

PENTEK® XE Series 4" Submersible Motors



Introducing the Pentek® XE Series 4" submersible high-thrust motors. Built with the latest design, manufacturing and testing technology, they feature laser-welded 304L stainless steel construction, higher thrust capacities and higher efficiencies. The Pentek XE Series submersible motors incorporate "encapsulated, epoxy stator design," and professional-grade Class F insulation provides longer life in harsh environments. Each motor is 100% factory pressure and run tested to support our quality standards.

APPLICATIONS

- **Water systems...** for residential, industrial, commercial, multiple housing and farm clean water use.

SPECIFICATIONS

End Bell – 304 Stainless Steel
Shell – 304 Stainless Steel
Motor Shaft – 17-4 Precipitation Hardened Stainless Steel
Insulation – Class F, 311° F (155° C)
Max. Water Temp – 86° F (30° C)
Fasteners – 304 Stainless Steel
Sand Boot – Nitrile
Cable – Field-serviceable, Controlled Compression Design, UL and CSA Approved
Cable Length – 48"
Diaphragm – EPDM
Thrust Bearings – Kingsbury-type, pivot shoe, carbon graphite mating ring
Thrust Load Capacity – 700 lbs.

FEATURES

700# Rated Kingsbury Thrust Bearing Design – Large high-performance bearings are standard on all HPs allowing for higher thrust loads, providing many years of trouble-free service under severe-duty operation.

2-Wire Permanent Split Capacitor – Design insures quiet operation and improved operating efficiency.

3-Wire Motors – Operate with Pentek SMC and other single-phase motor controls.

All Stainless Steel Exterior Professional-Grade Class F-Compliant Motor Insulation – Allows for longer service life.

