



PATTERSON SERVICES, INC.

BOP Information Sheet*

CAMERON U BOP Double 16 3/4" 5K

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" Double Ram BOP 16-3/4" 5K
3	Manufacturer	Cameron
4	Height	68.875" / 1.749 m
5	Weight (Standard)	26,940 lbs / 12,219.778 kg
6	Weight (with LBT) (LBT ≤ 1050 lbs ea., 2,100 per pair)	≤ 29,040 lbs. / 13,172.322 kg
7	Length (bonnets closed)	129.250" / 3.283 m
8	Length (bonnets opened)	202.125" / 5.134 m
9	Length - bonnets closed, LBT installed (LBT ≤ 28.25" each, 56.5" per pair)	≤ 185.75" / 4.718 m
10	Length - bonnets opened, LBT installed (LBT ≤ 28.25" each, 56.5" per pair)	≤ 258.625" / 6.569 m
11	Bonnet bolt torque (API lube)	12,500 ft.lbs. / 16,948 N'm
12	Bonnet bolt torque (Moly Lube)	6,500 ft.lbs. / 8,813 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 pressure	3,000 PSI / 206.844 bar
17	Open and close porting size	1" NPT
18	Open volume/Standard Bonnet per cavity	9.8 gal. / 37.100 liters
19	Close volume/Standard Bonnet per Cavity	10.6 gal. / 40.100 liters
20	Open volume (with LBT installed)	18.2 gal. / 68.90 liters
21	Close volume (with LBT installed)	19.0 gal. / 71.923 liters
22	Ram Change rod open faced wrench size	2-1/4" / 57.150 mm
23	(2) 16-3/4" 5K Flange-Bolt Diameter x Length	1-7/8" x 14-3/8" / 47.625 mm x 365.125 mm
24	Quantity	16 per flange
25	Bolt Torque	3,332 ft.lbs. / 4,517 N'm
26	(4) 4-1/16" 5K Flange Outlet-Bolt Diameter x Length	1-1/4" x 8-1/2" / 31.750 mm x 215.900 mm
27	Quantity	8 per flange
28	Bolt Torque	953 ft.lbs. / 1,292 N'm
29	Flange Gasket	BX-162
30	Outlet Gasket	R/RX-39

* 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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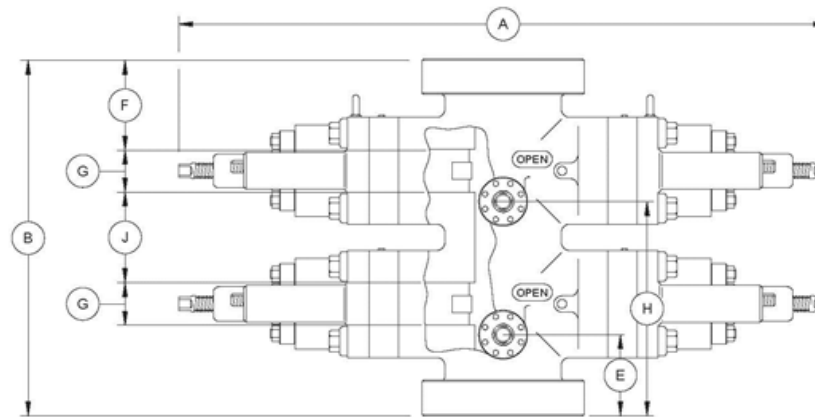
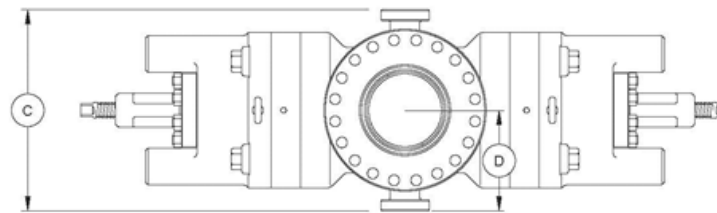
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SPECIFICATIONS

DIMENSIONAL DATA

CAMERON U BOP Double 16-3/4" 5K

Size	Pressure rating (PSI)	Vertical Bore (inches)
16.75"	5,000	16.75"



Double 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 below rams to bottom flange face
- E-2 Centerline of side outlet below rams to bottom hub face
- F-1 Top of upper ram to top flange face
- F-2 Top of upper ram to top hub face
- G Height of ram
- H-1 Centerline of side outlet between rams to bottom flange face
- H-2 Centerline of side outlet between rams to bottom hub face
- J Top of lower ram to bottom of upper ram

English Units (inches)

A-1	A-2	A-3	A-4	B-1	B-2	C	E-1	E-2	F-1	F-2	G	H-1	H-2	J	Approx. Weight (lb)
129.250	202.125	149.250	202.250	68.875	60.750	35.750	14.812	10.750	16.906	12.844	9.250	40.625	36.562	16.562	26,940.00

Metric Units (m)

A-1	A-2	A-3	A-4	B-1	B-2	C	E-1	E-2	F-1	F-2	G	H-1	H-2	J	Approx. Weight (kg)
3.283	5.134	3.791	5.137	1.749	1.543	908.050	376.225	273.050	429.412	326.238	234.950	1,031.875	0.929	420.675	12,219.778

1.032 m

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

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