

Model: PPG88S12-PPT-TCD3.6L4

Specification Sheet

Patriot Prime - Vacuum Assist, Priming System.
 Diesel-driven, Portable Pump Package DOT Trailer Mounted

Package Overview

Suction Size	8" Flange, Class 150
Discharge Size	8" Flange, Class 150
Solids Handling	3.00"
Max Flow	5,040 gpm
Shutoff Head	180 ft
Max Speed	2000 rpm
Impeller Diameter	12.25"

Pump Specification

Make / Model	Pioneer / SC88S12L71-EO311
Impeller Type	Enclosed, Dual Vane, Solids Handling
Volute Type	Tangential
BEP	69%
Run-Dry Mechanical Seal	Tungsten Carbide vs. Silicon Carbide Seal Faces. Viton Elastomers with Stainless-Steel Spring & Hardware.
Seal Lubrication	ISO 32 (10W) Hydraulic Oil

Materials of Construction

Impeller	CA6NM Stainless Steel
Shaft	17-4 PH Stainless Steel
Back-plate	A536 Grade 65-45-12 Ductile Iron
Wear Ring	ASTM A48 Class 40 Gray Iron
Volute Casing	A536 Grade 65-45-12 Ductile Iron
Suction Cover	A536 Grade 65-45-12 Ductile Iron
Bearing Frame	ASTM A48 Class 30/35 Gray Iron

Priming System

Vacuum Pump	Diaphragm Style, 50cfm air removal capability.
Oil Lubricated Bearings	30W, non-Detergent
Air Removal Capability	Up to 50 CFM
Priming Chamber Suction Spool	ASTM A36 Carbon Steel Const. 304 Stainless Steel Float Ball & Linkage. (3) Quick Clamps for fast access to: Strainer, Linkage Assembly & Air Valve
Check Valve	8" Val-Matic Swing-Flex® Ductile Iron/Buna-N Disc
Drive	Guarded, Timing Belt & Pulleys



Engine Specification

Make & Model	Deutz / TCD3.6L4
Gross HP Rating	134hp @ 2300rpm
Continuous HP Rating	99.7hp @ 1800 - 2300rpm
Coolant	DEUTZ cooling system conditioner DQC-CB mixed with water.
Lube Oil	Rodon 10W40 Low SAPS "Other Oils" Include ACEA E7, A3/B3, A3/B4, API CI-4
Emissions Rating	US EPA Tier 4
Engine Aftertreatment	DOC & SCR. Requires DEF
Fuel Consumption	5.0 Gph @ 1800rpm-Full Load
Industrial Battery	12 V - 925 CCA Wet/Flooded

