



PATTERSON SERVICES, INC.

BOP Information Sheet*

Cameron U BOP Single 11" 10K

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

1	BOP Serial #	P-
2	Type	Type "U" Single Ram BOP 11" 10K
3	Manufacturer	Cameron
4	Height	35.688 " / 906.475 mm (.906 m)
5	Weight (Standard)	6,400 lbs. / 2902.991 kilos
6	Weight (with LBT) (LBT = 625 lbs each, 1250 lbs per pair)	7,650 lbs. / 3469.982 kilos
7	Length (bonnets closed)	96.250 " / 2.445 m
8	Length (bonnets opened)	146.875 " / 3.731 m
9	Length (bonnets closed, LBT installed) (LBT ≤ 17" each, 34" pair)	≤ 130.250 " / 3.308 m
10	Length (bonnets opened, LBT installed) (LBT ≤ 17" each, 34" pair)	≤ 180.875 " / 4.594 m
11	Bonnet bolt torque (API lube)	7,900 ft.lbs. / 10,711 N'm
12	Bonnet bolt torque (Moly Lube)	4,100 ft.lbs. / 5,559 N'm
13	Bonnet bolt (impact socket size)	2-3/4 " / 69.850 mm
14	Bonnet bolt (striking wrench size)	1-3/4 " / 44.450 mm
15	Hydraulic operating pressure	1,500 PSI / 103.422 bar
16	Max hydraulic pressure	3,000 PSI / 206.844 bar
17	Open and close porting size	1" NPT
18	Open volume/Standard Bonnet per cavity	3.4 gal. / 12.870 liters
19	Close volume/Standard Bonnet per Cavity	3.5 gal. / 13.249 liters
20	Open volume (with LBT installed)	6.8 gal. / 25.741 liters
21	Close volume (with LBT installed)	12.2 gal. / 46.182 liters
22	Ram Change rod open faced wrench size	2 " / 50.800 mm
23	(2) 11" 10K Flange-Bolt Diameter x Length	1-3/4 " x 15-3/8 " / 44.450 mm x 390.525 mm
24	Quantity	16 per flange
25	Bolt Torque	2,696 ft.lbs. / 3,655.24 N'm
26	(2) 4-1/16" 10K Flanged Outlet-Bolt Diameter x Length	1-1/8 " x 8-1/2 " / 28.575 mm x 215.900 mm
27	Quantity	8 per flange
28	Bolt Torque	686 ft.lbs. / 930.08 N'm
29	Flange Gasket	BX-158
30	Outlet Gasket	BX-155

* 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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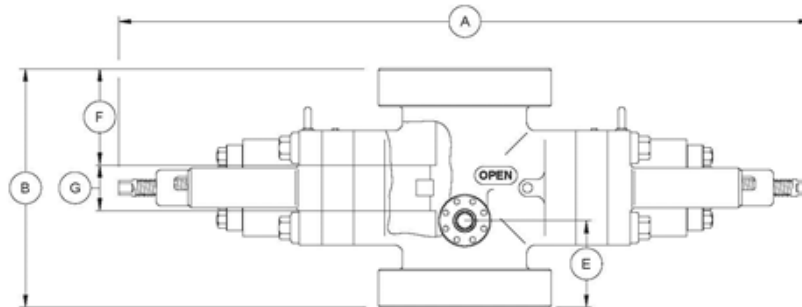
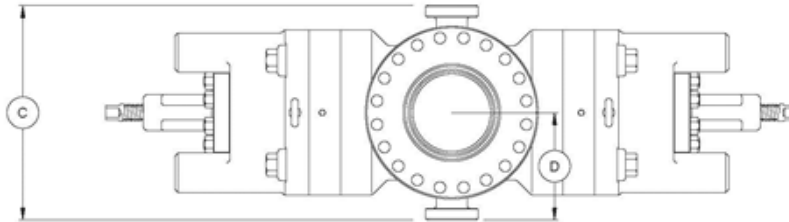
PATTERSON SERVICES, INC.

SPECIFICATIONS

DIMENSIONAL DATA

Cameron U BOP Single 11" 10K

Size (inches)	Pressure rating (PSI)	Vertical Bore (inches)	Single Approx. Weight (lbs)
11"	10,000	11"	6,400.00



Single U BOP

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

- A-1 Length - bonnets closed, locking screws locked
- A-2 Length - bonnets opened, locking screws unlocked .
- A-3 Length - bonnets closed, with wedgelocks
- A-4 Length - bonnets opened, with wedgelocks
- B-1 Height - flanged
- B-2 Height - clamp hubs
- C Width - no side outlets
- D Centerline of preventer to outlet flange or hub face. This distance is **variable** and must be determined per individual specifications.
- E-1 Centerline of side outlet to bottom flange face
- E-2 Centerline of side outlet to bottom hub face
- F-1 Top of ram to top flange face
- F-2 Top of ram to top hub face
- G Height of ram

English Units (inches)

A-1	A-2	A-3	A-4	B-1	B-2	C	D	E-1	E-2	F-1	F-2	G	English Units (lbs) Approx. Weight (lbs)
96.250	146.875	110.125	150.188	35.688	32.188	25.750	-	13.125	11.375	13.844	12.090	6.750	6,400.000

Metric Units (m)

Metric Units (m)						Metric Units (mm)						Metric Units (kg) Approx. Weight (kg)	
A-1	A-2	A-3	A-4	B-1	B-2	C	D	E-1	E-2	F-1	F-2	G	
2.445	3.731	2.797	3.815	0.871	0.744	638.175	-	315.925	252.425	334.162	270.662	171.450	2,902.991

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

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