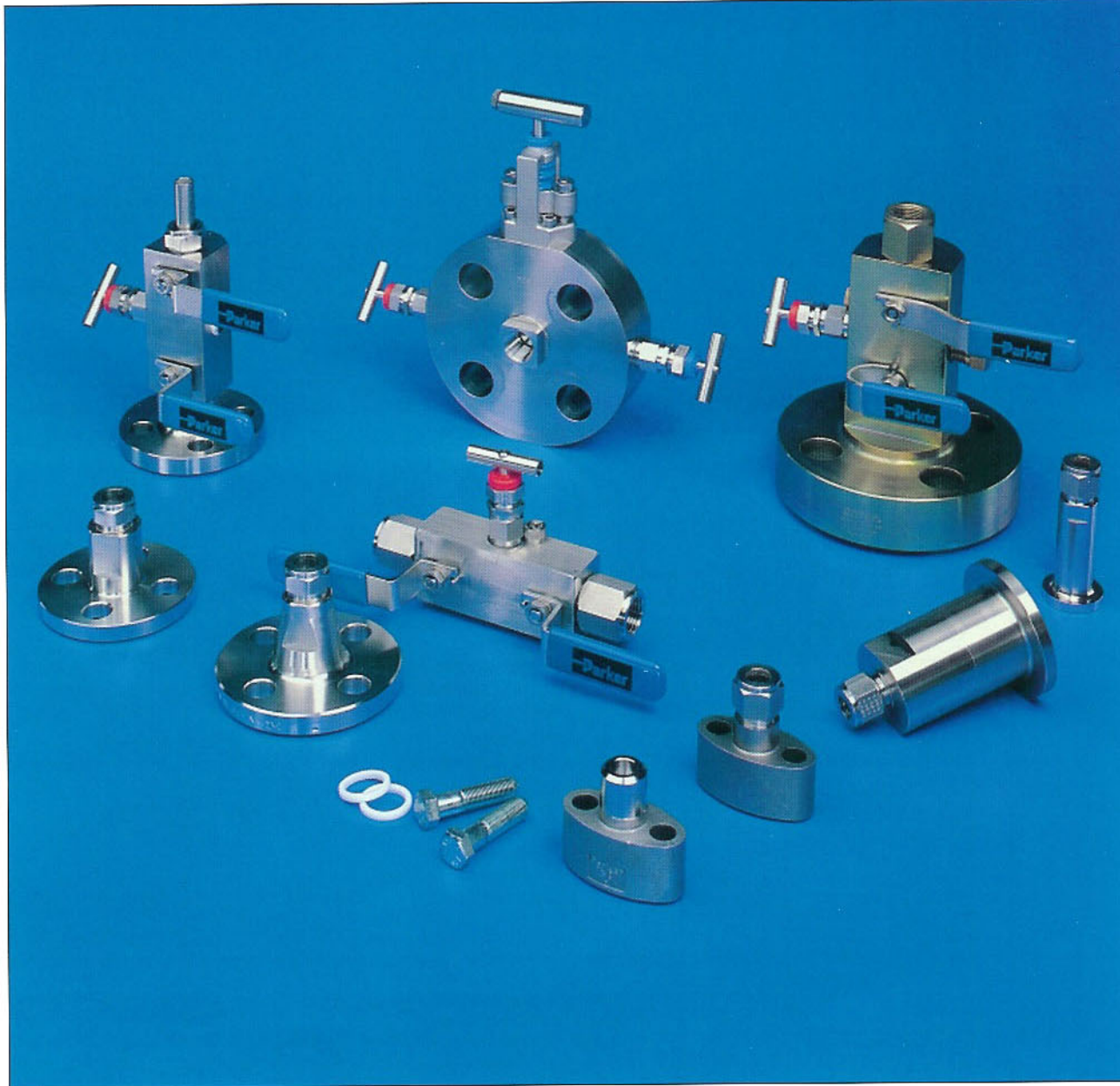


Flanged Double Block and Bleed Valves Flange to Fitting Connectors

*Bulletin 4256-FP
Revised, December 1999*

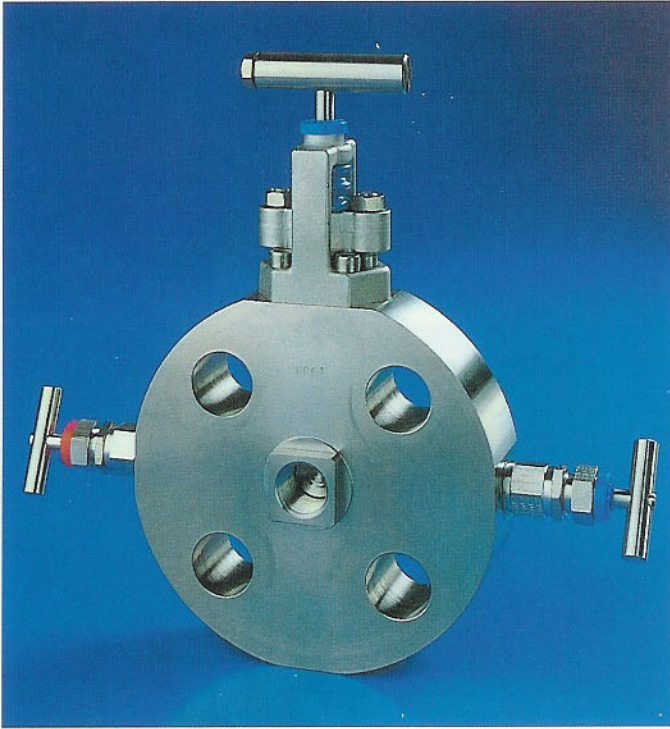


Monoblock Range

Monoblock

Purpose

Monoblock manifolds are designed to incorporate primary process isolation valves (O.S & Y.) together with standard isolation and vent needle valves in a one piece body to meet a variety of installation specifications. This compact, weight saving design is available to meet a large variety of customer requirements.



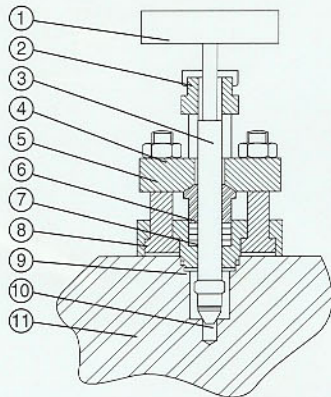
Specifications

- 1/2 to 2" N.B. flanges (15 to 50DN).
- 150 to 2500 lb flange class.
- RF or RTJ flange style.
- Stainless steel standard (316L bar stock)
- Valve pressure/temperature rating
 - P.T.F.E. 6000 psi (413 bar)/100°C (212°F)
 - 4000 psi (275 bar)/200°C (390°F)
 - Grafoil 6000 psi (413 bar)/100°C (212°F)
 - 3000 psi (207 bar)/450°C (850°F)
- Dimensionally compatible to ANSI B16.5 flange standards.

Features

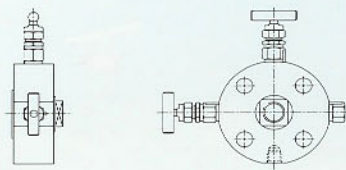
- Inverted A-LOK® outlets: 1/4" to 1" O.D. (3mm to 25mm O.D.)
- Outlets in male, female and gauge sizes, N.P.T., B.S.P.P., B.S.P.T.
- Outside screw and yoke (O.S. & Y.) and instrument needle valves are available in any position and any combination.
- Valve positional variations available.
- Full heat code traceable material to DIN 50049.3.1.B.
- Variety of materials available which include monel, hastelloy, 6mo, carbon steel and 316L forgings.
- Spanner flats for secure assembly grip are included on instrument outlet.
- Color coded function handles.
- Vent plug supplied loose for customer installation using their preferred thread sealant.
- Fire safe to BS6755 Part 2 available.
- DIN dimensioned flanges available.

