


Project: Self priming diesel dewatering pump

Reference Number: N/M


Qty.	Description
2	<p>GZT-10 self priming diesel dewatering pump</p>  <p>Note: Product picture may differ from actual product, reference only.</p> <p>Product No: On request</p> <p>GZT self-priming pump are design for rugged and dependable solid handling application. The heavy duty and easy to maintain design provide economical and trouble free operation in handling solid-laden and slurries. The large volute design enable the pumps to reprime automatically after initial priming, without the need for suction or discharge check valves. Automatic repriming is even possible with the pump casing only partially filled with liquid and completely dry suction line.</p> <p>Complete unit consists of pump connect with diesel engine by coupling, instrumental panel, 10 hours Integrate oil tank, battery box with leads, heavy duty trailer.</p> <p>Liquid:</p> <p>Pumped liquid Water</p> <p>Liquid temperature range: 0-40°C</p> <p>Selected liquid temperature: 20°C</p> <p>Density: 997 kg/m³</p> <p>Technical:</p> <p>Flow to: 780m³/h</p> <p>Head to: 50m</p> <p>Seal: Mechanical seal</p> <p>Solid handling size to: 75mm</p> <p>Materials:</p> <p>Pump casing: Cast iron</p> <p>Cover plate: Cast iron</p> <p>Impeller: Ductile Iron</p> <p>Shaft: Cr steel</p> <p>Bearing: NSK</p> <p>Wear plate: Hardened steel</p> <p>Installation:</p> <p>Range of ambient temperature: -15 .. 40 °C</p> <p>Pump inlet: 250mm</p> <p>Pump outlet: 250mm</p> <p>Diesel engine data:</p> <p>Brand: Cummins</p> <p>Type: 6BTAA5.9-P180(Specially for pump use)</p> <p>Power: 132KW</p> <p>RPM: 1500RPM</p>

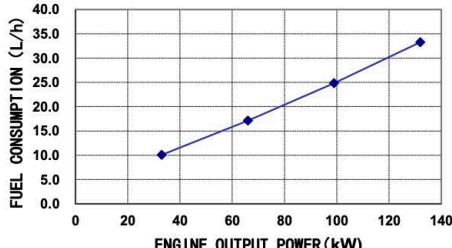
Project: Self priming diesel dewatering pump

Reference Number: N/M

Qty. **Description**

2 Diesel engine datasheet:

		Stationary Pump Engine Performance Data		6BTAA5.9-P180		132 kW @ 1800 r/min		
DONGFENG CUMMINS ENGINE Co.,LTD		XiangYang, Hubei Province, China www.cumminspowerunits.com		FR95998		CPL Code CPL3289	Revision 2017/4/17	Version 00
Displacement: 5.9L		Aspiration: Turbocharged & Aftercooled						
Application: Stationary Pump		Fuel System: Mechanical Pump + Electronical Governor						
All data is based on the engine operating without air compressor,fan,generator,fan,optional equipment and driven components .								
All data is based on the engine operating with 3.7 kPa inlet air restriction , 10 kPa exhaust restriction and with 13 kPa Inter-cooled implement differential pressure								
Curves shown above represent gross engine performance capabilities obtained and corrected in accordance with GB/T18297 conditions of 99kPa baiometric press. 298K inlet air temperature. and 1kPa water vapor pressure .								
Performance curve								
1500rpm Engine performance data								
ENGINE OUTPUT POWER			FUEL CONSUMPTION					
%	kW	Ps	g/kW.h	L/h				
100	132	180	208	33.3				
75	99	135	207	24.8				
50	66	90	214	17.1				
25	33	45	252	10.1				



General Performance Data			
Low idle speed:	800±50	rpm	
Maximum no load speed:	1890±20	rpm	
Maximum overspeed capability(15sec max):	2900	rpm	
Maximum altitude limit for continious running:	1500	m	
* Above 1500m, power derated 4% per 300m			
Cold start capability(Sea Level without Load)			
Without start add device:	-12	°C	
With air intake preheating:	-35	°C	
Cold start capability(Sea Level with Load)*			
Max parasitic load at 0℃ @ 500r/min without Aid:	NA	N.m	
Max parasitic load at -15℃ @ 500r/min without Aid:	NA	N.m	

* The data measured at 101kPa atmospheric pressure, crank speed 120r/min, Engine use 5W40 lube oil and diesel refer to GB19147

