

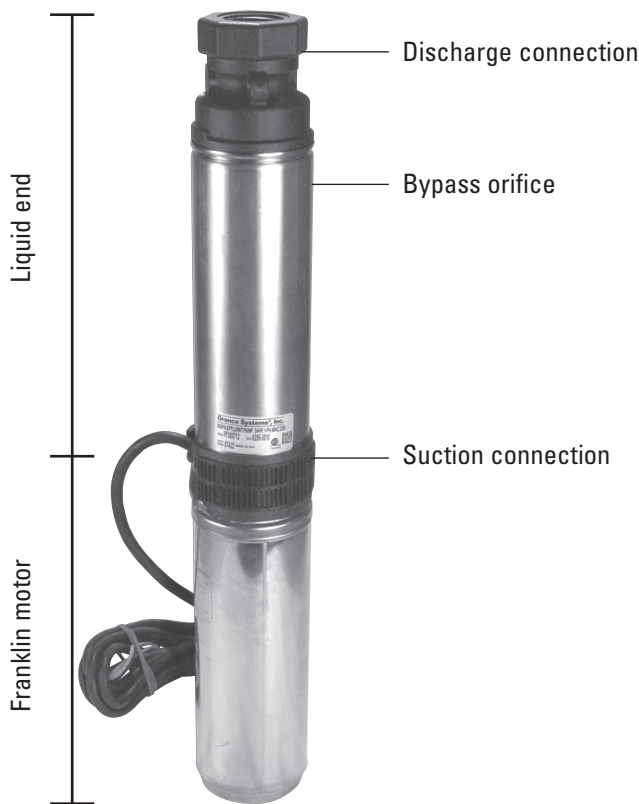
PF Series High-Head Effluent Pumps

Technical Data Sheet

Applications

Our submersible High-Head Effluent Pumps are designed to transport screened effluent (with low TSS counts) from septic tanks or separate dosing tanks to collection and treatment systems. All our pumps are constructed of lightweight, corrosion-resistant stainless steel and engineered plastics; all are field-serviceable and repairable with common tools; and all standard 60-Hz PF Series models are UL and CSA listed for use with effluent.

Orenco High-Head Effluent Pumps are used in a variety of applications, including pressurized drainfields, packed bed filters, mounds, aerobic units, effluent irrigation, effluent sewers, wetlands, lagoons, and more.



Features/Specifications

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

- Minimum 24-hour run-dry capability without water lubrication
- 1/8-inch bypass orifice to ensure flow recirculation for motor cooling and to prevent air bind
- Repairable (non-disposable) liquid end for better long-term cost of ownership
- Corrosion-resistant construction
- Super stainless Franklin Electric motor, rated for continuous use and frequent cycling
- Type SOOW motor cable (suitable for Class I, Division 1 and Division 2 applications)
- Five-year warranty from date of manufacture against defects in materials or workmanship

Standard Models

See specs chart, page 2, for a complete list.

Nomenclature

PF □ □ □ □ □ - □ □

Cord length:
 Blank = 10'
 20 = 20'
 30 = 30'
 50 = 50'

Voltage (nameplate):
 1 = 115 (1/2 hp only)
 200 = 200
 2 = 230 (220 if 50 Hz)
 4 = 460

Frequency:
 1 = single-phase 60 Hz
 3 = three-phase 60 Hz
 5 = single-phase 50 Hz

Horsepower:
 05 = 1/2 hp
 07 = 3/4 hp
 10 = 1 hp
 15 = 1-1/2 hp

Nominal flow (gpm):
 10
 20
 30
 50

Pump (PF Series)



Orenco Systems[®]
 Incorporated

Changing the Way the
 World Does Wastewater[®]

800-348-9843
 www.orenco.com

NTD-PU-PF-1

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Page 1 of 4

PF Series High-Head Effluent Pumps (continued)

Specifications

60 Hz

Model	hp	Amps ²	Nominal Flow (gpm)	Number of Impellers	Discharge (in.)	Length (in.)	Minimum Liquid Level (in.)	Weight (lb)	Rated Cycles/Day
PF100511/12 ¹	0.50	12.7/6.3	10	6	1.25	22.1	20	27	300
PF100712	0.75	8.3	10	8	1.25	25.0	22	30	300
PF1010 ³	1.00	--	10	--	1.25	--	--	--	100/300 ⁴
PF200511/12 ¹	0.50	12.4/6.3	20	6	1.25	24.0	20	27	300
PF2010 ³	1.00	--	20	--	1.25	--	--	--	100/300 ⁴
PF2015 ³	1.50	--	20	--	1.25	--	--	--	100/300 ⁴
PF300511/12 ¹	0.50 ¹	12.2/6.2	30	4	1.25	21.5	22	26	300
PF300712	0.75	8.5	30	6	1.25	25.0	24	30	300
PF3010 ³	1.00	--	30	--	1.25	26.5	--	--	100/300 ⁴
PF3015 ³	1.50	--	30	--	1.25	32.5	--	--	100/300 ⁴
PF500511/12 ¹	0.50	12.1/6.2	50	2	2.00	19.4	22	28	300
PF500712	0.75	8.5	50	3	2.00	22.7	24	31	300
PF5010 ³	1.00	--	50	--	2.00	--	--	--	100/300 ⁴
PF5015 ³	1.50	--	50	--	2.00	--	--	--	100/300 ⁴