Outside screw and yoke

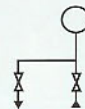


	Description	Material
1	Handle & retainer	St.St.
2	Dust cap	PVC
3	Spindle	316 SS
4	Nut & bolt assy	A2 SS
5	Yoke	St.St.
6	Packing follower	316 SS
7	Multi ring packing	PTFE
8	O.S & Y. body	St.St.
9	Body seal	PTFE
10	Non-rotating tip	17-4 PH
11	Body	316 SS

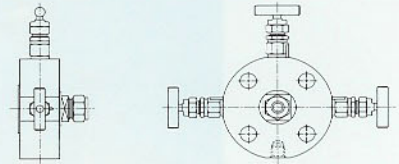
Series MB



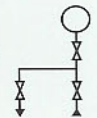
Needle valves: single isolate
single vent
Outlet: female threaded



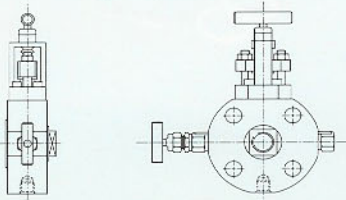
Series MB



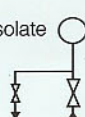
Needle valves: primary isolate
secondary isolate
single vent
Outlet: inverted A-LOK®



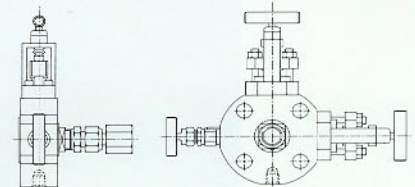
Series MB



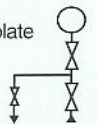
Outside screw and yoke: primary isolate
Needle valve: single vent
Outlet: female threaded



Series MB



Outside screw and yoke: double isolate
Needle valve: single vent
Outlet: gauge



Double Block and Bleed Flanged Manifold Valves

Double block and bleed valve manifolds

Purpose

To incorporate double isolate and vent valves from a choice of ball, outside screw and yoke (O.S. & Y.), plug, or needle in one piece compact weight saving unit, accommodating customer choice of piping or instrument specification valves.



Specifications

- 1/2 to 2" N.B. flanges (15 to 50DN).
- 150 to 2500lb flange class.
- RF or RTJ finish.
- Stainless steel standard
- Valve pressure/temp rating
 - P.T.F.E. 6000 psi (413 bar)/100°C (212°F).
 - 4000 psi (275 bar)/200°C (390°F).
 - Grafoil 6000 psi (413 bar)/100°C (212°F).
 - 3000 psi (207 bar)/450°C (850°F).
- Flange to ANSI B16.5.
- Ball valve design to BS5351, BS6755 part 2, API 607

Features

- Inverted A-LOK® outlets: 1/4" to 1" O.D. (3mm to 25mm O.D.)
- Outlets in male, female and gauge sizes, N.P.T., B.S.P.P., B.S.P.T.
- Needle, ball, plug and O.S. & Y valves available or combination.
- Full heat code traceable material to DIN 50049.3.1.B and B.S. EN10204:3.1.B.
- Variety of materials available include monel, hastelloy, 6mo and carbon steel.
- Low operating torques.
- Bubble tight shut off.
- Compact weight saving design for limited area installation.
- Vent plug supplied loose for customer installation using their preferred thread sealant.
- Variety of valve packing and seats available.
- Color coded function handles.
- Fire safe valves available to BS6755 part 2.
- Non flanged available.
- DIN standard flanges available.

The Parker range of flanged style manifolds offer the user the true benefits of leak path elimination together with full piping specification requirements, extra safe operation, compact, weight and stress saving design all in a single envelope design.