Performance data	
Parameter	Advertised Power
Engine Speed(rpm)	1800
Output Power(kW)	132
Torque(N.m)	700
Inlet air flow(L/s)	135
Charge air flow(kg/min)	628
Exhaust gas flow(kg/min)	628
Exhaust gas temperature(deg C)	540
Heat rejection to coolant(kW)	63
Radiator coolant flow(L/min)	144
Heat rejection to charge air cooler(kW)	22
Turbo Comp.Outlet Pressure(kPa)	145
Temperature(deg C)	150
Fuel Consumption(kg/hr)	28

Project: Self priming diesel dewatering pump
Reference Number: N/M

Qty.	Description																																																																																										
2	<div><p>Pump performance curve 10" x 10"</p><p>The graph shows the performance characteristics of the pump. The y-axis represents Total Head in feet (0 to 160) and meters (0 to 50). The x-axis represents Flow in US GPM (0 to 350), L/s (0 to 13), and m³/h (0 to 125). Efficiency curves are shown for 70%, 75%, and 79%. NPSH curves are provided for various RPMs from 1450 down to 650. An operating range is marked for flow between 10 and 20 GPM and head between 10 and 160 FT.</p><table><caption>Approximate Total Head (FT) vs Flow (US GPM) for 10" x 10" pump</caption><tr><th>Flow (US GPM)</th><th>1450 RPM</th><th>1350 RPM</th><th>1250 RPM</th><th>1150 RPM</th><th>1050 RPM</th><th>950 RPM</th><th>850 RPM</th><th>750 RPM</th><th>650 RPM</th></tr><tr><td>0</td><td>160</td><td>145</td><td>130</td><td>115</td><td>100</td><td>85</td><td>70</td><td>55</td><td>40</td></tr><tr><td>50</td><td>150</td><td>135</td><td>120</td><td>105</td><td>90</td><td>75</td><td>60</td><td>45</td><td>30</td></tr><tr><td>100</td><td>140</td><td>125</td><td>110</td><td>95</td><td>80</td><td>65</td><td>50</td><td>35</td><td>20</td></tr><tr><td>150</td><td>130</td><td>115</td><td>100</td><td>85</td><td>70</td><td>55</td><td>40</td><td>25</td><td>10</td></tr><tr><td>200</td><td>120</td><td>105</td><td>90</td><td>75</td><td>60</td><td>45</td><td>30</td><td>15</td><td>5</td></tr><tr><td>250</td><td>110</td><td>95</td><td>80</td><td>65</td><td>50</td><td>35</td><td>20</td><td>10</td><td>0</td></tr><tr><td>300</td><td>100</td><td>85</td><td>70</td><td>55</td><td>40</td><td>25</td><td>10</td><td>0</td><td>0</td></tr><tr><td>350</td><td>90</td><td>75</td><td>60</td><td>45</td><td>30</td><td>15</td><td>0</td><td>0</td><td>0</td></tr></table></div>	Flow (US GPM)	1450 RPM	1350 RPM	1250 RPM	1150 RPM	1050 RPM	950 RPM	850 RPM	750 RPM	650 RPM	0	160	145	130	115	100	85	70	55	40	50	150	135	120	105	90	75	60	45	30	100	140	125	110	95	80	65	50	35	20	150	130	115	100	85	70	55	40	25	10	200	120	105	90	75	60	45	30	15	5	250	110	95	80	65	50	35	20	10	0	300	100	85	70	55	40	25	10	0	0	350	90	75	60	45	30	15	0	0	0
Flow (US GPM)	1450 RPM	1350 RPM	1250 RPM	1150 RPM	1050 RPM	950 RPM	850 RPM	750 RPM	650 RPM																																																																																		
0	160	145	130	115	100	85	70	55	40																																																																																		
50	150	135	120	105	90	75	60	45	30																																																																																		
100	140	125	110	95	80	65	50	35	20																																																																																		
150	130	115	100	85	70	55	40	25	10																																																																																		
200	120	105	90	75	60	45	30	15	5																																																																																		
250	110	95	80	65	50	35	20	10	0																																																																																		
300	100	85	70	55	40	25	10	0	0																																																																																		
350	90	75	60	45	30	15	0	0	0																																																																																		

Project: Self priming diesel dewatering pump

Reference Number: N/M

Qty. **Description**

2 **Pump outline drawing**

EXTERNAL DIMENSIONS MILLIMETERS (INCHES)

