



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.

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

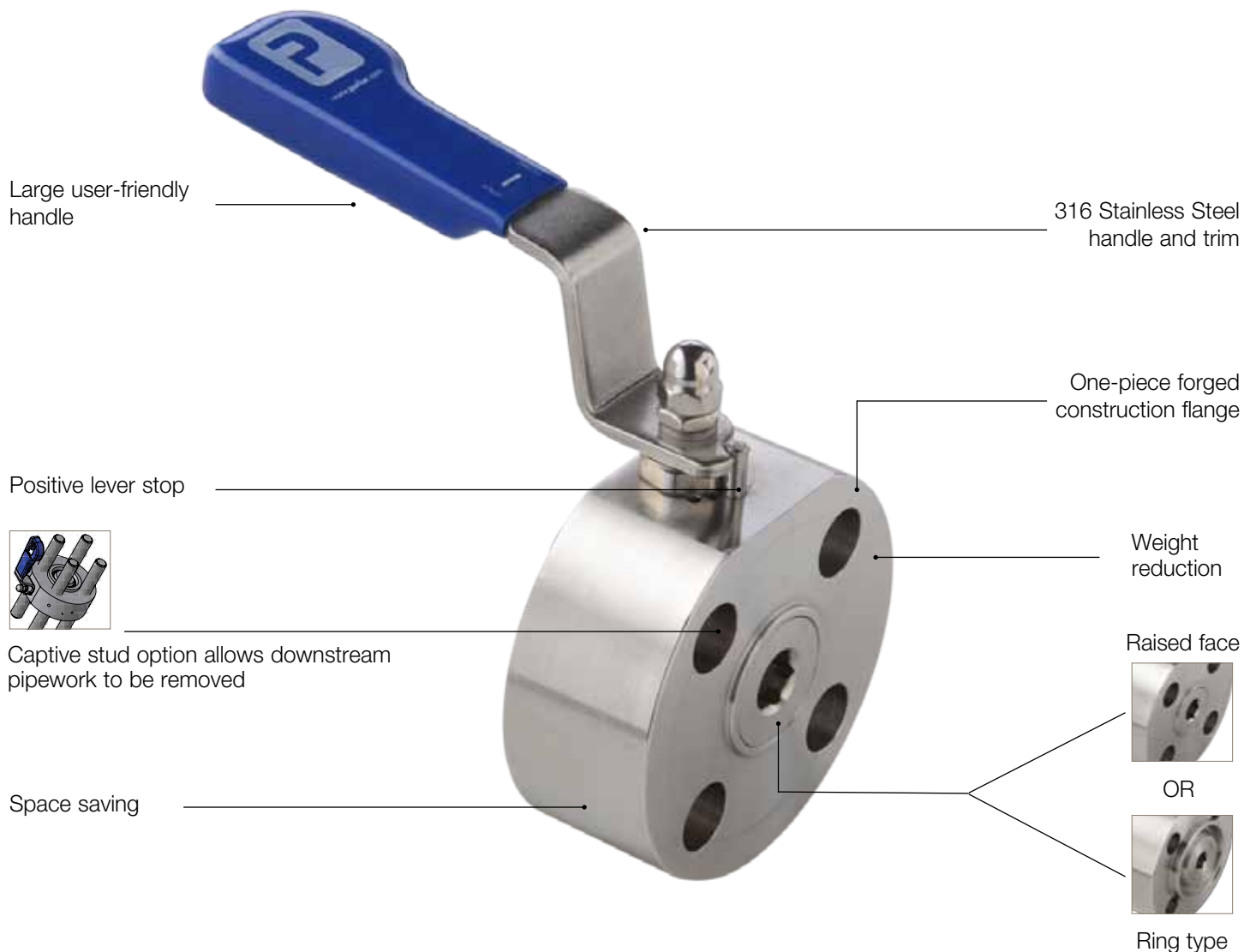
Specifications

- 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 (-65F to 450°F)
- Up to 2500 ASME Class B16.5

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.



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.