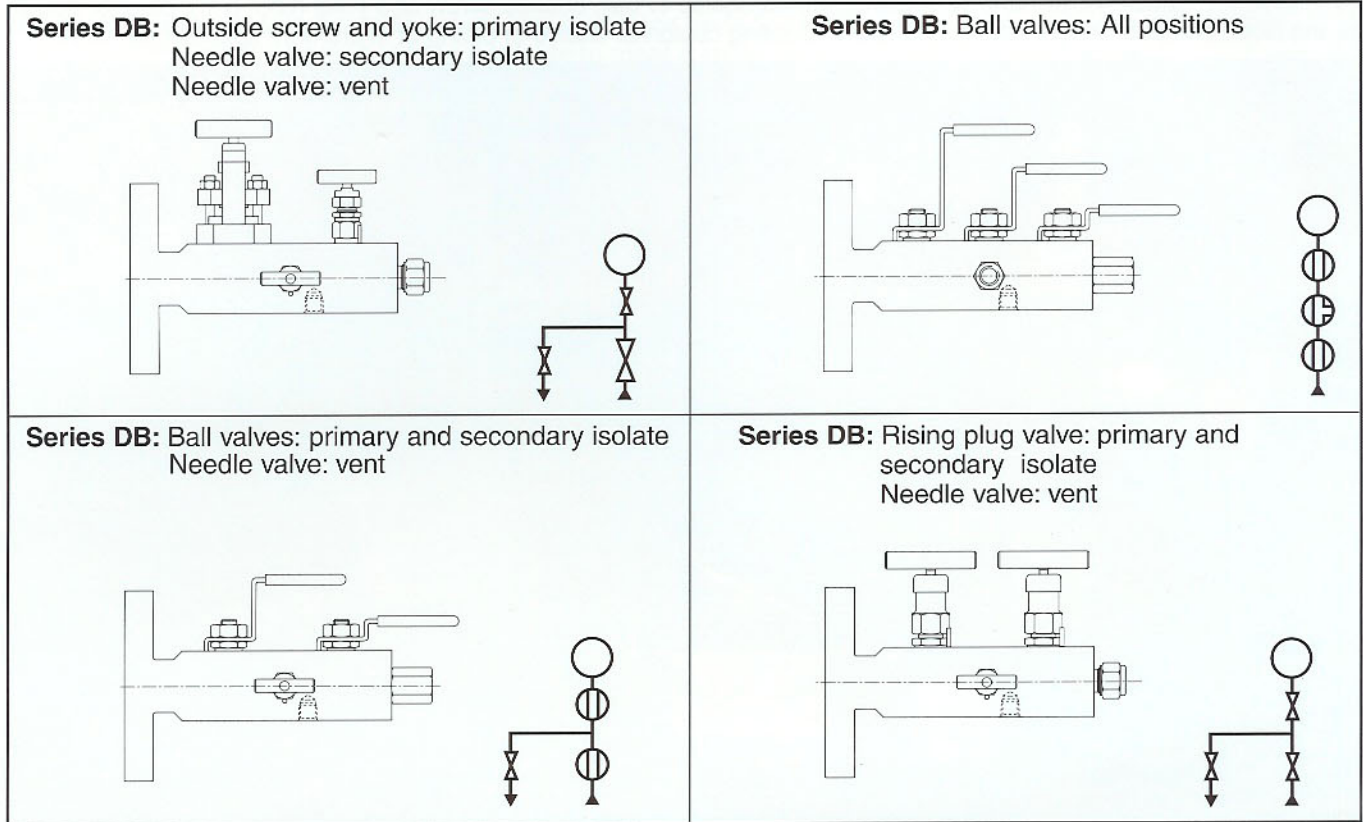
In its quest for improved performance the optional incorporation of the A-LOK® fitting as an integral part of these manifolds successfully eliminates the need for taper threads and thread sealant. Not only reducing leakage paths, but saving installation time, the fitting incorporates the A-LOK® supercased back ferrule for total corrosion resistance.

These manifolds are available in a large variety of inlet (flanged) and outlet connections. For full details of needle valve specifications and other manifold and enclosure ranges see Catalog 4256.

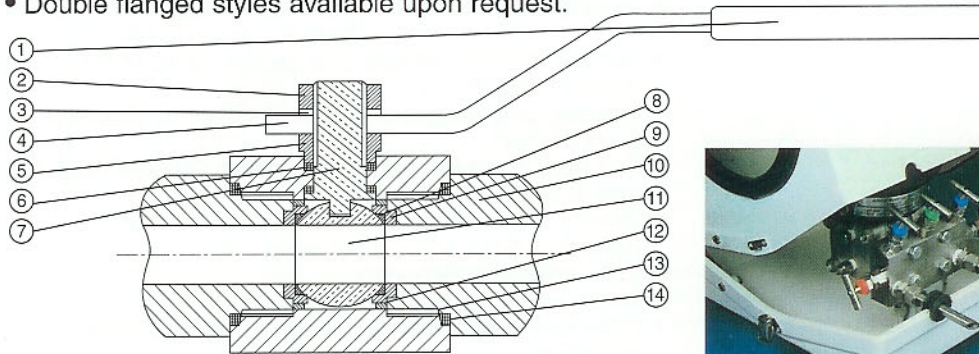
Double Block and Bleed Flanged Manifold Valves

Double block and bleed valve manifolds

A few examples of the many multiflange double block and bleed manifold arrangements.



