

PFEF Submersible Effluent Pumps

Applications

PFEF Effluent Pumps are used primarily for pumping effluent to low-pressure (gravity) dispersal areas. They can handle solids up to ¾-inch (19-mm) in diameter, and their corrosion-resistant construction makes them highly durable in wastewater applications. All PFEF units are CSA and UL listed. Manufactured by Franklin Electric.



PFEF4011-B



PFEF4012



PFEF5011-B and PFEF10012-B



Powered by

Franklin Electric

Features/Specifications

To specify this product, require the following:

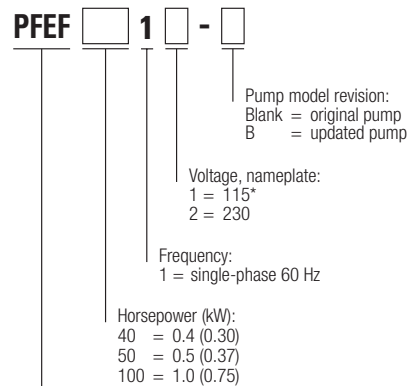
- Ability to handle liquids and solid waste materials up to ¾-inch (19-mm) in diameter
- Cast iron pump housing and cover with epoxy coating for corrosion resistance
- Oil-filled motor housing for lifetime lubrication and rapid heat dissipation
- Stainless steel screws, bolts, handle, and seal assembly
- Mechanical seals made of corrosion-resistant materials including stainless steel springs, nitrile parts, and carbon and ceramic faces
- Thermal overload protection for motor
- Rated for continuous duty
- Three-year warranty from date of manufacture

Standard Models

PFEF4011-B, PFEF4012, PFEF5011-B, PFEF5012-B, PFEF10012-B

(Additional configurations available.)

Product Code Diagram

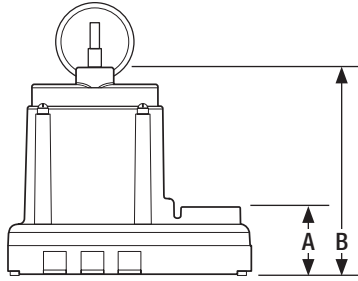


Pump, PFEF Series

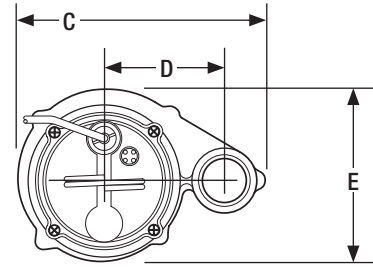
* available for 0.4-hp pumps only

Materials of Construction

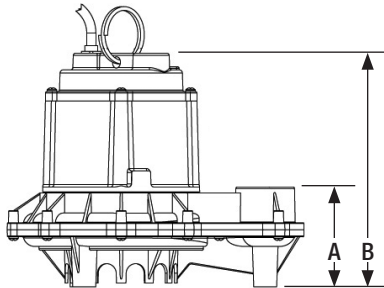
Component	PFEF4011-B	PFEF4012	PFEF50XX-B	PFEF10012-B
Motor Housing	Epoxy-coated cast iron	Epoxy-coated cast iron	Epoxy-coated cast iron	Epoxy-coated cast iron
Impeller	Thermoplastic elastomer	Polycarbonate	Epoxy-coated cast iron	Epoxy-coated cast iron
Volute	Epoxy-coated cast iron	ABS	Epoxy-coated cast iron	Epoxy-coated cast iron
Power cord	18/3, SJTW	16/3, SJTW	14/3, SJOOW	16/3, SJOOW
Mechanical shaft seal	Carbon/ceramic-faced nitrile	Carbon/ceramic-faced nitrile	Carbon/ceramic-faced nitrile	Carbon/ceramic-faced nitrile
Upper bearings	Sintered sleeve	Sintered sleeve	Ball	Ball
Lower bearings	Ball	Ball	Ball	Ball
Shaft	High-strength steel	416 stainless steel	416 stainless steel	416 stainless steel
Fasteners	Stainless steel	Stainless steel	Stainless steel	Stainless steel



