



Wafer Style Monoball

Ring Type/Raised Face Valves

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



ENGINEERING YOUR SUCCESS.

Wafer Style Monoball

Monoflange-style construction makes the new valve lighter and more compact than conventional flange-to-flange mounted ball valves. This makes it ideal for space and weight sensitive applications such as offshore platforms, as well as the many common isolation requirements found in oil, gas and chemical processing installations.

In addition to being used as an isolation valve, the Monoball's compact construction makes it a versatile building block for configuring multi-valve manifold arrangements.

It provides a simple means of coupling instruments closely to process piping, allowing the safe removal of an instrument valve if it needs replacing due to damage or plugging.

Additional construction features employed by Parker further enhance reliability and safety for users. The valve body is machined from a single forging, reducing potential leak paths to a minimum.

Parker can also supply the valve with two-ferrule and single-ferrule tube fitting ends, thereby eliminating taper threads and the subsequent need for thread sealants, which can be a source of problems in the field.

As standard, Monoball valves are available in stainless steel (ASTM A182 F316/F316L), carbon steel (ASTM A350 LF2/A105), or Duplex (ASTM A182 F51) materials.

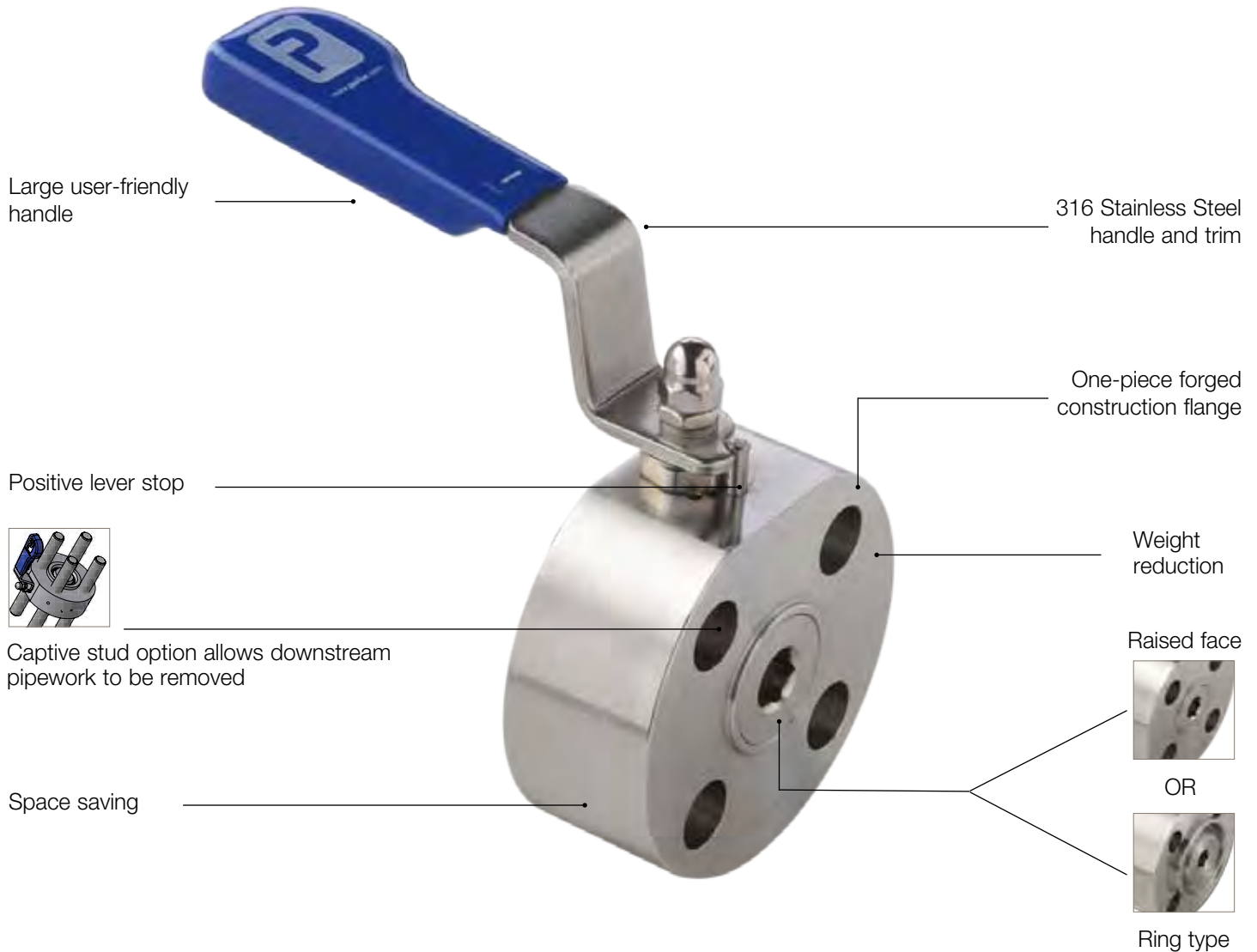
Other high performance alloys, and NACE MR 0175/ISO 15156 compliant versions are available on request. Depending on the bore size chosen, the valve comes with flange sizes from ½ to 2 inches NB (15 to 50 DN), compatible with ANSI B16.5 flange classes from 150 to 2500.