- Many valve combinations of the above are available and can incorporate rising plug, O.S. & Y, needle and ball or any combination of these.
- Double flanged styles available upon request.



Fire safe specification

	Description	Material
1	Handle cover	PVC
2	Half nut	A2 St.St.
3	Spring washer	St.St.
4	Handle	St.St.
5	Spigot nut	St.St.
6	Washer	SLG
7	Valve stem	316 SS
8	Ball seat	P.T.F.E.
9	Seat retainer/fire seal	316 SS
10	End connectors	316 SS
11	Ball	316 SS
12	Seat retainer seal	SLG
13	Body	316 SS
14	Connector seals	SLG



A full range of instrument products including twin and single ferrule fittings, quick coupling, needle, ball, plug, check and mini size valves, manifolds, enclosures, tube and tube fabrication equipment are all available from your local distributor.

Multiflange flange connector

Purpose

One piece switchover connector from pipe flange to instrument tubing.

Series FC



Specifications

- 1/2 to 2" N.B. flanges (15 to 50DN).
- 150 to 2500 lb flange class.
- RF or RTJ finish.
- Flanges to ANSI B16.5.
- Standard stainless steel body (316L).

Features

- Standard or inverted A-LOK® arrangement
1/4" to 1" O.D. (3mm to 25mm O.D.)
- Full heat code traceability to DIN 50049.3.1.B.
- Eliminates taper thread connection.
- Variety of materials available.

Multiflange lapped joint tube adaptors

Purpose

For applications involving small flanged process valves with simple conversion to instrument lines.

Series LJ



Specifications

- 1/2 to 2" N.B. flanges (15 to 50DN).
- 150 to 2500lb flange class.
- RFS or RFR available (RTJ not available).
- Standard stainless steel body (316L).

Features

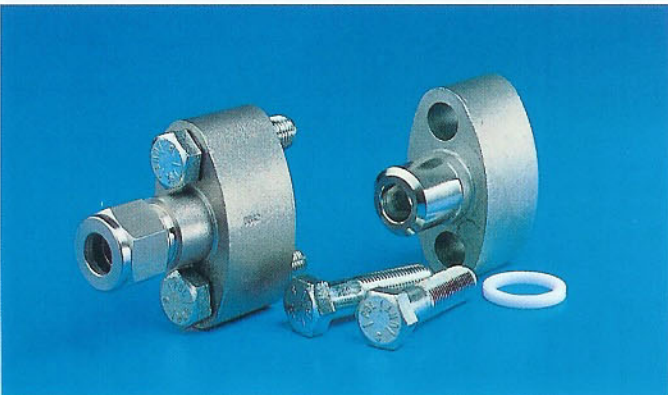
- Standard or inverted A-LOK® arrangement
1/4" to 1" O.D. (3mm to 25mm O.D.)
- Full heat code traceability to DIN 50049.3.1.B.
- Appropriate lapped joint flanges available.
- Variety of materials available.
- Choice of smooth or rough spiral faces.

Multiflange kidney flanges

Purpose

Integral A-LOK® twin ferrule connection for simple, easy and safe connection from process measurement impulse line to instrument or manifold.

Series KF



Specifications

- Rated to 6000 psi.
- Standard P.T.F.E. seal ring.
Optional Grafoil available.
- Standard stainless steel body (316L).

Features

- Elastomer 'O' ring seals available.
- High tensile steel bolts standard.
- Standard A-LOK® connection up to 1/2" or 12mm.
- 1/2" NB Sch.40 to Sch XXS butt weld connections available.
- 1/2" NB socket weld connection available.