UL, CSA Approved and NSF/ANSI 61 Certified

100% Factory Pressure and Run Tested

Equipped with Surge Arrestor Automatic Thermal Protection on 1/2 – 1 HP Models

PENTEK® XE Series

4" Submersible Motors

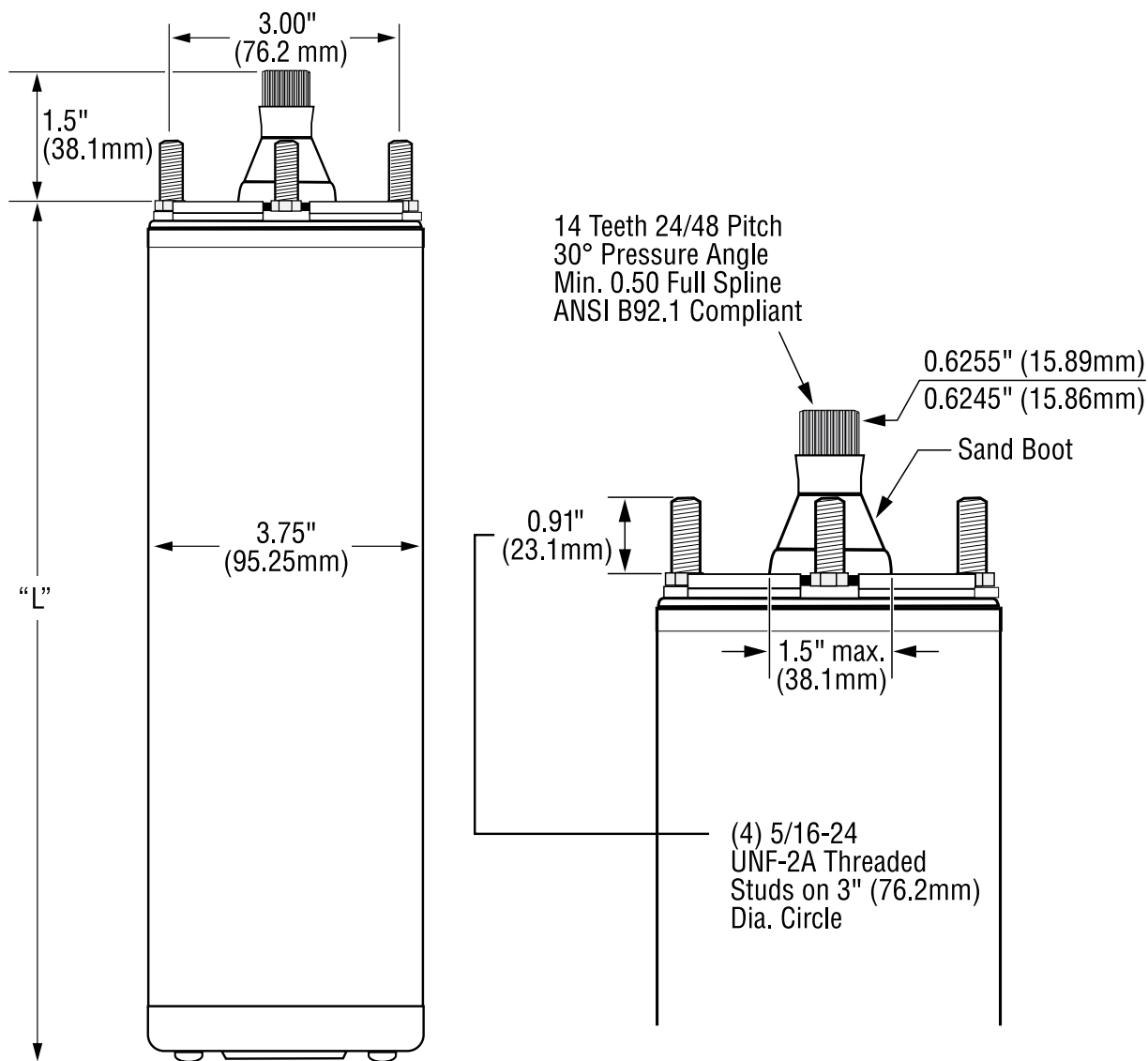
ORDERING INFORMATION

| Rating | | | | | Catalog Number | Full Load Amps | Max. Load (SF Load) Amps | Locked Rotor Amps | Winding | | Thrust Rating | Length | | Weight | | | |
|--------------------|------|-------|----|----------------|----------------|----------------|--------------------------|------------------------------|-------------------|------------------|---------------|----------------|--------|--------|------|----|------|
| HP | kW | Volts | Hz | Service Factor | | | | | Main Resistance | Start Resistance | | In. | mm | Lb. | Kg | | |
| PSC 2 Wire | | | | | | | | | | | | | | | | | |
| 1/2 | 0.37 | 115 | 60 | 1.6 | P42B0005A1-C | 7.4 | 9.5 | 36.4 | 1.3-1.8 | 700 | 11.0 | 279 | 19.2 | 8.7 | | | |
| | | 230 | | 1.6 | P42B0005A2-C | 3.7 | 4.7 | 19.5 | 4.5-5.2 | | 11.0 | 279 | 19.2 | 8.7 | | | |
| 3/4 | 0.55 | 230 | | 1.5 | P42B0007A2-C | 5.0 | 6.4 | 24.8 | 3.0-4.8 | | 12.4 | 314 | 22.7 | 10.3 | | | |
| 1 | 0.75 | 230 | | 1.4 | P42B0010A2-C | 7.9 | 9.1 | 21.7 | 4.2-5.2 | | 13.3 | 337 | 24.5 | 11.1 | | | |
| 1-1/2 | 1.1 | 230 | | 1.3 | P42B0015A2-C | 9.2 | 11.0 | 42.0 | 1.9-2.3 | | 14.9 | 378 | 28.9 | 13.1 | | | |
| CSIR 3 Wire | | | | | | | | | | | | | | | | | |
| 1/2 | 0.37 | 115 | 60 | 1.6 | P43B0005A1-C | 11.0 | 12.6 | 49.6 | 0.9-1.6 | 5.7-7.0 | 700 | 10.0 | 253 | 18.9 | 8.6 | | |
| | | 230 | | 1.6 | P43B0005A2-C | 5.5 | 6.3 | 22.3 | 4.2-4.9 | 17.4-18.7 | | 9.7 | 246 | 18.1 | 8.2 | | |
| 3/4 | 0.55 | 230 | | 1.5 | P43B0007A2-C | 7.2 | 8.3 | 32.0 | 2.6-3.6 | 11.8-13.0 | | 10.8 | 275 | 21.4 | 9.7 | | |
| 1 | 0.75 | 230 | | 1.4 | P43B0010A2-C | 8.4 | 9.7 | 41.2 | 2.2-3.2 | 11.3-12.3 | | 11.7 | 297 | 23.1 | 10.5 | | |
| CSCR 3 Wire | | | | | | | | | | | | | | | | | |
| 1/2 | 0.37 | 230 | 60 | 1.6 | P43B0005A2-C | 4.1 | 4.9 | 22.3 | 4.2-4.9 | 17.4-18.7 | 700 | 9.7 | 246 | 18.1 | 8.2 | | |
| 3/4 | 0.55 | | | 1.5 | P43B0007A2-C | 5.1 | 6.3 | 32.0 | 2.6-3.6 | 11.8-13.0 | | 10.8 | 275 | 21.4 | 9.7 | | |