Engine Control Panel

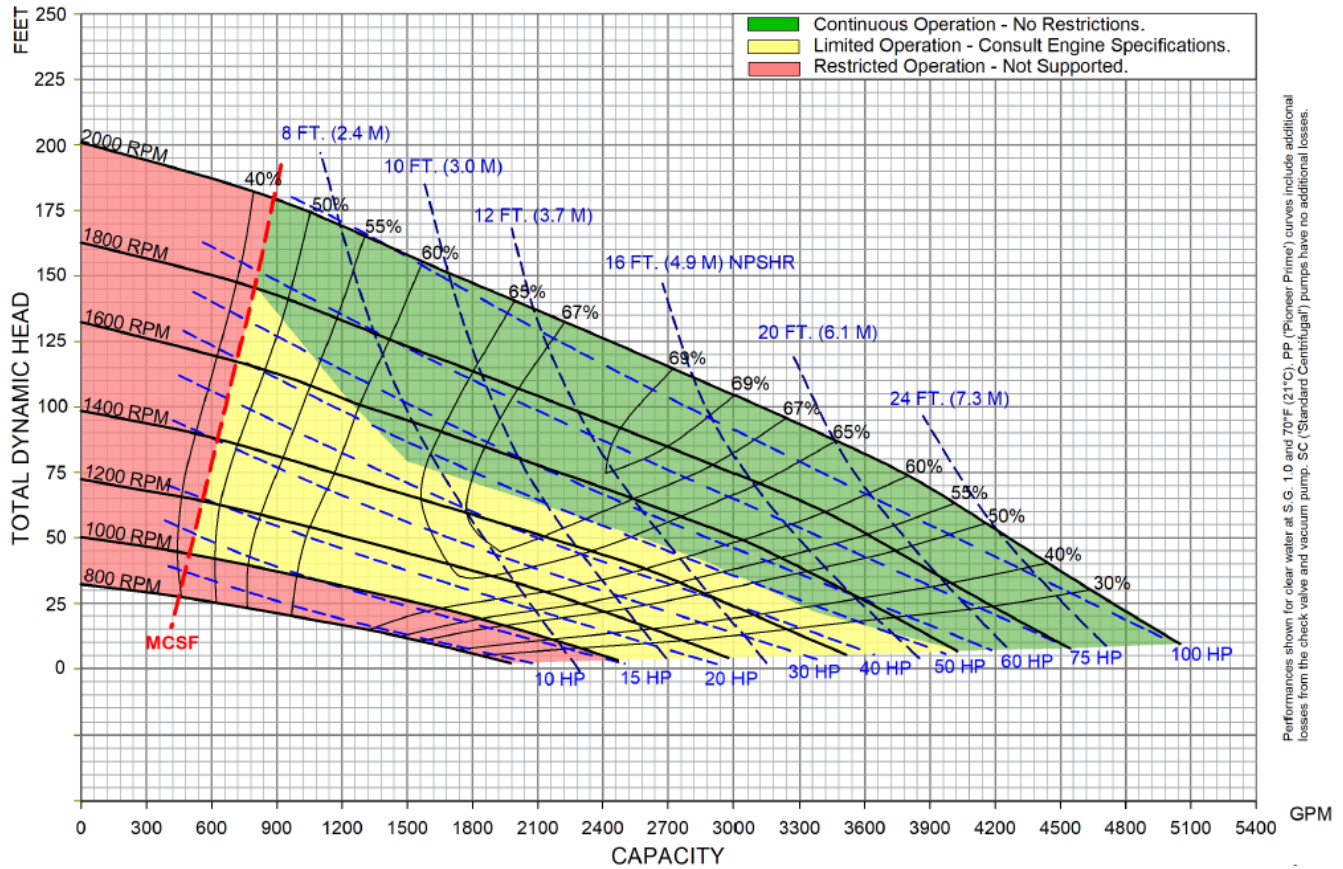
Make & Model	Controls Inc / CX-83516-AS-CPE
Display	3.12" OLED Graphical Screen. Up to 24 parameters displayed
Operating Voltage	6-32 VDC
Speed Control	Toggle Switch (up/down)
Auxiliary Operation	Automatic Start/Stop with Float Controls & Level Transducers

Enclosed Platform - DOT Trailer Mounted

Fuel capacity	160 US Gal
Platform Material & Coatings	ASTM A36 Carbon Steel Material. Sandblasted and Powder Coated.
Leveling Jacks	(1) 2500lb, Sidewind, Tongue Jack. (2) 2000lb, Sidewind, Swivel Mount, Rear Stabilizing Jacks
Wheels & Tires	Radial Type - ST235-80R16 Single Tire Rating: 3.2k @ 80PSI. Mounted to 16" Steel Wheel
Trailer Brakes	Electric Brake Hubs
Trailer Suspension	7,000 lbs. Strait Torsion Axle.
Trailer Connection	7 Pin Connector Plug Pintle Ring Hitch Connection



Performance Curve



Package Dimensions

OpenPlatform – DOT Trailer Mounted

Dry Weight: 5,250 lbs

Wet Weight: 6,386 lbs

