



PATTERSON SERVICES, INC.

BOP Information Sheet*

CAMERON U BOP Double 7-1/16" 15K

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 7-1/16" 15K
3	Manufacturer	Cameron
4	Height	49.875" / 1.266 m
5	Weight (Standard)	6,750 lbs. / 3061.75 kg
6	Weight (with LBT) (LBT ≤ 290 lbs each, 580 lbs per pair)	7,330 lbs. / 3324.83 kg
7	Length (bonnets closed)	74.000" / 1.879 m
8	Length (bonnets opened)	109.500" / 2.781 m
9	Length (bonnets closed, LBT installed) (LBT ≤ 15" each, 30" per pair)	104.000" / 2.641 m
10	Length (bonnets opened, LBT installed) (LBT ≤ 15" each, 30" per pair)	139.500" / 3.54 m
11	Bonnet bolt torque (API lube)	6,000 ft.lbs. / 8135 N'm
12	Bonnet bolt torque (Moly Lube)	3,300 ft.lbs. / 4474 N'm
13	Bonnet bolt (impact socket size)	2-3/4" / 69.85 mm
14	Bonnet bolt (striking wrench size)	1-3/4" / 44.45 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 port size	1" NPT
18	Open volume w/ standard bonnets	1.3 gal. / 4.921 liter (per set of rams)
19	Close volume w/ standard bonnets	1.3 gal. / 4.921 liter (per set of rams)
20	Open volume (with LBT installed)	2.4 gal. / 9.084 liters
21	Close volume (with LBT installed)	4.2 gal. / 15.898 liters
22	Ram Change rod open faced wrench size	1-3/4" / 44.45 mm
23	(2)7-1/16"15K Flange-Bolts Diameter x Length	1-1/2" x 13" / 38.1 mm x 330.2 mm
24	Quantity	16 per flg.
25	Bolt Torque	1,668 ft.lbs. / 2261 N'm
26	(4)2-1/16" 15K Flange Outlet Bolts Diameter x Length	7/8" x 6-1/2" / 22.225 mm x 158.75 mm
27	Quantity	8 per flg.
28	Bolt Torque	319 ft.lbs. / 428 N'm
29	Flange Gasket	BX-156
30	Outlet Gasket	BX-152

* 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.

Technical information contained herein is furnished without charge or obligation and is given and accepted at recipient's sole risk. Because conditions of use may vary and are beyond our control, Patterson Services, Inc. makes no representation about, and is not responsible or liable for the accuracy or reliability of the data, described herein. Nothing contained in this document shall be considered a recommendation for any use that may infringe patent rights, or an endorsement of any particular material, equipment, service, or other item. The properties listed in this document are not specification. They are provided as information only and in no way modify, amend, enlarge or create any specification or warranty.





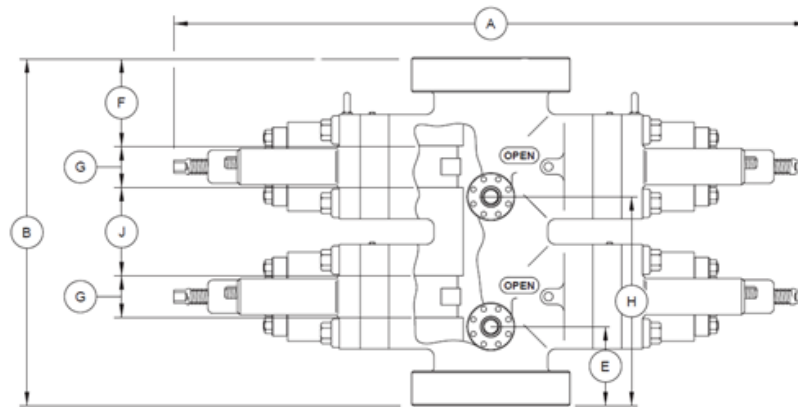
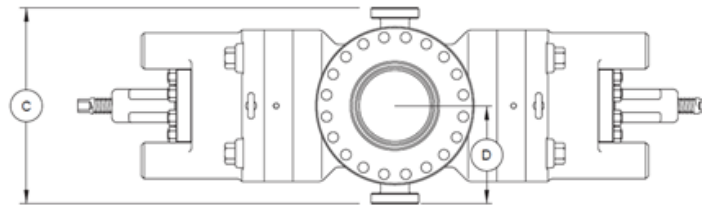
PATTERSON SERVICES, INC.

SPECIFICATIONS

DIMENSIONAL DATA

CAMERON U BOP Double 7-1/16" 15K

Size	Pressure rating (PSI)	Vertical Bore (inches)
7 - 1/16"	15,000	7 - 1/16"



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	English Units (lbs) Approx. Weight (lb)
74.000	109.500	-	-	49.875	-	20.625	11.688	-	12.656	-	5.500	29.750	-	12.562	6,750.000

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	E-1	E-2	F-1	F-2	G	H-1	H-2	J	Approx. Weight (kg)
1.879 m	2.781	-	-	1.267	-	523.875	296.875	-	321.462	-	139.700	755.650	-	319.075	3,061.748

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