

# FB-1600 and FC-1600 Triplex Mud Pumps





FC-1600 Triplex Mud Pump

## Introduction

Responsible for pumping mud throughout your system and as the heart of your rig, quality mud pumps are essential parts of your equipment suite. Rated at 1600 horsepower (HP), these mud pumps operate with high performance, easy maintenance, and durability in mind to meet your toughest demands.



FB-1600 Triplex Mud Pump



FC-1600 Triplex Mud Pump

### High Performance

- Suction desurger built into the suction manifold for reduction of pressure surges
- Low weight-to-horsepower ratio
- Single or dual motor drives both support 1600 HP

### Easy Maintenance

- Forged steel cylinders are identical and interchangeable
- One-piece piston rod
- Discharge strainer
- Pistons/piston rods are removed/replaced through the front of the pumps
- One-piece interchangeable eccentric straps

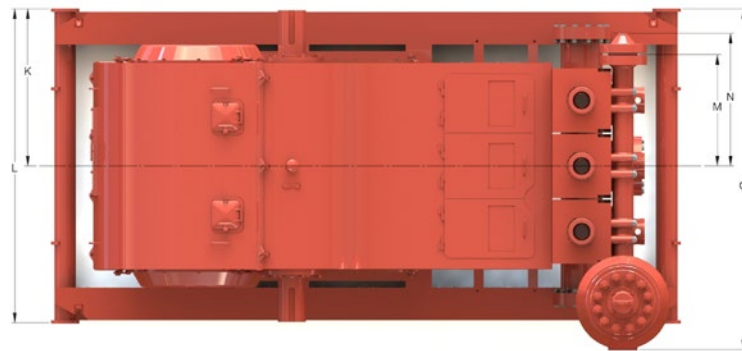
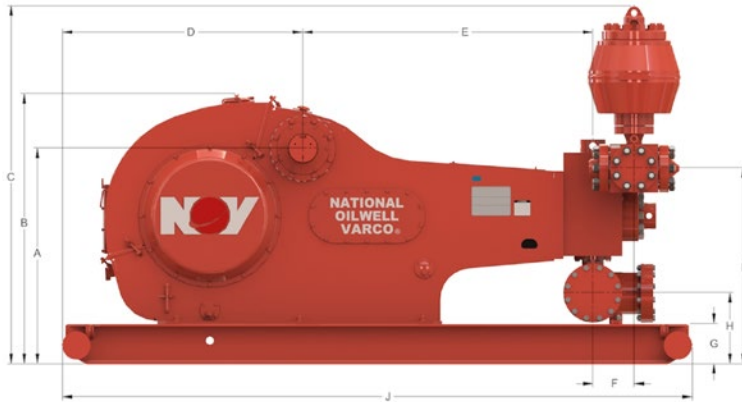
### Durability

- Rugged Fabriform™ construction
- Gear and pinion are machined from alloy steel forgings

### Additional Accessories

- Belt drive
- Drilling motors
- Mud gauge
- Pulsation dampener
- Relief valve

## FB-1600 Mud Pump



### Dimensions

<b>A</b>	65.75 in (1670 mm)	<b>I</b>	59.75 in (1518 mm)
<b>B</b>	82.31 in (2091 mm)	<b>J</b>	192.00 in (4877 mm)
<b>C</b>	109.06 in (2770 mm)	<b>K</b>	48.00 in (1219 mm)
<b>D</b>	73.38 in (1864 mm)	<b>L</b>	96.00 in (2438 mm)
<b>E</b>	88.38 in (2245 mm)	<b>M</b>	34.00 in (864 mm)
<b>F</b>	12.56 in (319 mm)	<b>N</b>	40.50 in (1029 mm)
<b>G</b>	12.25 in (311 mm)	<b>O</b>	104.19 in (2646 mm)
<b>H</b>	21.75 in (552 mm)		