How to order Photocopy this page, complete part number and send to your nearest Instrumentation distributor who is:

Stage 1: Multiflange selection	Stage 2: Valve style and position	Stage 3: Valve gland seal material	Stage 4: Seat material/arrangements	Stage 5: Material																																																																											
<p>MB – Monoblock DB – Double block & bleed FC – Flange connector LJ – Lapped joint tube connector KF – A-LOK® kidney flange</p>	<p>†N – Needle †B – Ball* †P – Rising plug* †Y – O.S. & Y</p> <p>†Add position 1,2 or 3</p> <p>Example: 1 & 2 ball, 3 needle 1B2B3N Always complete all fields in this stage – – indicates no valve * not available for MB</p>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th></th> <th>Needle</th> <th>Ball</th> <th>Plug</th> <th>O.S. & Y</th> </tr> <tr> <td>P.T.F.E.</td> <td>T</td> <td>T</td> <td>T</td> <td>T</td> </tr> <tr> <td>Grafoil</td> <td>G</td> <td>G</td> <td></td> <td>G</td> </tr> <tr> <td>Viton</td> <td></td> <td></td> <td>V</td> <td></td> </tr> <tr> <td>Buna N</td> <td></td> <td></td> <td>B</td> <td></td> </tr> <tr> <td>Neoprene</td> <td></td> <td></td> <td>N</td> <td></td> </tr> <tr> <td>Peek</td> <td></td> <td>P</td> <td></td> <td></td> </tr> <tr> <td>Fire safe</td> <td>F</td> <td>F</td> <td></td> <td>F</td> </tr> </table> <p>A selection from the above will assume all valve positions require the same packing. If a mix of packings needed, indicate M (mixed) in the stage 3 box and specify separately.</p>		Needle	Ball	Plug	O.S. & Y	P.T.F.E.	T	T	T	T	Grafoil	G	G		G	Viton			V		Buna N			B		Neoprene			N		Peek		P			Fire safe	F	F		F	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th></th> <th>Needle</th> <th>Ball</th> <th>Plug</th> <th>O.S. & Y</th> </tr> <tr> <td>Metal/metal</td> <td>H</td> <td></td> <td></td> <td>H</td> </tr> <tr> <td>Kel-F tip/seat</td> <td>K</td> <td>K</td> <td>K</td> <td>K</td> </tr> <tr> <td>Delrin seat</td> <td></td> <td></td> <td>D</td> <td></td> </tr> <tr> <td>Peek tip/seat</td> <td>P</td> <td></td> <td>P</td> <td></td> </tr> <tr> <td>PTFE seat</td> <td></td> <td>T</td> <td>T</td> <td></td> </tr> <tr> <td>Fire safe</td> <td>F</td> <td>F</td> <td></td> <td>F</td> </tr> </table> <p>If combination needed insert M (mixed) and specify separately.</p> <div style="border: 1px solid red; padding: 2px; display: inline-block;"> Stage 4. Ball = K Needle = H </div>		Needle	Ball	Plug	O.S. & Y	Metal/metal	H			H	Kel-F tip/seat	K	K	K	K	Delrin seat			D		Peek tip/seat	P		P		PTFE seat		T	T		Fire safe	F	F		F	<p>*S – 316L Bar stock *F – 316L Forging C – Carbon steel *M – Monel *N – Hastelloy *A – 6mo</p> <p>*All wetted parts supplied in above material. Non wetted supplied as shown for St.St.</p> <p>For materials other than 316L please state preferred body material condition ie. bar stock or forging.</p>
	Needle	Ball	Plug	O.S. & Y																																																																											
P.T.F.E.	T	T	T	T																																																																											
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Fire safe	F	F		F																																																																											

Stage 1
Stage 3
Stage 5
Stage 7
Stage 9

Sample	D	B	1	B	2	B	3	N	T	M	S	0	8	R	R	0	6	-	8	A	4	F	N	-	-	-	-	
For customer completion																												

