



# 10" x 8" BYPASS PUMP PACKAGE

PUMP TYPE: CORNELL ENGINE: PERKINS

# **SPECIFICATION SHEET**

GENERAL BYPASS PUMP PACKAGE INFORMATION						
TPC Model	Pump	Engine	Max. Solids	Fuel Tank	Suc. x Dis.	
TPK8-FS	Cornell	Perkins	3"	330 gals	10" x 8"	

**Engine rating: Rated for 2200 rpm engine speed.** (Corrected per SAE J1349) Intermittent - Applicable for a varying intermittent loads with no overload capability. Continuous - Continuous prime rating is applicable for supplying power to a varying load for an unlimited amount of running time, with 10% overload capacity available for 1 out of every 12 hours.

## STANDARD PUMP PACKAGE DESCRIPTION

Tradewinds Power Corp (TPC) bypass 10" x 8" pump packages are designed for continuous operation in rugged environments requiring uninterrupted de-watering for extended periods. As standard a automatic priming centrifugal pump and diesel engine are close coupled together on a DOT trailer. The package designed to be easily transported to site making it the preferred pump for renters, municipalities, industrial users, and construction.

#### Key TPK8-FS Pump Package Features are:

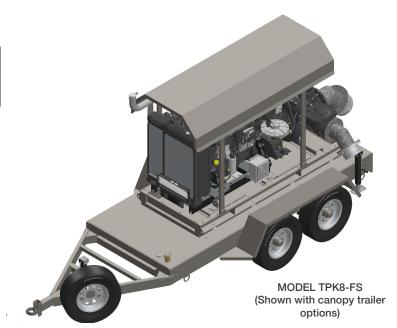
- CORNELL model 8NHTH Redi-Primel<sup>®</sup> bypass pump
- · Perkins diesel engine
- · EPA and CARB certified for mobile applications
- · DOT trailer for road and rough terrain mobility
- · Heavy duty lifting bale
- 12v starter, charger and battery
- · Auto start controller
- · Open configuration with option for enclosure
- · Spray bed liner that lasts longer than paint
- · Torque spring axles for smoother equipment ride
- · Hose box assembly with 250 PSI hoses
- · All stainless steel hardware

#### Pump Features:

- 10" discharge x 8" suction with 125# cast iron flanges
- Cast iron casing
- 2-vane enclosed stainless steel impeller that handles 3" diameter solids
- Replaceable wear rings & Run Dry Seals
- Cornell's patented Cycloseal<sup>®</sup> design with run-Dry oil lubrication system
- Vacuum pump 50 SCFM maximum. Positive seating vacuum priming valve prevent water carry-over to the vacuum, pump or atmosphere
- · Ball valve made out of brass to prevent corrosion
- Alarms for Low Oil Level for run dry seals

#### Optional Equipment Available for TPK8-FS Pump Package:

- Sound attenuated full enclosure fabricated from marine grade aluminum, and powder paint for durability
- Package can be easily upgraded to a pressure, level or flow transducer auto-start configuration



### Optional Equipment. Continued:

- · Options for Flow Meters and Level Transducers
- · Hoses with Stainless Steel couplings

### **AUTOMATIC ENGINE CONTROLLER:**

- · Automatic engine controller with digital display of all functions
- · Quick and easy to install
- · Advanced, rugged, reliable microprocessor-based design
- · Full engine monitoring and shut down protection
- · Full autostart, manual start, and off controls
- 3.8" monochrome, transflective, white back light LCD



MPC20 ENGINE CONTROLLER

#### WARRANTY:

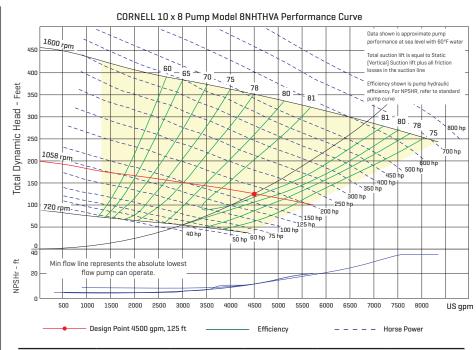
- Engine & Pump covered under the OEM manufacturer's warranty - consult Tradewinds Power Corp for details
- · Complete package supplied with one-year limited warranty

The manufacture reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.



<b>TPK8-FS</b>	Performance	Curve
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Pump Specifications		
Manufacturer	Cornell	
Model #	8NHTH	
Туре	10" discharge x 8" suction	
Priming	Self-prime	
Casing material	Cast iron	
Impeller	Enclosed 2-vane	
Impeller material	Stainless steel	
Ball valve material	Brass	
Solid size managed	3"	
Wear rings	Replaceable	
Ball bearing life	Heavy duty 50,000 hours	
Shaft sleeve material	Stainless steel	
Vacuum Pump	50 SCFM maximum	
Engine Specifications		
Manufacturer	Perkins	
Model	1206F-E70TTA	
Emissions	Tier 4 - Final	
Crankshaft speed	1,800 rpm	
Engine Type & Combustion	Diesel Direct Injection	
Fuel Injection System	High Pressure Common Rail	
Fuel Presssure	1800 bar	
Aspiration	Turbo-Charged aftercooled	
Diesel fuel grade	EN590 : 2009 Diesel	
Cylinder Arrangement	In-line 6	
Displacement in <sup>3</sup> (liters)	427.7 [7.01]	
Bore and stroke ins (mm)	4.13 X 5.3 (105 X 135)	
Peak power hp (kW) @ 2200 rpm	301.0 (225.0)	
Cooling	Water Cooled	
Engine Control	Electronic Engine Management	
Compression ratio	16.5:1	
Standard Pump Package Arra		
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Coupling Arrangement	Close coupled cam and groove	
Fuel tank	330 gallon mounted in base	
Starter and charging alternator	MPC20	
Exhaust	MPC20 Mounted silencer	
Hose coupling	Aluminum 250 psi	
Site handling management	Lifting points	
Options Offered for Pump Pac		
Sound attenuated enclosure	Aluminum powder coated	
Hose box	Mounted on bed	
Hose coupling option	Stainless steel	
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Auto switch operation options	Pressure/level/flow transducer	
	Pressure/level/flow transducer To track water pumped To measure height of water	



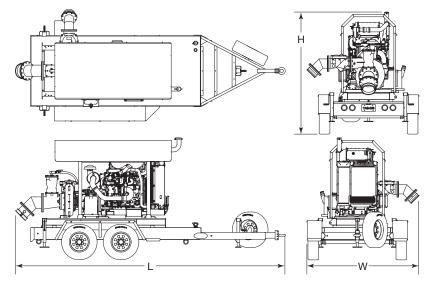
# **TPK8-FS Performance Table**

### Diesel Model: PERKINS 1206F-E70TTA

Pump Model: Cornell 8NHTH

Pump Details						
Encl. Solids Handling	Adjustable	Package Dimensions				
Design Point	4500 US gpm, 125 ft	Inches and Pounds				
Static Head	0 ft	Height	103.25			
Size	8NHTH	Length	214.00			
Diameter (inches)	22"	Width	86.50			
Speed	1058 rpm	Dry Weight	6360.9 lbs			

# **TPK8-FS Dimensions**



TRADEWINDS POWER CORP • 5820 NW 84th Avenue • Miami • Florida 33166

Call: 800.223.3289 or email: info@tradewindspower.com