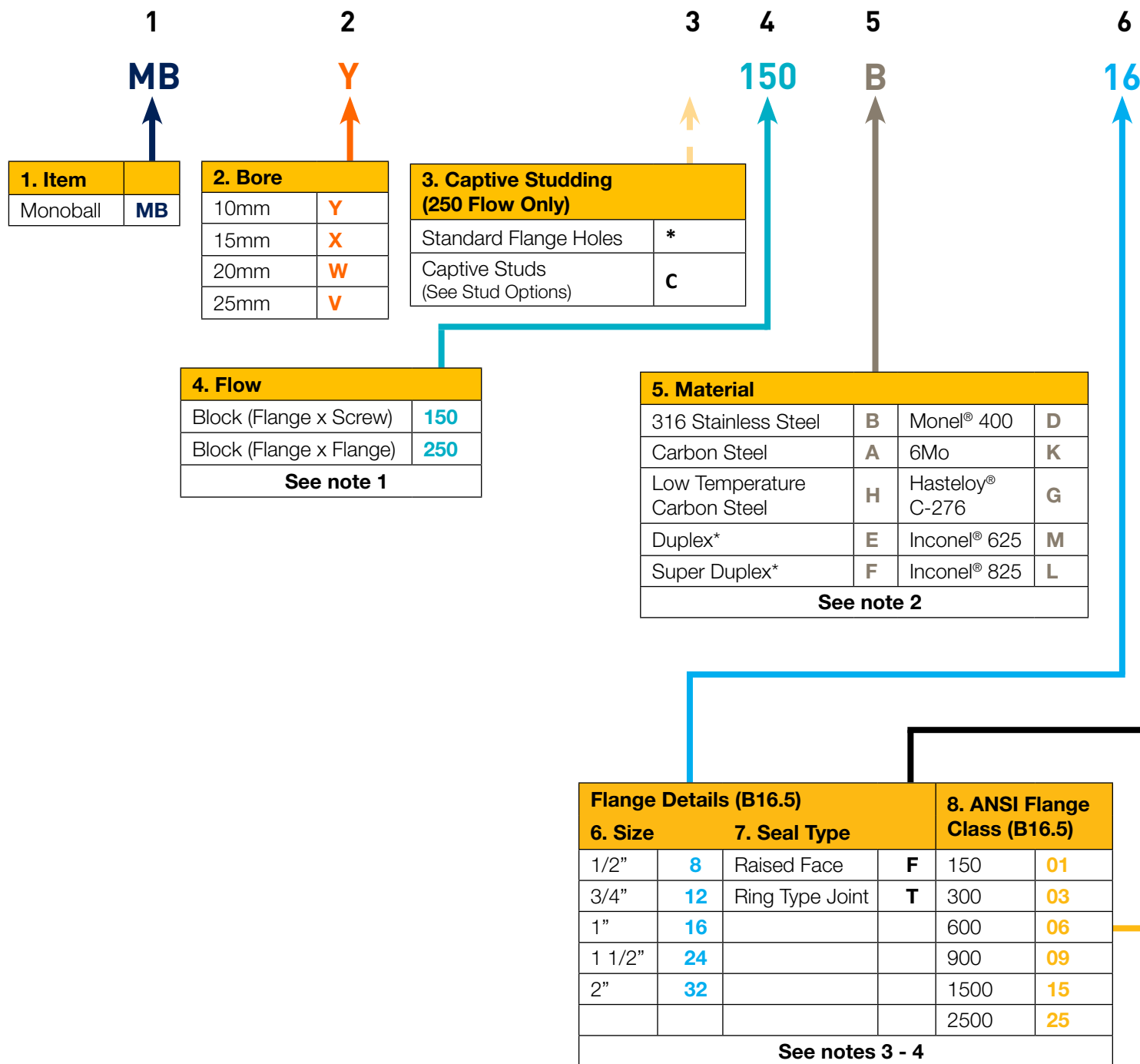
This means that when the instrument valve is replaced the process line does not have to be shut down. Lost production and huge costs can be incurred if a process line has to be shut down.

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.

