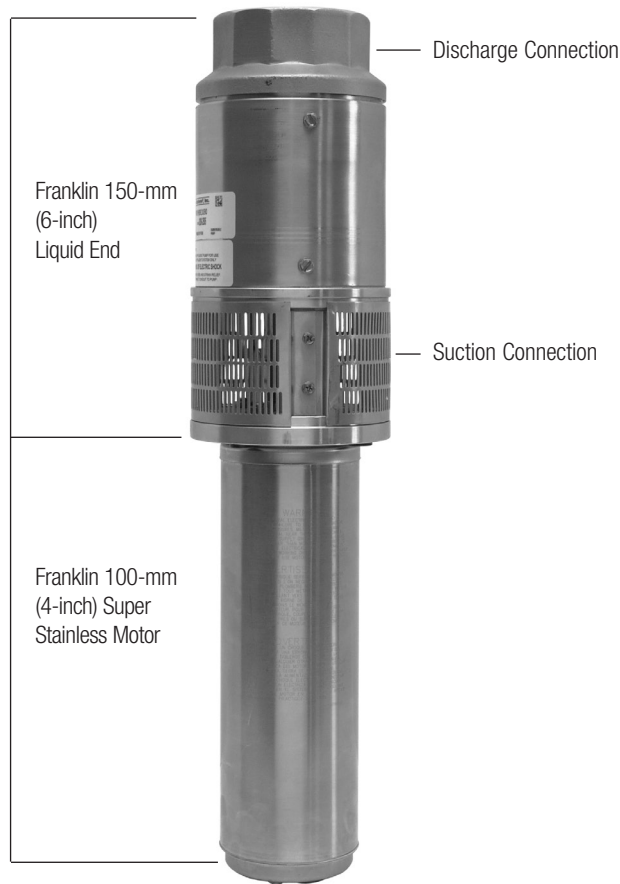


# PF Series 50-Hz, High-Flow Submersible Effluent Pumps

## Applications

Orenco's 50-Hz, High-Flow Submersible Effluent Pumps are designed to transport screened effluent (with low TSS counts) in AdvanTex® AX-Max and AX-Mobile Treatment Systems. They are also used in pump applications where high flows are required.

Because these pumps have 150-mm (6-inch) liquid ends, a 200-mm (8-inch) flow inducer is required to house them.



Orenco® PF(50HZ)1201552 pump



## General

Orenco's 50-Hz, High-Flow Submersible Effluent Pumps combine a 150-mm (6-inch) liquid end and a 100-mm (4-inch) pump motor to provide high flow and high head in applications where both are necessary. They are constructed of corrosion-resistant stainless steel and engineered plastics.

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

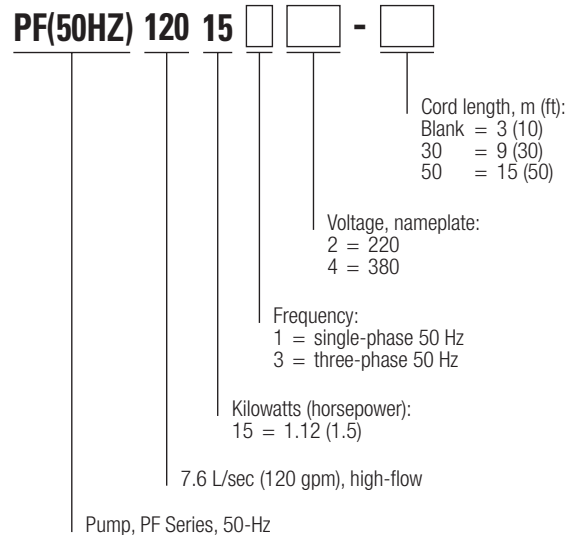
To specify this pump for your installation, require the following:

- Franklin Electric Super Stainless motor, rated for continuous use and frequent cycling
- Type 16/3 SOOW 600-V motor cable for 1-phase pumps or Type 14/4 SOOW 600-V motor cable for 3-phase pumps

## Standard Models

PF(50HZ)1201512, PF(50HZ)1201532, PF(50HZ)1201534

## Product Code Diagram



## Specifications

Pump Model	Design L/sec (gpm)	Kilowatt (hp)	Phase	Nameplate voltage	Actual voltage	Design flow amps	Max amps	Impellers	Discharge size and material <sup>1</sup>	Length, mm (in.)	Min. liquid level, <sup>2</sup> mm (in.)	Weight, <sup>3</sup> kg (lb)	Rated cycles/day
PF(50HZ)1201512	7.6 (120)	1.1 (1.5)	1	220	230	8.8	8.9	1	3 in. SS	635 (25.0)	635 (25.0)	21 (47)	100
PF(50HZ)1201532	7.6 (120)	1.1 (1.5)	3	220	230	4.8	4.8	1	3 in. SS	584 (23.0)	584 (23.0)	21 (47)	300
PF(50HZ)1201534	7.6 (120)	1.1 (1.5)	3	380	380-415	2.8	2.8	1	3 in. SS	584 (23.0)	584 (23.0)	19 (42)	300

## Materials of Construction

Discharge	Stainless steel
Suction connection	Stainless steel
Discharge bearing	Neoprene
Drive shaft	15.9-mm (5/8-in.) hexagonal stainless steel
Diffuser	Noryl GFN3
Coupling	Stainless steel
Impeller	Noryl GFN3
Shell	Stainless steel
Intake screen	Stainless steel
Motor	Franklin Electric Super Stainless Motor. Filled with deionized water and propylene glycol for constant lubrication. Hermetically sealed motor housing. Kingsbury-type thrust bearings. Rated for continuous duty. Single-phase motors have built-in thermal overload protection, which trips at 95-105° C (203-221° F) . For three-phase motors, control panels featuring thermal overload protection are recommended.

## 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 most accurate pump specification, use Orenco's PumpSelect™ software.