Features

- 1/2" to 2" N.B Flanges (15 to 50 DN)
- ANSI B16.5 150 to 2500 flange class
- 1/2"-14 NPT (Female) standard outlet on Flange x Screw arrangement
- Instrument connections two/single ferrule available
- Optional Fire Safe designed and tested to meet BS6755 Part 2/API 607
- Designed to meet the pressure and temperature requirements of ASME/ANSI B16.34/B16.5
- Pressure boundary designs calculated to ASME VIII. Div 1 and verified by testing
- 4:1 Factor of Safety
- Heat code traceable materials to EN10204.3.1
- Bubble-tight shut-off
- Optional locking and anti-tamper devices for all valve types available
- NACE MRO 175/ISO 15156 compliance available on request

Specifications

- 316 Stainless Steel construction as standard, see part number configurator for other material options
- Maximum cold working pressure rating 6,000 psi (414 bar) with PTFE or PEEK seats
- Temperature rating PTFE seats -54°C to 204°C (-65°F to +400°F)
- Temperature rating PEEK seats -54°C to 232°C (-65°F to 450°F)
- Up to 2500 ASME Class B16.5



Value

The wafer style Monoball offers many advantages over a traditional flange x flange single isolate ball valve. Due to its smaller footprint it uses less material and therefore saves both space and weight. This is very important especially offshore where weight saving is crucial.

The Monoball can also be a huge advantage when isolating before an Instrument valve such as a Monoflange. Traditionally a large process valve is the preferred choice of some process piping engineers. These large heavy valves require additional support and raise both the costs of installation and purchase. The Monoball can achieve the same purpose but will not need supports or any additional fabrication costs.

The Monoball is available with captive studding. These studs are screwed through the valve and then held in position by a grub screw. The advantage of this unique design is that if an instrument valve needs replacing due to damage or "plugging", the Monoball will isolate the process safely from the operator.

The captive studs allow the instrument valve to be removed from one side while the process flange side retains its leak tight integrity.

This means that when the instrument valve is replaced the process line does not have to be shut down. Lost production and huge costs can be incurred if a process line has to be shut down.

A further advantage of the studded Monoball is that the valve is a piping class primary isolate. This allows the Monoflange to be block and bleed giving the operator the required double block and bleed. Parker offer Monoflanges in a block and bleed pattern allowing the client to have block block bleed which is a preference of some end users. The block block bleed pattern offers two isolating valves prior to the bleed. During in-situ calibration or removal of the instrument for workshop calibration the operator has two block valves preventing leakage to atmosphere. This gives additional safety over the block bleed block alternative.

Wafer Style Monoball

How to order

These high performance bi-directional monoflange isolating ball valves offer the user full cold working pressure ratings up to 6,000 psi demanding applications in the oil, gas and process control industries.