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How to order

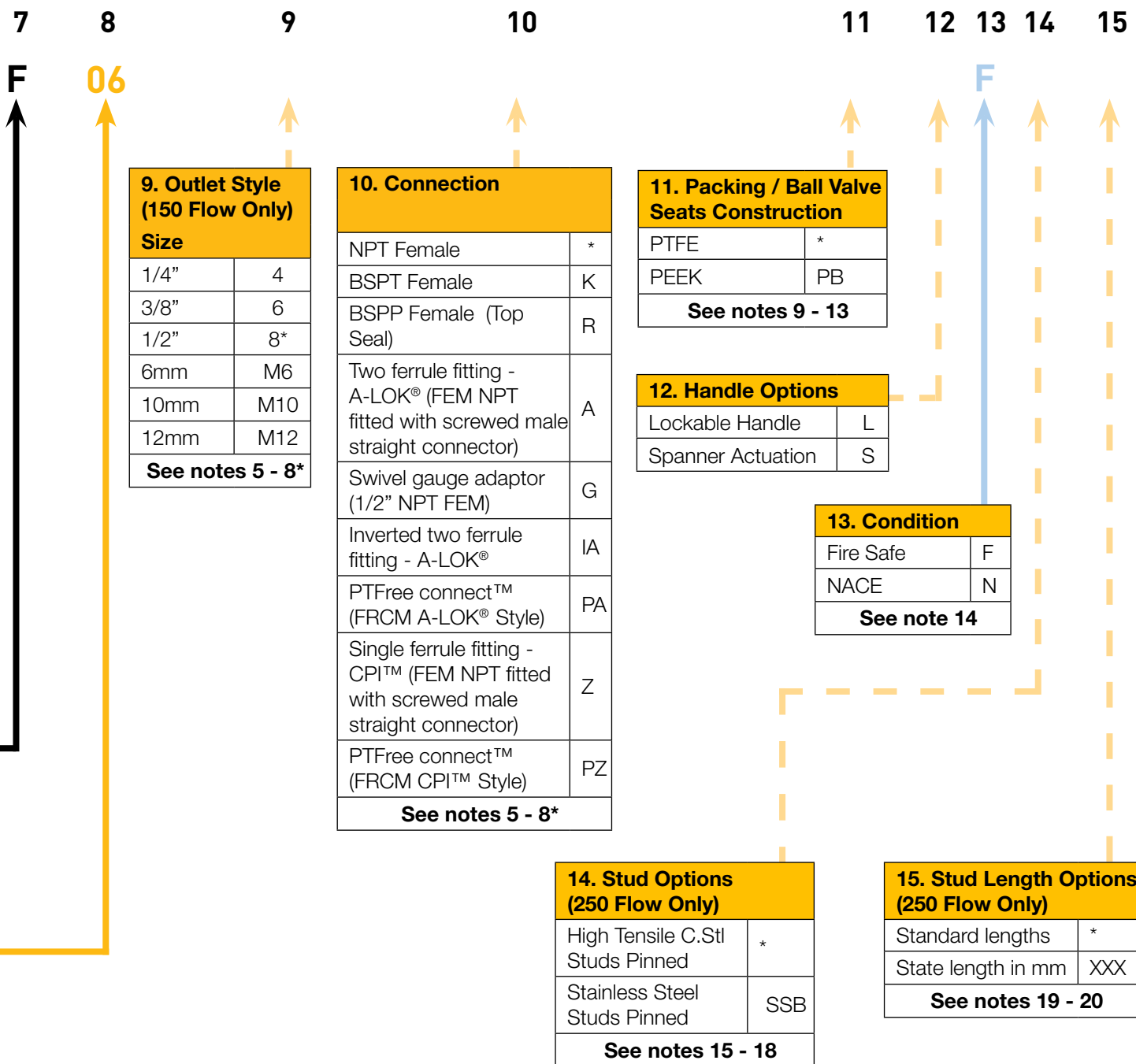
These high performance bi-directional monoflange isolating ball valves offer the user full cold working pressure ratings up to 6,000 psi demanding applications in the oil, gas and process control industries.



Please refer to explanatory notes on page 6

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(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

 **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.

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