| 1 | 0.75 | | | 1.4 | P43B0010A2-C | 6.1 | 7.2 | 41.2 | 2.2-3.2 | 11.3-12.3 | | 11.7 | 297 | 23.1 | 10.5 | | |
| 1-1/2 | 1.1 | | | 1.3 | P43B0015A2-C | 9.7 | 11.1 | 47.8 | 1.6-2.3 | 7.9-8.7 | | 13.6 | 345 | 27.4 | 12.4 | | |
| 2 | 1.5 | | | 1.25 | P43B0020A2-C | 9.9 | 12.2 | 49.4 | 1.6-2.2 | 10.8-12.0 | | 15.1 | 383 | 31.0 | 14.1 | | |
| 3 | 2.2 | | | 1.15 | P43B0030A2-C | 14.3 | 16.5 | 76.4 | 1.1-1.4 | 2.0-2.5 | 18.3 | 466 | 40.0 | 18.1 | | | |
| 5 | 3.7 | | | 1.15 | P43B0050A2-C | 24 | 27 | 101.0 | 0.62-0.76 | 1.36-1.66 | 1500 | 27.7 | 703 | 70.0 | 31.8 | | |
| 3 Phase | | | | | | | | | | | | | | | | | |
| Rating | | | | | Catalog Number | Full Load Amps | Max. Load (SF Load) Amps | Line to Line Resistance Ohms | Locked Rotor Amps | Thrust Rating | Length | | Weight | | | | |
| HP | kW | | | Volts | | | | | | | Hz | Service Factor | In. | mm | Lb. | Kg | |
| 1/2 | 0.37 | 200 | 60 | 1.6 | P43B0005A8-C | 2.9 | 3.4 | 4.1-5.2 | 22 | 700 | 10.0 | 254 | 18.9 | 8.6 | | | |
| | | 230 | | | P43B0005A3-C | 2.4 | 2.9 | 5.72-7.2 | 17.3 | | 10.0 | 254 | 18.9 | 8.6 | | | |
| | | 460 | | | P43B0005A4-C | 1.3 | 1.5 | 23.6-26.1 | 9 | | 10.0 | 254 | 18.9 | 8.6 | | | |
| 3/4 | 0.55 | 200 | 60 | 1.5 | P43B0007A8-C | 3.8 | 4.5 | 2.6-3.0 | 32.0 | | 10.8 | 274 | 21.4 | 9.7 | | | |
| | | 230 | | | P43B0007A3-C | 3.3 | 3.9 | 3.3-4.3 | 27 | | 10.8 | 274 | 21.4 | 9.7 | | | |
| | | 460 | | | P43B0007A4-C | 1.7 | 2.0 | 14.4-16.2 | 14 | | 10.8 | 274 | 21.4 | 9.7 | | | |
| 1 | 0.75 | 200 | 60 | 1.4 | P43B0010A8-C | 4.6 | 5.5 | 3.4-3.9 | 29.0 | | 11.7 | 297 | 23.1 | 10.5 | | | |
| | | 230 | | | P43B0010A3-C | 4.0 | 4.7 | 4.1-5.1 | 26.1 | | 11.7 | 297 | 23.1 | 10.5 | | | |
| | | 460 | | | P43B0010A4-C | 2.2 | 2.5 | 17.8-18.8 | 13.0 | | 11.7 | 297 | 23.1 | 10.5 | | | |
| 1-1/2 | 1.1 | 200 | 60 | 1.3 | P43B0015A8-C | 6.3 | 7.2 | 1.9-2.5 | 40.0 | | 11.7 | 297 | 23.1 | 10.5 | | | |
| | | 230 | | | P43B0015A3-C | 5.2 | 6.1 | 2.8-3.4 | 32.4 | 11.7 | 297 | 23.1 | 10.5 | | | | |
| | | 460 | | | P43B0015A4-C | 2.8 | 3.2 | 12.3-13.1 | 16.3 | 11.7 | 297 | 23.1 | 10.5 | | | | |
| 2 | 1.5 | 575 | 60 | 1.25 | P43B0015A5-C | 2 | 2.4 | 19.8-20.6 | 11.5 | 11.7 | 297 | 23.1 | 10.5 | | | | |
| | | 200 | | | P43B0020A8-C | 7.5 | 8.8 | 1.4-2.0 | 51.0 | 13.8 | 351 | 27.4 | 12.4 | | | | |