1
2
3
4
5
6

MB
Y

150
B
16

1. Item	
Monoball	MB

2. Bore	
10mm	Y
15mm	X
20mm	W
25mm	V

3. Captive Studding (250 Flow Only)	
Standard Flange Holes	*
Captive Studs (See Stud Options)	C

4. Flow	
Block (Flange x Screw)	150
Block (Flange x Flange)	250
See note 1	

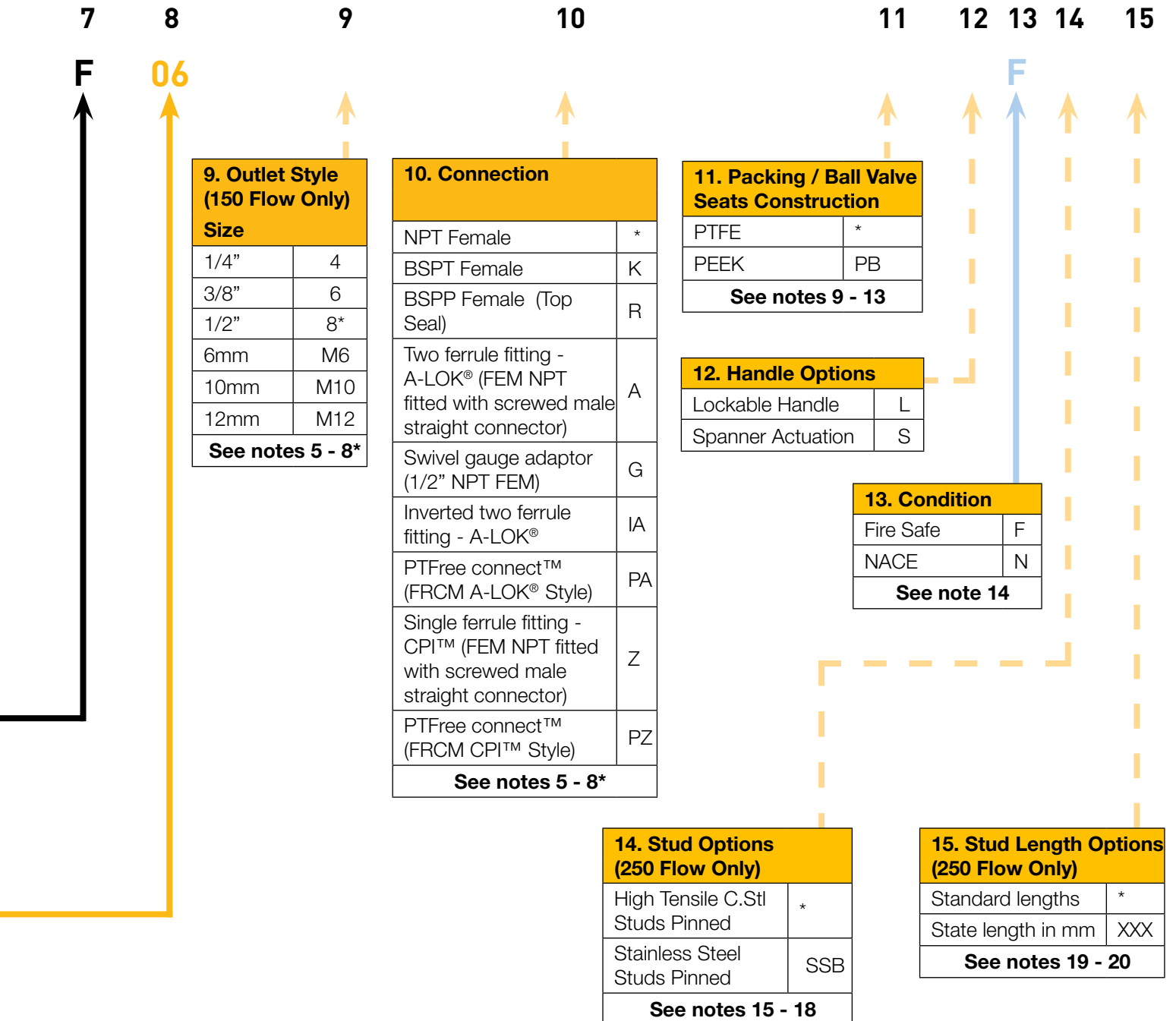
5. Material			
316 Stainless Steel	B	Monel® 400	D
Carbon Steel	A	6Mo	K
Low Temperature Carbon Steel	H	Hastelloy® C-276	G
Duplex*	E	Inconel® 625	M
Super Duplex*	F	Inconel® 825	L
See note 2			

6. Size				7. Seal Type		8. ANSI Flange Class (B16.5)	
1/2"	8	Raised Face	F	150	01		
3/4"	12	Ring Type Joint	T	300	03		
1"	16			600	06		
1 1/2"	24			900	09		
2"	32			1500	15		
				2500	25		
See notes 3 - 4							

Please refer to explanatory notes on page 6

Hastelloy® is a registered trademark of Haynes International, Inc
Monel® is a registered trademarks of Inco Alloys International
Inconel® is a registered trademarks of Inco Alloys International

(414 bar), giving 100% bubble tight shut-off and continuous repeatable performance. The Monoballs are suitable for the most



