

P-Series Submersible Effluent Pumps: Single-Phase, 60Hz, 4in (100mm)

Applications

Orenco's Submersible Effluent Pumps are used to transport screened effluent (with low TSS counts) from septic tanks or separate dosing tanks.

Orenco's P-Series 4in (100mm) Submersible Effluent Pumps are designed to be used in a variety of Orenco pumping packages, typically with a Biotube® ProPak™ pumping package. P-Series pumps are only available for sale in a limited number of Orenco pumping packages.



Orenco P-Series Submersible Effluent Pump

Features

P-Series pumps are constructed of lightweight, corrosion-resistant stainless steel and engineered plastics. The liquid end is cleanable in the field with common tools. These pumps meet UL requirements and are CSA certified to US and Canadian safety standards for effluent pumps.

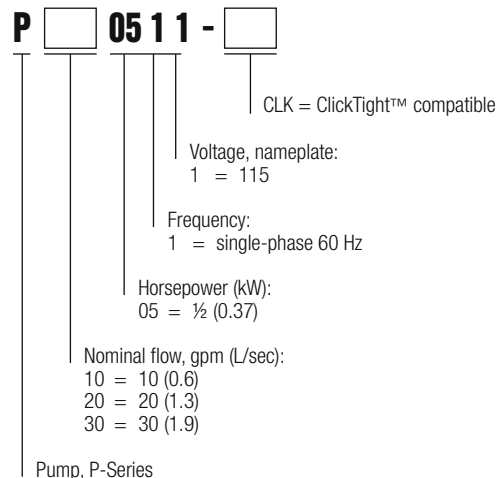
To specify this pump for your installation, require the following:

- Run-dry capability
- 1/8in (3mm) bypass orifice for motor cooling and to prevent air binding
- Pentek XE Series motor is UL, CSA approved and NSF/ANSI 61 certified
- Built-in thermal overload protection
- 16AWG, 3-conductor Type SOOW 600V motor cable (suitable for Class I, Division 1 and Division 2 applications)
- 36 month warranty from date of manufacture on liquid end against defects in materials or workmanship

Standard Models

P100511, P200511, P300511

Product Code Diagram



All product and performance assertions are based on proper design, installation, operation, and maintenance according to Orenco's current published documentation.

Specifications

| Pump Model | Design gpm (L/sec) | Horsepower (kW) | Phase | Nameplate voltage | Actual voltage | Design flow amps | Max amps | Discharge size and material | Length in (mm) | Min. liquid level in (mm) | Weight lb (kg) | Rated cycles per day |
|--------------------------|-----------------------|--------------------|-------|----------------------|-------------------|---------------------|----------|--------------------------------|-------------------|------------------------------|-------------------|-------------------------|
| P100511 ^{1,2,3} | 10 (0.6) | 0.5 (0.37) | 1 | 115 | 120 | 10.15 | 12 | 1¼in FRT | 21.50 (546) | 18 (457) | 25 (11.3) | 300 |
| P200511 ^{1,2,3} | 20 (1.3) | 0.5 (0.37) | 1 | 115 | 120 | 11.65 | 12 | 1¼in FRT | 22.25 (565) | 20 (508) | 24 (10.9) | 300 |
| P300511 ^{1,2,3} | 30 (1.9) | 0.5 (0.37) | 1 | 115 | 120 | 10.64 | 12 | 1¼in. FRT | 22.50 (571) | 22 (559) | 27 (12.2) | 300 |

1 Discharge is female NPT threaded, US nominal size, to accommodate Orenco discharge hose and valve assemblies. Consult your Orenco Distributor about fittings to connect discharge assemblies to metric-sized piping.

2 FRT = Fiberglass-reinforced thermoplastic

3 ClickTight™ compatible

Materials of Construction

| | |
|-------------------|---|
| Cable | 10ft (3m) 16/3 Type SOOW 600V motor cable |
| Coupling | Stainless steel, 300 series |
| Diffusers | Engineered composite |
| Discharge | Fiberglass-reinforced thermoplastic |
| Discharge bearing | Nylatron® |
| Drive shaft | Stainless steel, 300 series |
| Impellers | Engineered composite |
| Intake | Engineered composite |
| Intake screen | Polypropylene |
| Motor | Laser-welded 304L stainless steel construction. Pentek XE Series motor incorporates encapsulated epoxy stator design and professional-grade Class F insulation to provide long life in harsh environments. Each motor is 100% factory pressure tested and run tested. |
| Shell | Stainless steel |

Using a Pump Curve

A pump curve helps you determine the best pump for your system. Pump curves show the relationship between flow (gpm or L/sec) and pressure (total dynamic head or TDH), providing a graphical representation of a pump's optimal performance range. Pumps perform best at their nominal flow rate — the value, measured in gpm, expressed by the first two numerals in an Orenco pump's product code. The graphs on the following page use solid lines to show the optimal pump operation range. Dashed lines indicate flow rates outside of the optimal range for each pump. For the most accurate pump specifications, use Orenco's PumpSelect™ software.

Pump Curves