Stage 2
Stage 4
Stage 6
Stage 8
Stage 10

If any stage is not applicable leave fields empty. Quantity

Stage 6: Inlet connection (Process)	Stage 7: Outlet (Instrument)	Stage 8: Vent	Stage 9: Thread form	Stage 10: Options	Specification check																																																																		
<p>Non flanged inlet</p> <p>8M – 1/2 male threaded 8F – 1/2 female threaded 8S – 1/2 NB socket weld 8B – 1/2 NB butt weld</p> <p>Flange face style</p> <p>RS – Raised face (smooth spiral) RR – Raised face (rough spiral) RT – Ring type joint</p> <p>Flanged inlet size</p> <p>08 – 1/2 flange (DN15) 12 – 3/4 flange (DN20) 16 – 1 flange (DN25) 20 – 1.1/4 flange (DN32) 24 – 1.1/2 flange (DN40) 32 – 2 flange (DN50) 40 – 2.1/2 flange (DN60) 48 – 3 flange (DN75)</p> <p>Other connections available.</p> <p>Sequence of part number spec:- 1st = Inlet __ 2nd = Flange face __ 3rd = Flange class __</p>	<p>Flange class</p> <p>01 – 150 lb 03 – 300 lb 06 – 600 lb 09 – 900 lb 15 – 1500 lb 25 – 2500 lb 50 – 5000 lb XX – 10000 lb</p> <p>8M – 1/2" male thread 8F – 1/2" female thread 8S – 1/2" socket weld 8B – 1/2" butt weld 8G – 1/2" swivel gauge adaptor</p> <p>For 1/4" or 3/8" sizes of the above replace 8 with 4 (1/4) or 6 (3/8).</p> <p>-4A – 1/4" A-LOK® -6A – 3/8" A-LOK® -8A – 1/2" A-LOK® 12A – 3/4" A-LOK® 16A – 1" A-LOK® -3M – 3mm A-LOK® -6M – 6mm A-LOK® -8M – 8mm A-LOK® 10M – 10mm A-LOK® 12M – 12mm A-LOK® 15M – 15mm A-LOK® 16M – 16mm A-LOK® 20M – 20mm A-LOK® 25M – 25mm A-LOK®</p> <p>For inverted A-LOK® change part number around i.e -A8 or -M8</p>	<p>4F – 1/4 female 4S – 1/4 socket weld 4B – 1/4 butt weld</p>	<p>N – NPT R – BSPP K – BSPT</p> <p>The above assumes all threads are common. If combination required insert M (mixed) and specify separately</p>	<p>LJ – Lapped joint tube adaptor flange clamps Z – For CPI™ connector AT – Needle anti tamper IL – Ball valve interlock NACE – NACE (not A-LOK®) DEG – Degreased TAG – Tagging (state details) GS – Gauge syphon FS – Fire safe LK-A – All handle lock LK-V – Vent only lock LK-P – Primary only lock LK-S – Secondary only lock</p> <p>If option required is not listed above, specify separately. If more than one of the above options are needed add suffixes in descending order.</p>	<p>For each product the following stages must be completed. Please check to ensure part numbers have been correctly specified.</p> <table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <tr> <th>Stage</th> <th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th> </tr> <tr> <td>MB</td> <td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>*</td><td>*</td> </tr> <tr> <td>DB</td> <td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>*</td><td>*</td> </tr> <tr> <td>FC</td> <td>●</td><td></td><td></td><td></td><td>●</td><td>●</td><td>●</td><td>*</td><td>*</td><td>*</td> </tr> <tr> <td>LJ</td> <td>●</td><td></td><td></td><td></td><td>●</td><td>●</td><td>●</td><td>*</td><td>*</td><td>*</td> </tr> <tr> <td>KF</td> <td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>*</td><td>*</td><td>*</td> </tr> </table> <p>* Optional ● Obligatory</p> <p>Parker Hannifin plc Instrumentation Products Division Riverside Road Pottington Business Park Barnstaple Devon EX31 1NP England Telephone: +44 (0)1271 313131 Telefax: +44 (0)1271 373636</p>	Stage	1	2	3	4	5	6	7	8	9	10	MB	●	●	●	●	●	●	●	●	*	*	DB	●	●	●	●	●	●	●	●	*	*	FC	●				●	●	●	*	*	*	LJ	●				●	●	●	*	*	*	KF	●	●	●	●	●	●	●	*	*	*
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6. Changes, Reschedules and Cancellations: Buyer may request to modify the designs or specifications for the items sold hereunder as well as the quantities and delivery dates thereof, or may request to cancel all or part of this order, however, no such requested modification or cancellation shall become part of the contract between Buyer and Seller unless accepted by Seller in a written amendment to this Agreement. Acceptance of any such requested modification or cancellation shall be at Seller's discretion, and shall be upon such terms and conditions as Seller may require.