Wafer Style Monoball

Notes

* Fitted as standard. No part number designator required

1. 15,20 & 25mm bore offered with 1/2" pipe thread connections only on flow 150 style
2. *Duplex/Super Duplex offered with pipe thread connections only on flow 150 style
3. Flange size/class combinations as per Pro-Bloc® range
4. DN PN (BS EN 1092-1) flanges. Consult factory for availability
5. 1/2"NPT (FEM) as standard on flow 150 style
6. Tube connections only available on 10mm bore - consult factory on size and material combinations
7. Swivel gauge option on 10mm bore only
8. For Inverted A-LOK®, consult factory for availability of Inverted A-LOK® size/material combination
9. Consult Hi-Pro Ball Valve catalogue (4190/HBV) for pressure/temperature curves for stainless steel/seat performance
10. 15mm bore offered with PEEK seats only. Apply 'PB' Option suffix to part number
11. Phflex seats fitted on 25mm bore class 2500 valves (6000 psi) as standard. Other seat options in accordance with Hi-Pro catalogue
12. PTFE packing fitted as standard
13. Graphite packing fitted as standard for Firesafe option (API 607 / BS6755 Pt2)
14. Does not apply for A-LOK®/CPI™ ended valves in 316 Stainless Steel
15. Captive studs are full threaded studs/pinned as standard
16. High tensile carbon steel studs (ASTM A193M-B7M) bright zinc plate - fitted as standard
17. Stainless steel studs (A193M-B8M)
18. Heavy hex nuts & washers supplied with studs as standard on MB*C250 part numbers
19. Standard lengths supplied from ANSI B16.5 from raised face/ring type to end of exposed full thread stud length
20. Advise length in millimetres i.e. 200 for 200mm from raised face/ring type to end of exposed full thread stud length

PART NO. EXAMPLE - 1

MBY150B16F06FN

Monoball 10mm Bore
Flange X Screw
316 St.Stl A182-F316
1"NB x 600 lb RF (ANSI B16.5) - Process Flange
1/2"NPT (FEM) Outlet
Firesafe to BS6755 Pt2
NACE MR0175 Compliance

PART NO. EXAMPLE - 2

MBY150B32F25M12IAPBLF

Monoball 10mm Bore
Flange X Screw
316 St.Stl A182-F316
2"NB x 2500 lb RF (ANSI B16.5) - Process Flange
12mm OD Tube Inverted A-LOK®
PEEK Seats / Graphite Packing
Handle Locking
Firesafe to BS6755 Pt2

PART NO. EXAMPLE - 3

MBVC250E32F25FNSSB200

Monoball 25mm Bore
Flange X Flange
Duplex A182-F51
2"NB x 2500 lb RF (ANSI B16.5) - Process Flange
2"NB x 2500 lb RF (ANSI B16.5) - Process Flange
Firesafe to BS6755 Pt2
NACE MR0175 Compliance
Stainless Steel Studs (A193M-B8M)
Full thread studs/pinned with a length of 200mm from raised face

Notes

[illegible]

! WARNING

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

This document and other information from Parker Hannifin Corporation, its subsidiaries or its authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalogue. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

Offer of Sale

The items described in this document are available for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. Any sale contract entered into by Parker will be governed by the provisions stated in Parker's standard terms and conditions of sale (copy available upon request).



/ParkerHannifinProcessControl



YouTube /ParkerHannifin

Parker Worldwide

AE – UAE, Dubai
Tel: +971 4 8875600
parker.me@parker.com

AR – Argentina, Buenos Aires
Tel: +54 3327 44 4129

AT – Austria, Wiener Neustadt
Tel: +43 (0)2622 23501-0
parker.austria@parker.com

AT – Eastern Europe,
Wiener Neustadt
Tel: +43 (0)2622 23501 970
parker.easteurope@parker.com

AU – Australia, Castle Hill
Tel: +61 (0)2-9634 7777

AZ – Azerbaijan, Baku
Tel: +994 50 2233 458
parker.azerbaijan@parker.com

BE/LX – Belgium, Nivelles
Tel: +32 (0)67 280 900
parker.belgium@parker.com

BR – Brazil, Cachoeirinha RS
Tel: +55 51 3470 9144

BY – Belarus, Minsk
Tel: +375 17 209 9399
parker.belarus@parker.com

CA – Canada, Grimsby, Ontario
Tel +1 905-945-2274
ipd_canada@parker.com

CH – Switzerland, Etoy
Tel: +41 (0) 21 821 02 30
parker.switzerland@parker.com

CN – China, Shanghai
Tel: +86 21 5031 2525

CZ – Czech Republic, Klecany
Tel: +420 284 083 111
parker.czechrepublic@parker.com

