



PATTERSON SERVICES, INC.

Tubing
1" thru 4 1/2"

Drill Pipe
2 3/8" thru 5 1/2"

Heavy Weight Drill Pipe
2 7/8" thru 6 5/8"

Drill Collars
2 7/8" thru 10"

Blow-Out Preventers
Annular Type
2 9/16" 5M thru 29 1/2" 500 PSI

Hydraulic Ram Type
Single and Double
3 1/16" 10M thru 21 3/4" 5M

Valves Manual & Hydraulic
12" Ball Valves
2 1/16" 5M thru 4 1/16" 15M

BOP Information Sheet*

Shaffer Spherical BOP 4-1/16" 10K

1	BOP Serial #	P-
2	Type	4-1/16" 10K Spherical BOP (Bolted Cover)
3	Manufacturer	Shaffer
4	Height (Flange Face to Face)	25.50" / 647.700 mm (0.648 m)
5	Weight (Approximate -- varies with connectors)	1,850 lbs / 839.146 Kilograms
6	Outside Diameter	23" / 584.200 (0.584 m)
7	Hydraulic operating pressure	≤ 1,500 PSI / 103.422 bar
8	Max hydraulic pressure	1,500 PSI / 103.422 bar
9	Close port size	3/4" NPT
10	Open volume	1.95 U.S. Gallons / 7.382 Liters
11	Close volume	2.38 U.S. Gallons / 9.009 Liters
12	4-1/16"10K Studded Top Bolts Diameter x Length	1- 1/8" x 5-3/4" / 28.575 mm x 146.050 mm
13	Quantity	8 per studded flange
14	Bolt Torque	686 ft-lbs / 930.079 N'm
15	4-1/16" 10K Flanged Bottom Bolts Diameter x Length	1- 1/8" x 8-1/2" / 28.575 mm x 215.900 mm
16	Quantity	8 per flange
17	Bolt Torque	686 ft-lbs / 930.079 N'm
18	Flange Gasket (Open-faced Bottom Flange)	BX 155
19	Studded Flange Gasket	BX 155
20	Lifting Capacity B.O.P. Lugs	

* Drawings and information contained herein are for general purposes and are for reference only. Dimensions may vary according to Manufacturer, Year Manufactured, Model or Type.

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SPECIFICATIONS

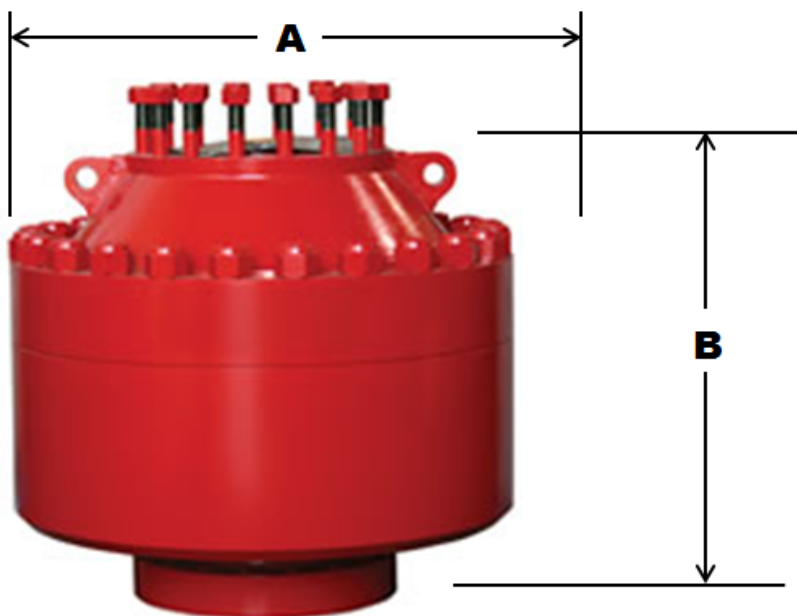
DIMENSIONAL DATA

Shaffer Spherical BOP 4-1/16" 10K

Size	Pressure rating (PSI)	Vertical Bore (inches)	Single Approx.* Weight (lbs)
4.0625"	10,000	4.0625"	2,650.00

*Approximate: Varies with connectors.

The capital letters in the following designations refer to the BOP dimensional views and dimensional charts shown.



Picture provided for reference only.

English Units (inches)		English Units (lbs)
A (Clearance Diameter)	B (height)	
23.000	25.500	1,850.000
Metric Units (m)		Metric Units (kgs)
A (Clearance Diameter)	B (height)	
0.584	0.648	839.146

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