



Flange Connections

Pump Model	Discharge Connection Sizes	Suction Connection Sizes
Calder MUD 750	4" ANSI Flange	6" (152.4) Grooved Pipe 8" ANSI 150 lb

Specifications

Pump Type:

Triplex Reciprocating Piston Pump

Maximum Input Power:

750 kW (1,000 HP) Continuous

Stroke Length:

200 mm

Maximum Rod Load:

578 kN (130,000 lbs)

Approximate Weight:

8,200 Kgs

Pump Power End:

Fabricated from High Strength Alloy Steel

Gears:

Helical

Gear Ratio:

6.35:1 / 7.00:1 / 7.5:1

Rod Bearings:

Shell Type Replaceable

Main Bearings:

Straight Roller

Pinion Bearings:

Spherical Roller

Crankshaft:

Alloy Steel Nitrided

Connecting Rod:

One Piece Forged Steel

Crosshead:

Cast Steel

Crosshead Guide:

Bronze Replaceable

Fluid End:

Piston Type Segmented Block

Piston Diameter:

114 mm to 178 mm (4.5 to 7.0 inches)

Liners:

Hard Steel or Blue Lightening

Discharge Connection:

4" ANSI Flange

Suction Inlet:

8" ANSI 150 lb RF

Valves and Seals:

APT 6 Stem Guided & Hard Steel Seats

Power End Lubrication:

140 Lpm Required

Packing Lubrication:

Optional Air Driven Air/Oil or Mechanical Oil Drip System Available



MUD 750 Triplex Piston Pump



INNOVATION THROUGH EXPERIENCE

Continuous Duty Performance Chart

4.5" to 7.0" Piston x 8" Stroke, Single Acting Triplex Piston Pump

IMPERIAL UNITS

Plunger Diameter Inches	Displacement Factors@100% Volumetric Efficiency US Gallons/Rev GPR	Pump Speed in Crankshaft Revolutions per Minute (RPM)									
		60		80		100		120		140***	
		Capacity @100% VE** GPM	Discharge Pressure Max @ Capacity PSIG	Capacity @100% VE** GPM	Discharge Pressure Max @ Capacity PSIG	Capacity @100% VE** GPM	Discharge Pressure Max @ Capacity PSIG	Capacity @100% VE** GPM	Discharge Pressure Max @ Capacity PSIG	Capacity @100% VE** GPM	Discharge Pressure Max @ Capacity PSIG
7	3.999	240	2874	320	2872	400	2870	480	2870	560	2538
6.5	3.448	207	3332	276	3331	345	3329	414	3328	483	2943
6	2.938	176	3910	235	3908	294	3907	353	3905	411	3454
5.5	2.468	148	4655	197	4653	247	4650	296	4649	346	4111
5	2.04	122	5850	163	5850	204	5850	245	5850	286	4974
4.5	1.652	99	6500	132	6500	165	6500	198	6500	231	6141
Input Power @ 85% ME***	BHP**	473		630		787		1000		1000	
Pinion RPM @ 7.0 : 1 Gear Ratio		420		560		700		840		980	

*VE = Volumetric Efficiency, **BHP (Brake Horsepower) is based on 85% Mechanical Efficiency. *** Speeds above 120 RPM are not recommended for continuous drilling operation.

METRIC UNITS

Plunger Diameter mm	Displacement Factors@100% Volumetric Efficiency Litres/Rev LPR	Pump Speed in Crankshaft Revolutions per Minute (RPM)									
		60		80		100		120		140***	
		Capacity @100% VE** LPM	Discharge Pressure Max @ Capacity Bar	Capacity @100% VE** LPM	Discharge Pressure Max @ Capacity Bar	Capacity @100% VE** LPM	Discharge Pressure Max @ Capacity Bar	Capacity @100% VE** LPM	Discharge Pressure Max @ Capacity Bar	Capacity @100% VE** LPM	Discharge Pressure Max @ Capacity Bar
178	15.14	908	198	1211	198	1514	198	1817	198	2120	175
165	13.05	783	230	1045	230	1306	230	1567	230	1828	203
152	11.12	666	270	889	270	1113	269	1336	269	1556	238
140	9.34	560	321	746	321	935	321	1120	321	1310	283
127	7.72	462	403	617	403	772	403	927	403	1083	343
114	6.25	375	448	500	448	625	448	749	448	874	424
Input Power @ 85% ME***	kW	354		473		591		750		750	
Pinion RPM @ 7.0 : 1 Gear Ratio		420		560		700		840		980	

*VE = Volumetric Efficiency, **kW (Brake kW) is based on 85% Mechanical Efficiency. *** Speeds above 120 RPM are not recommended for continuous drilling operation.



Calder Ltd
Prescott Drive
Warndon
Worcester
WR4 9NE
United Kingdom

web : www.calderltd.com
email : sales@calder.co.uk
tel : +44 (0) 1905 751790

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