| | | 230 | | | P43B0020A3-C | 6.5 | 7.6 | 1.8-2.4 | 44.0 | 13.8 | 351 | 27.4 | 12.4 | | | | |
| | | 460 | | | P43B0020A4-C | 3.3 | 3.8 | 8.00-8.67 | 23.0 | 13.8 | 351 | 27.4 | 12.4 | | | | |
| | | 575 | | | P43B0020A5-C | 2.7 | 3.3 | 9.4-9.7 | 21.4 | 15.3 | 389 | 32 | 14.5 | | | | |
| 3 | 2.2 | 200 | 60 | 1.15 | P43B0030A8-C | 10.9 | 12.0 | 0.9-1.3 | 71.0 | 15.3 | 389 | 32 | 14.5 | | | | |
| | | 230 | | | P43B0030A3-C | 9.2 | 10.1 | 1.3-1.7 | 58.9 | 15.3 | 389 | 32 | 14.5 | | | | |
| | | 460 | | | P43B0030A4-C | 4.8 | 5.3 | 5.9-6.5 | 30.0 | 15.3 | 389 | 32 | 14.5 | | | | |
| | | 575 | | | P43B0030A5-C | 3.7 | 4.1 | 9.4-9.7 | 21.4 | 15.3 | 389 | 32 | 14.5 | | | | |
| | | 200 | | | P43B0050A8-C | 18.3 | 20.2 | 0.4-0.8 | 113.0 | 21.7 | 551 | 55 | 24.9 | | | | |
| 5 | 3.7 | 230 | 60 | 1.15 | P43B0050A3-C | 15.7 | 17.5 | 0.85-1.25 | 93.0 | 21.7 | 551 | 55 | 24.9 | | | | |
| | | 460 | | | P43B0050A4-C | 7.6 | 8.5 | 3.58-4.00 | 48.0 | 21.7 | 551 | 55 | 24.9 | | | | |
| | | 575 | | | P43B0050A5-C | 7.0 | 7.6 | 3.6-4.2 | 55.0 | 27.7 | 703 | 70 | 31.8 | | | | |
| | | 200 | | | P43B0075A8-C | 27.0 | 30.0 | 0.5-0.6 | 165.0 | 27.7 | 703 | 70 | 31.8 | | | | |
| 7-1/2 | 5.6 | 230 | 60 | 1.15 | P43B0075A3-C | 24.0 | 26.4 | 0.55-0.85 | 140.0 | 27.7 | 703 | 70 | 31.8 | | | | |
| | | 460 | | | P43B0075A4-C | 12.2 | 13.5 | 1.9-2.3 | 87.0 | 27.7 | 703 | 70 | 31.8 | | | | |
| | | 575 | | | P43B0075A5-C | 9.1 | 10.0 | 3.6-4.2 | 55.0 | 27.7 | 703 | 70 | 31.8 | | | | |
| | | 10 | | | 7.5 | 460 | 60 | 1.15 | P43B0100A4-C | 15.6 | 17.2 | 1.8-2.2 | 110.0 | 30.7 | 780 | 78 | 35.4 |

NOTE: Amp ratings on 3-wire motors reflect use with CSIR controls. A CSCR control is recommended for lower values. Max Load Amps are measured on the yellow wire, refer to PN793 for more detail.

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OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.

LEAD LENGTH

| Catalog Number | # of Wire | Type | Length | Gauge |
|--|-----------|------|--------|-------|
| XE SERIES REPLACEMENT MOTOR LEADS | | | | |
| P18-1485K | 2 Wire | XLPE | 48" | 14 Ga |
| P18-1486K | 3 Wire | XLPE | 48" | 14 Ga |
| P18-1651K | 2 Wire | XLPE | 100" | 14 Ga |
| P18-1652K | 3 Wire | XLPE | 100" | 14 Ga |