50 Hz (220 V nameplate, 230 V actual)

PF100552	0.5	4.2 ⁵	10	6	1.25	22.0	20	27	300
PF100752	0.75	6.2 ⁵	10	9	1.25	27.0	24	30	300
PF300552	0.5	4.0 ⁵	30	4	1.25	21.5	22	26	300
PF500552	0.5	4.0 ⁵	50	2	2.00	19.4	22	28	300
PF500752	0.75	6.4 ⁵	50	3	2.00	22.7	24	31	300
PF501052	1.0	7.4 ⁵	50	4	2.00	26.0	27	34	100/300 ⁴

1. All 60-Hz 1/2-hp pumps are available in 115- and 230-V (nameplate) models.
2. Maximum sustained amperage, single phase. The paired amperage numbers for 1/2 hp pumps are for 115 and 230 V (nameplate), respectively. All other numbers are for 230 V (nameplate). Actual running amperage may exceed the motor's nameplate amperage by 10% (UL 778).
3. Will be available mid-2007.
4. Single-phase/three-phase.
5. Maximum sustained amperage, single phase (220-V nameplate voltage).

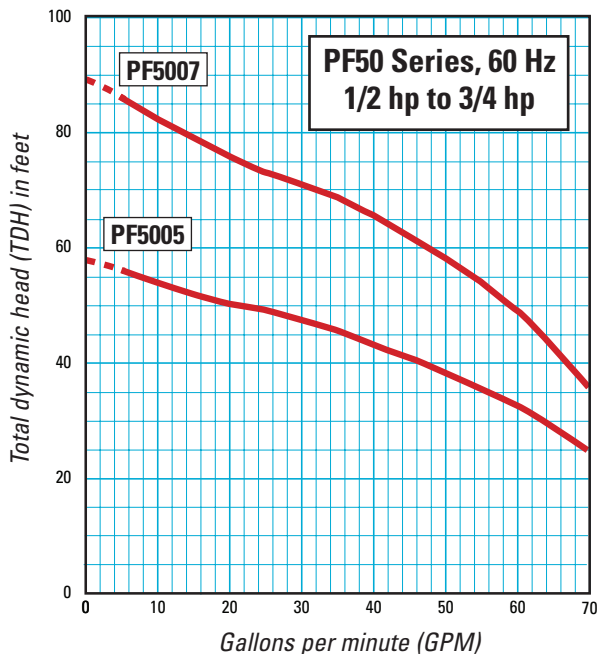
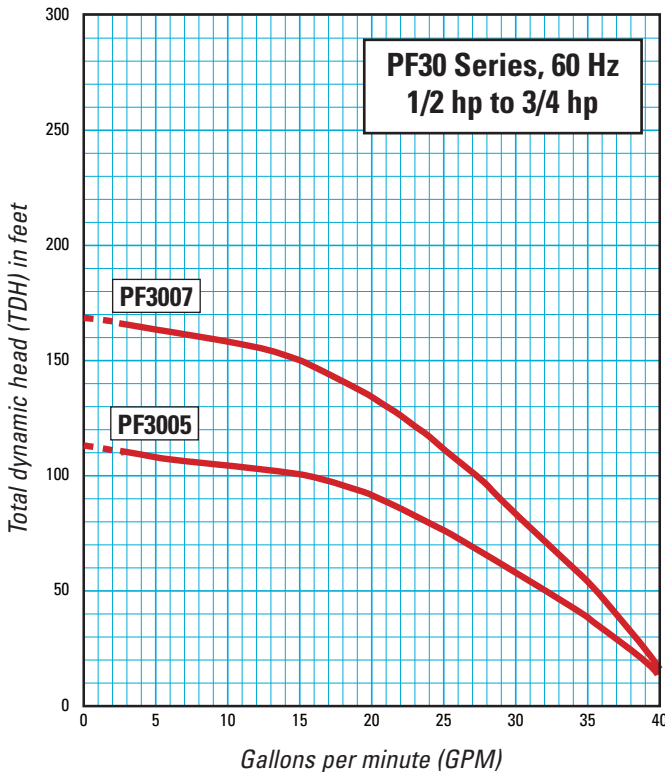
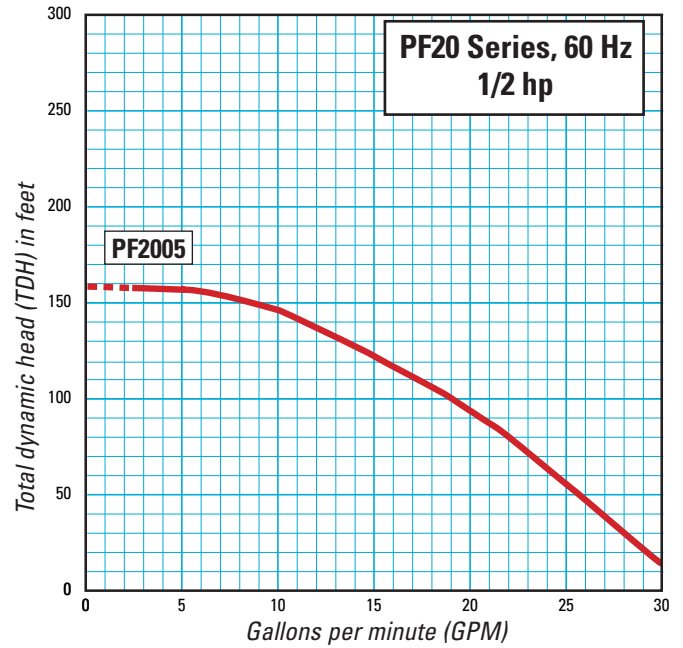
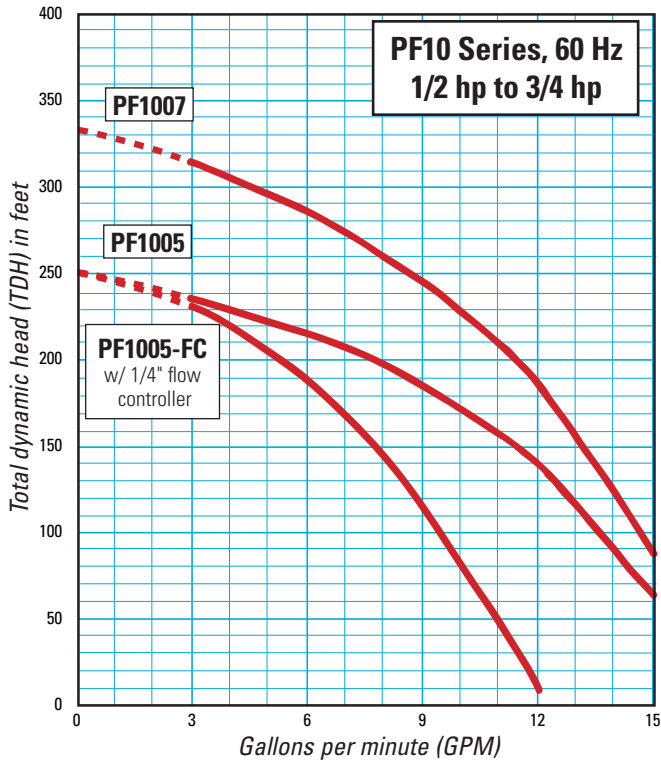
Materials of Construction

Discharge:	Glass-filled PPO (Noryl® GFN3) or stainless steel (PF50 models)
Discharge bearing:	Engineered thermoplastic (PEEK)
Diffusers:	Glass-filled PPO (Noryl GFN3)
Impellers:	Celcon® acetal copolymer on 10-gpm models; all others are Noryl GFN3
Intake screen:	Polypropylene
Suction connection:	Glass-filled PPO (Noryl GFN3) or stainless steel (PF50 models)
Drive shaft:	7/16 inch hexagonal stainless steel, 300 series
Coupling:	Sintered stainless steel, 300 series
Shell:	Stainless steel, 300 series
Motor:	Franklin motor exterior constructed of stainless steel. Motor filled with deionized water and propylene glycol for constant lubrication. Hermetically sealed motor assures moisture-free windings. All thrust absorbed by Kingsbury type thrust bearing. Rated for continuous duty. Protected against thermal overload and equipped with surge arrestors for added security.

PF Series High-Head Effluent Pumps (continued)

Using a Pump Curve

A *pump curve* helps you determine the best pump for your system. Pump curves show the relationship between flow (gpm) and pressure (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.



PF Series High-Head Effluent Pumps (continued)