### Specifications FB-1600

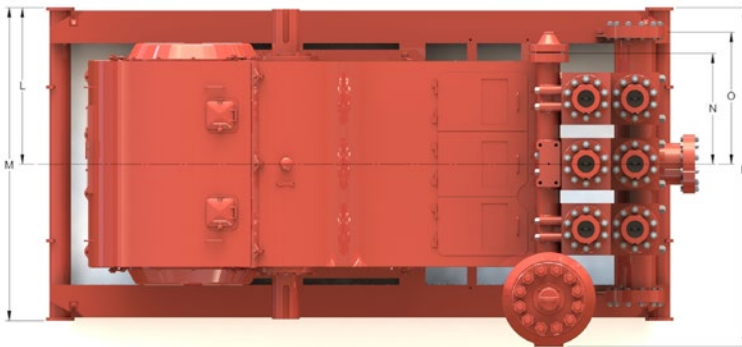
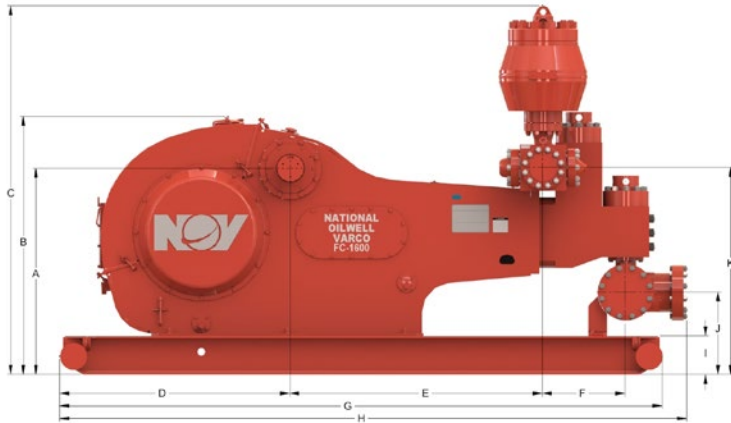
<b>Normal Horsepower Rating, HP (kW) @ 120 SPM</b>	1,600 (1,193)
<b>Size, Maximum Liner by Stroke, in (mm)</b>	7 in x 12 in (178 mm x 305 mm)
<b>Gear Ratio</b>	4.31:1
<b>Discharge Outlet, in (mm)</b>	5 in (127 mm) 7500 psi (527 kg/cm <sup>2</sup> ) API Flange
<b>Lubrication</b>	Pressure and splash to all moving parts
<b>Valve Pot</b>	Valve-over-valve, API #7
<b>Valve Pot Cover</b>	Screw Type
<b>Cylinder Head</b>	Screw Type
<b>Liner Lock</b>	Metal-to-metal
<b>Crosshead Guide</b>	Replaceable

### Performance of FB-1600 Triplex Mud Pump

Strokes Per Minute	Horsepower Rating	"KW Rating"	Liner Size and Pressure Rating											
			7 in	178 mm	6.75 in	171 mm	6.5 in	165 mm	6 in	152 mm	5.5 in	140 mm	5 in	127 mm
			psi	kg/cm <sup>2</sup>	psi	kg/cm <sup>2</sup>	psi	kg/cm <sup>2</sup>	psi	kg/cm <sup>2</sup>	psi	kg/cm <sup>2</sup>	psi	kg/cm <sup>2</sup>
			Volume - Gallons (Liters) per Minute											
120	1600	1193	720	(2724)	669	(2533)	621	(2349)	529	(2002)	444	(1682)	367	(1390)
110	1467	1094	660	(2497)	613	(2322)	569	(2153)	485	(1835)	407	(1542)	337	(1274)
100	1333	994	600	(2270)	558	(2111)	517	(1958)	441	(1668)	370	(1402)	306	(1158)
90	1200	895	540	(2043)	502	(1900)	465	(1762)	397	(1501)	333	(1261)	275	(1042)
80	1067	796	480	(1816)	446	(1689)	414	(1566)	353	(1334)	296	(1121)	245	(927)
70	933	696	420	(1589)	390	(1478)	362	(1370)	308	(1168)	259	(981)	214	(811)
60	800	597	360	(1362)	335	(1267)	310	(1175)	264	(1001)	222	(841)	184	(695)
<b>Gallons (Liters) per Revolution</b>			6.00	(22.70)	5.58	(21.11)	5.17	(19.58)	4.41	(16.68)	3.70	(14.02)	3.06	(11.59)

Based on 100% volumetric efficiency and 90% mechanical efficiency. Typical liners are shown. Other data is available upon request.