DE – Germany, Kaarst
Tel: +49 (0)2131 4016 0
parker.germany@parker.com

DK – Denmark, Ballerup
Tel: +45 43 56 04 00
parker.denmark@parker.com

ES – Spain, Madrid
Tel: +34 902 33 00 01
parker.spain@parker.com

FI – Finland, Vantaa
Tel: +358 (0)20 753 2500
parker.finland@parker.com

FR – France, Contamine s/Arve
Tel: +33 (0)4 50 25 80 25
parker.france@parker.com

GR – Greece, Athens
Tel: +30 210 933 6450
parker.greece@parker.com

HK – Hong Kong
Tel: +852 2428 8008

HU – Hungary, Budapest
Tel: +36 1 220 4155
parker.hungary@parker.com

IE – Ireland, Dublin
Tel: +353 (0)1 466 6370
parker.ireland@parker.com

IN – India, Mumbai
Tel: +91 22 6513 7081-85

IT – Italy, Corsico (MI)
Tel: +39 02 45 19 21
parker.italy@parker.com

JP – Japan, Fujisawa
Tel: +(81) 4 6635 3050

KR – South Korea, Seoul
Tel: +82 2 559 0400

KZ – Kazakhstan, Almaty
Tel: +7 7272 505 800
parker.easteurope@parker.com

LV – Latvia, Riga
Tel: +371 6 745 2601
parker.latvia@parker.com

MX – Mexico, Apodaca
Tel: +52 81 8156 6000

MY – Malaysia, Shah Alam
Tel: +603-78490800

NL – The Netherlands,
Oldenzaal
Tel: +31 (0)541 585 000
parker.nl@parker.com

NO – Norway, Stavanger
Tel: +47 (0)51 826 300
parker.norway@parker.com

NZ – New Zealand, Mt Wellington
Tel: +64 9 574 1744

PL – Poland, Warsaw
Tel: +48 (0)22 573 24 00
parker.poland@parker.com

PT – Portugal, Leca da Palmeira
Tel: +351 22 999 7360
parker.portugal@parker.com

RO – Romania, Bucharest
Tel: +40 21 252 1382
parker.romania@parker.com

RU – Russia, Moscow
Tel: +7 495 645-2156
parker.russia@parker.com

SE – Sweden, Spånga
Tel: +46 (0)8 59 79 50 00
parker.sweden@parker.com

SG – Singapore,
Tel: +65 6887 6300

SK – Slovakia, Banská Bystrica
Tel: +421 484 162 252
parker.slovakia@parker.com

SL – Slovenia, Novo Mesto
Tel: +386 7 337 6650
parker.slovenia@parker.com

TH – Thailand, Bangkok
Tel: +662 717 8140

TR – Turkey, Istanbul
Tel: +90 216 4997081
parker.turkey@parker.com

TW – Taiwan, Taipei
Tel: +886 2 2298 8987

UA – Ukraine, Kiev
Tel: +380 44 494 2731
parker.ukraine@parker.com

UK – United Kingdom,
Warwick
Tel: +44 (0)1926 317878
parker.uk@parker.com

US – USA, Cleveland
Tel: +1 216 896 3000

VE – Venezuela, Caracas
Tel: +58 212 238 5422

ZA – South Africa,
Kempton Park
Tel: +27 (0)11 961 0700
parker.southafrica@parker.com

European Product Information Centre
Free phone: 00 800 27 27 5374
(from AT, BE, CH, CZ, DE, DK, EE, EI, ES, FI, FR,
IT, NL, NO, PL, RU, SE, SK, UK, ZA)

© 2013 Parker Hannifin Corporation. All rights reserved

Parker Hannifin Manufacturing Ltd
Instrumentation Products
Division Europe
Riverside Road
Pottington Business Park
Barnstaple, Devon, EX31 1NP
United Kingdom
Tel.: +44 (0) 1271 313131
Fax: +44 (0) 1271 373636
www.parker.com/ipd

Parker Hannifin Corporation
Instrumentation Products Division
1005 A Cleaner Way
Huntsville
AL 35805
USA
Tel: + 1 (256) 881-2040
Fax: + 1 (256) 881-5072
www.parker.com/ipdus