7. Special Tooling: A tooling charge may be imposed for any special tooling, including without limitation, dies, fixtures, molds and patterns, acquired to manufacture items sold pursuant to this contract. Such special tooling shall be and remain Seller's property notwithstanding payment of any charges by Buyer. In no event will Buyer acquire any interest in apparatus belonging to Seller which is utilized in the manufacture of the items sold hereunder, even if such apparatus has been specially converted or adapted for such manufacture and not withstanding any charges paid by Buyer. Unless otherwise agreed, Seller shall have the right to alter, discard or otherwise dispose of any special tooling or other property in its sole discretion at any time.

8. Buyer's Property: Any designs, tools, patterns, materials, drawings, confidential information or equipment furnished by Buyer or any other items which become Buyer's property, may be considered obsolete and may be destroyed by Seller after two (2) consecutive years have elapsed without Buyer placing an order for the items which are manufactured using such property, Seller shall not be responsible for any loss or damage to such property while it is in Seller's possession or control.

9. Taxes: Unless otherwise indicated on the face hereof, all prices and charges are exclusive of excise, sales, use, property, occupational or like taxes which may be imposed by any taxing authority upon the manufacture, sale or delivery of the items sold hereunder. If any such taxes must be paid by Seller or if Seller is liable for the collection of such tax, the amount thereof shall be in addition to the amounts for the items sold. Buyer agrees to pay all such taxes or to reimburse Seller therefore upon receipt of its invoice. If Buyer claims exemption from any sales, use or other tax imposed by any taxing authority, Buyer shall save Seller harmless from and against any such tax, together with any interest or penalties thereon which may be assessed if the items are held to be taxable.

10. Indemnity For Infringement of Intellectual Property Rights: Seller shall have no liability for infringement of any patents, trademarks, copyrights, trade dress, trade secrets or similar rights except as provided in this Part 10. Seller will defend and indemnify Buyer against allegations of infringement of U.S. Patents, U.S. Trademarks, copyrights, trade dress and trade secrets (hereinafter 'Intellectual Property Rights'). Seller will defend at its expense and will pay the cost of any settlement or damages awarded in an action brought against Buyer based on an allegation that an item sold pursuant to this contract infringes the Intellectual Property Rights of a third party. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of such allegations of infringement, and Seller having sole control over the defense of any allegations or actions including all negotiations for settlement or compromise. If an item sold hereunder is subject to a claim that it infringes the Intellectual Property Rights of a third party, Seller may, at its sole expense and option, procure for Buyer the right to continue using said item, replace or modify said item so as to make it noninfringing, or offer to accept return of said item and return the purchase price less a reasonable allowance for depreciation. Notwithstanding the foregoing, Seller shall have no liability for claims of infringement based on information provided by Buyer, or directed to items delivered hereunder for which the designs are specified in whole or part by Buyer, or infringements resulting from the modification, combination or use in a system of any item sold hereunder. The foregoing provisions of this Part 10 shall constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for infringement of Intellectual Property Rights.

If a claim is based on information provided by Buyer or if the design for an item delivered hereunder is specified in whole or in part by Buyer, Buyer shall defend and indemnify Seller for all costs, expenses or judgments resulting from any claim that such item infringes any patent, trademark, copyright, trade dress, trade secret or any similar right.

11. Force Majeure: Seller does not assume the risk of and shall not be liable for delay or failure to perform any of Seller's obligations by reason of circumstances beyond the reasonable control of Seller (hereinafter 'Events of Force Majeure'). Events of Force Majeure shall include without limitation, accidents, acts of God, strikes or labor disputes, acts, laws, rules or regulations of any government or government agency, fires, floods, delays or failures in delivery of carriers or suppliers, shortages of materials and any other cause beyond Seller's control.

12. Entire Agreement/Governing Law: The terms and conditions set forth herein, together with any amendments, modifications and any different terms or conditions expressly accepted by Seller in writing, shall constitute the entire Agreement concerning the items sold, and there are no oral or other representations or agreements which pertain thereto. This Agreement shall be governed in all respects by the law of the State of Ohio. No actions arising out of the sale of the items sold hereunder or this Agreement may be brought by either party more than two (2) years after the cause of action accrues.

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Parker Hannifin plc
Instrumentation Products Division
Riverside Road
Pottington Business Park
Barnstaple, Devon EX31 1NP
England
Phone: +44 (0)1271 313131
Fax: +44 (0)1271 373636
Email: ipd@parker.com
www.parker.com/instrumentation