## FC-1600 Mud Pump



### Dimensions

<b>A</b>	66.13 in (1680 mm)	<b>I</b>	12.25 in (311 mm)
<b>B</b>	82.68 in (2100 mm)	<b>J</b>	26.62 in (676 mm)
<b>C</b>	117.99 in (2997 mm)	<b>K</b>	66.37 in (1686 mm)
<b>D</b>	73.38 in (1864 mm)	<b>L</b>	48.00 in (1219 mm)
<b>E</b>	80.50 in (2045 mm)	<b>M</b>	96.00 in (2438 mm)
<b>F</b>	26.38 in (670 mm)	<b>N</b>	33.97 in (863 mm)
<b>G</b>	192.00 in (4877 mm)	<b>O</b>	40.50 in (1029 mm)
<b>H</b>	199.88 in (5077 mm)	<b>P</b>	104.00 in (2642 mm)

### Specifications FC-1600

<b>Normal Horsepower Rating, HP (kW) @ 120 SPM</b>	1,600 (1,193)
<b>Size, Maximum Liner by Stroke, in (mm)</b>	7 in x 12 in (178 mm x 305 mm)
<b>Gear Ratio</b>	4.31:1
<b>Discharge Outlet, in (mm)</b>	5 in (127 mm) 7500 psi (527 kg/cm <sup>2</sup> ) API Flange
<b>Lubrication</b>	Pressure and splash to all moving parts
<b>Valve Pot</b>	Valve-over-valve, API #7
<b>Valve Pot Cover</b>	Screw Type
<b>Cylinder Head</b>	Screw Type
<b>Liner Lock</b>	Metal-to-metal
<b>Crosshead Guide</b>	Replaceable

### Performance of FC-1600 Triplex Mud Pump

Strokes Per Minute	Horsepower Rating	"KW Rating"	Liner Size and Pressure Rating													
			7 in	178 mm	6.75 in	171 mm	6.5 in	165 mm	6 in	152 mm	5.5 in	140 mm	5 in	127 mm	4.5 in	114 mm
			3429	241	3688	259	3977	280	4668	328	5555	391	6722	473	7500	527
			psi	kg/cm <sup>2</sup>	psi	kg/cm <sup>2</sup>	psi	kg/cm <sup>2</sup>	psi	kg/cm <sup>2</sup>	psi	kg/cm <sup>2</sup>	psi	kg/cm <sup>2</sup>	psi	kg/cm <sup>2</sup>
			Volume - Gallons (Liters) per Minute													
120*	1600*	1193*	720	(2724)	669	(2533)	621	(2349)	529	(2002)	444	(1682)	367	(1390)	297	(1126)
110	1467	1094	660	(2497)	613	(2322)	569	(2153)	485	(1835)	407	(1542)	337	(1274)	273	(1032)
100	1333	994	600	(2270)	558	(2111)	517	(1958)	441	(1668)	370	(1402)	306	(1158)	248	(938)
90	1200	895	540	(2043)	502	(1900)	465	(1762)	397	(1501)	333	(1261)	275	(1042)	223	(844)
80	1067	796	480	(1816)	446	(1689)	414	(1566)	353	(1334)	296	(1121)	245	(927)	198	(751)
70	933	696	420	(1589)	390	(1478)	362	(1370)	308	(1168)	259	(981)	214	(811)	174	(657)
60	800	597	360	(1362)	335	(1267)	310	(1175)	264	(1001)	222	(841)	184	(695)	149	(563)
<b>Gallons (Liters) per Revolution</b>			6.00	(22.70)	5.58	(21.11)	5.17	(19.58)	4.41	(16.68)	3.70	(14.02)	3.06	(11.58)	2.48	(9.38)

Based on 100% volumetric efficiency and 90% mechanical efficiency. \* Rated maximum input horsepower and speed

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