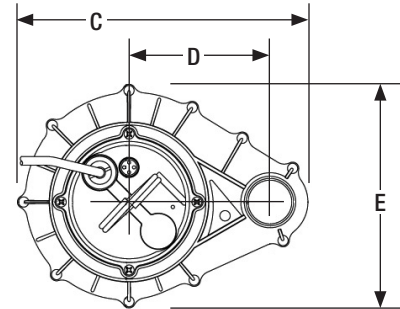
PFEF4011-B, side view



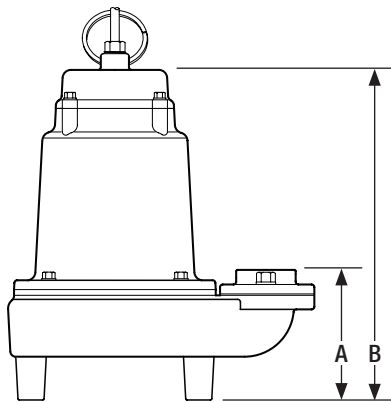
PFEF4011-B, top view



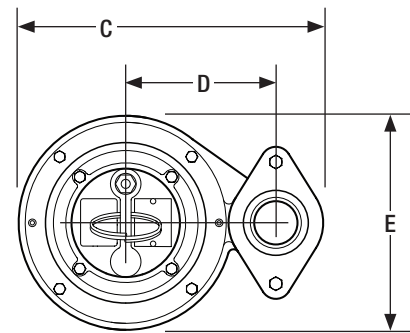
PFEF4012, side view



PFEF4012, top view



PFEF5011-B and PFEF10012-B, side view



PFEF5011-B and PFEF10012-B, top view

Specifications

Dimensions, in. (mm)	PFEF4011-B	PFEF4012	PFEF5011-B	PFEF5012-B	PFEF10012-B
A	2.9 (73)	3.9 (99)	3.8 (97)	3.8 (97)	3.8 (97)
B	9.2 (234)	9.3 (236)	13.8 (351)	13.8 (351)	13.8 (351)
C	9.6 (244)	11.7 (297)	12.3 (312)	12.3 (312)	12.3 (312)
D	4.6 (117)	5.7 (145)	5.8 (147)	5.8 (147)	5.8 (147)
E	6.8 (173)	9.0 (229)	9.5 (241)	9.5 (241)	9.5 (241)
Discharge size*	1½-inch FNPT	1½-inch FNPT	2-inch FNPT	2-inch FNPT	2-inch FNPT
Cord length, ft (m)	20.0 (6.1)	20.0 (6.1)	20.0 (6.1)	20.0 (6.1)	20.0 (6.1)
Weight, lb (kg)	26.5 (12.0)	24.0 (10.9)	56.0 (25.4)	56.0 (25.4)	57.0 (25.8)

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

Performance

	PFEF4011-B	PFEF4012	PFEF5011-B	PFEF5012-B	PFEF10012-B
Horsepower (kW)	0.4 (0.30)	0.4 (0.30)	0.5 (0.37)	0.5 (0.37)	1.0 (0.75)
Nameplate voltage	115	230	115	230	230
Maximum amps	8.1	7.2	14.7	10.8	15.1
Minimum liquid level, in. (mm)	9.0 (230)	9.0 (230)	13.8 (351)	13.8 (351)	13.8 (351)
Maximum starts per day	100	100	100	100	100
Minimum off-time, minutes	1	1	1	1	1
Impeller type	Non-clog	Closed vane	Non-clog	Non-clog	Non-clog

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. At low flow rates, TDH varies from pump to pump, so it is represented as a dashed line in the pump curves. For the most accurate pump specification, use Orenco's PumpSelect™ software.

