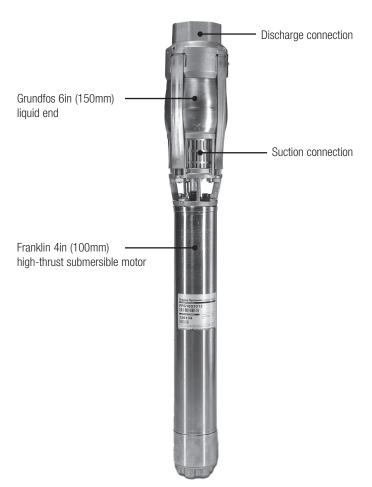
PFG-Series High-Flow 60Hz Submersible Effluent Pumps

Applications

Orenco's PFG-Series High-Flow Submersible Effluent Pumps are designed to transport screened effluent (with low TSS counts) in AdvanTex® AX-Max $^{\text{TM}}$ and AX-Mobile $^{\text{TM}}$ Treatment Systems. They are also used in pump applications where high flows are required.

Because PFG pumps have 6in (150mm) liquid ends, a 7in (178mm) flow inducer is required to house them.



Orenco PFG-Series High-Flow Submersible Effluent Pump

General

PFG-Series High-Flow Pumps* combine a 6in (150mm) liquid end and a 4in (100mm) pump motor to provide high flow and high head in applications where both are necessary. They are constructed of corrosion-resistant stainless steel.

PFG pumps are serviceable in the field with common tools. Because of their specific applications, they are not rated for run-dry capability. All PFG pumps are CSA certified to the US and Canadian safety standards for effluent pumps, meeting UL requirements.

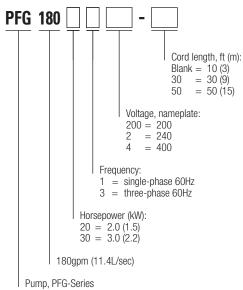
To specify this pump for a project, require the following features:

- Grundfos 6in (150mm) liquid end
- Franklin Electric Super Stainless motor, rated for continuous use and frequent cycling
- Type 14/4 SOOW 600V motor cable

Standard Models

PFG1802012, PFG1802032, PFG180203200, PFG1802034 PFG1803012, PFG1803032, PFG180303200, PFG1803034

Product Code Diagram



^{*} These pumps require a capacitor pack (sold separately or installed in a custom control panel).

Contact Orenco for information.

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



Specifications

| | Design gpm (L/sec) | Horsepower (KW) | Phase | Nameplate voltage | Actual voltage | Max amps | Discharge size and material* | Length in (mm) | Min. liquid level in (mm) | Weight Ib (kg) | Rated cycles per day |
|--------------|-----------------------|--------------------|-------|----------------------|-------------------|----------|---------------------------------|-------------------|------------------------------|-------------------|-------------------------|
| Pump Model | | | _ | | | | | | | | |
| PFG1802012 | 180 (11.4) | 2.0 (1.5) | 1 | 230 | 240 | 10.0 | 3in SS | 34.1 (866) | 34 (864) | 55 (24.9) | 100 |
| PFG1802032 | 180 (11.4) | 2.0 (1.5) | 3 | 230 | 240 | 6.7 | 3in SS | 33.5 (851) | 33 (838) | 50 (22.7) | 300 |
| PFG180203200 | 180 (11.4) | 2.0 (1.5) | 3 | 200 | 208 | 7.7 | 3in SS | 33.5 (851) | 33 (838) | 50 (22.7) | 300 |
| PFG1802034 | 180 (11.4) | 2.0 (1.5) | 3 | 460 | 480 | 3.4 | 3in SS | 33.5 (851) | 33 (838) | 50 (22.7) | 300 |
| PFG1803012 | 180 (11.4) | 3.0 (2.2) | 1 | 230 | 240 | 14.0 | 3in SS | 37.4 (950) | 37 (940) | 68 (30.8) | 100 |
| PFG1803032 | 180 (11.4) | 3.0 (2.2) | 3 | 230 | 240 | 9.5 | 3in SS | 34.4 (874) | 34 (864) | 63 (28.6) | 300 |
| PFG180303200 | 180 (11.4) | 3.0 (2.2) | 3 | 200 | 208 | 10.9 | 3in SS | 34.4 (874) | 34 (864) | 63 (28.6) | 300 |
| PFG1803034 | 180 (11.4) | 3.0 (2.2) | 3 | 460 | 480 | 4.8 | 3in SS | 34.4 (874) | 34 (864) | 63 (28.6) | 300 |

^{*}Discharge connection is a National Pipe Thread (NPT) threaded stainless steel receptacle-style port, 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.

Materials of Construction

| Coupling | Stainless steel | | | | |
|--------------------|--|--|--|--|--|
| Diffuser | Stainless steel | | | | |
| Discharge | Stainless steel | | | | |
| Discharge bearing | PTFE/stainless steel | | | | |
| Drive shaft | Stainless steel | | | | |
| Impeller | Stainless steel | | | | |
| Intake screen | Stainless steel | | | | |
| Motor | Franklin Electric high thrust. Filled with deionized water and propylene glycol for constant lubrication. Hermetically sealed windings. Kingsbutype thrust bearings. Continuous duty rated. Single-phase motors have built-in lightning arresters. Control panels featuring thermal overload protection are recommended. | | | | |
| Shell | Stainless steel | | | | |
| Suction connection | 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 nomenclature. The graph to the right uses a solid line to show the optimal pump operation range. Dashed lines indicate flow rates outside of this range. For the most accurate pump specification, use Orenco's PumpSelect™ software.

