



PATTERSON SERVICES, INC.

BOP Information Sheet*

CAMERON U BOP Single 13 5/8" 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 13-5/8" 10K
3	Manufacturer	Cameron
4	Height	41.688" / 1.059 m
5	Weight (Standard)	10,300 lbs. / 4,672.001 kg
6	Weight (with LBT) (LBT ≤ 1,050 lbs each, 2,100 lbs per pair)	12,400 lbs / 5,624.545 kg
7	Length (bonnets closed)	114.125" / 2.899 m
8	Length (bonnets opened)	172.750" / 4.388 m
9	Length (bonnets closed, LBT installed) (LBT ≤ 19.750" each, 39.5" per pair)	153.625" / 3.902 m
10	Length (bonnets opened, LBT installed) (LBT ≤ 19.750" each, 39.5" per pair)	212.250" / 5.391 m
11	Bonnet bolt torque (API lube)	14,500 ft.lbs./19,659 N'm
12	Bonnet bolt torque (Moly Lube)	7,500 ft.lbs./10,169 N'm
13	Bonnet bolt (impact socket size)	3-1/2" / 88.900 mm
14	Bonnet bolt (striking wrench size)	2-1/4" / 57.150 mm
15	Hydraulic operating pressure	1,500 PSI / 103.422 bar
16	Max hydraulic operating pressure	3,000 PSI / 206.844 bar
17	Open and close porting size	1" NPT
18	Open volume/Standard Bonnet per cavity	5.5 gal. / 20.820 liters
19	Close volume/Standard Bonnet per Cavity	5.8 gal. / 21.955 liters
20	Open volume (with LBT installed)	10.5 gal. / 39.747 liters
21	Close volume (with LBT installed)	17.5 gal. / 66.245 liters
22	Ram Change rod open faced wrench size	2-1/4" / 57.150 mm
23	(2) 13-5/8" 10K Flange Bolt Diameter x Length	1-7/8" x 17-3/4" / 47.625 mm x 450.850 mm
24	Quantity	20 per flange
25	Bolt Torque	3,332 ft.lbs. / 4,517.526 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. / 930.079 N'm
29	Flange Gasket	BX-159
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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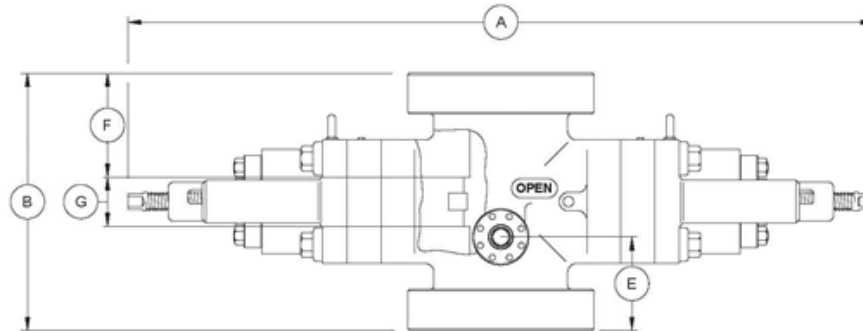
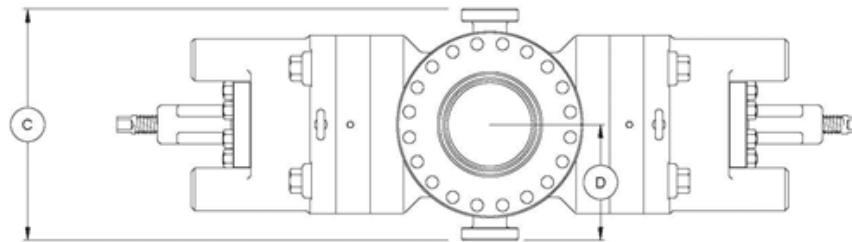
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SPECIFICATIONS

DIMENSIONAL DATA

CAMERON U BOP Single 13 5/8" 10K

Size (inches)	Pressure rating (PSI)	Vertical Bore (inches)	Single Approx. Weight (lbs)
13.625*	10,000	13.625*	10,300.00



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	Approx. Weight (lbs)
114.125	172.750	124.688	167.312	41.688	32.812	30.250	-	15.125	10.688	17.094	12.656	7.500	10,300.000

Metric Units (m)

Metric Units (m)						Metric Units (mm)						Metric Units (kg)	
A-1	A-2	A-3	A-4	B-1	B-2	C	D	E-1	E-2	F-1	F-2	G	Approx. Weight (kg)
2.899	4.388	3.167	4.250	1.059	0.833	768.350	-	384.175	271.475	434.188	321.462	190.500	4,672.001

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

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Hydraulic Ram Type

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