

4" Submersible Motors T-Series

For high-thrust water well applications

PENTEK 4" Submersible High-Thrust Motors are fully featured for many years of dependable operation. Performance meets or exceeds that of other manufacturers. Horsepower and temperature ratings are continuous for operation at 95°F (35°C) at 0.5 ft./sec. cooling flow past the motor.



2-10 HP, Single and Three Phase, 230V and 460V, 60Hz

ENGINEERED GAS-FILLED STATOR DESIGN

The New PENTEK 4-inch high-thrust water well submersible motors utilize a 304-grade stainless steel "encapsulated, gas-filled stator design," which provides longer life in harsh environments. Professional-grade Class F insulation allows for more frequent starts/stops than other manufacturers.

FEATURES

PENTEK submersible motors are unique in providing the industry with innovative and robust design features that will extend the life of your installation:

- ▶ NEMA Standard Configuration – Interchangeable with other NEMA-fit motors with standard bolt circle and bolt size
- ▶ Encapsulated Stators – Gas-filled, not epoxy-filled
- ▶ Motor End Bells – Precision-machined heavy-duty nickel-plated cast iron, with stamped 304 stainless steel end bell cover
- ▶ Motor Leads – Watertight, 4-conductor, field-replaceable
- ▶ Thrust Bearings – Kingsbury-type design, professional choice for trouble-free operation under severe-duty conditions
- ▶ Class F Insulation – Allows for more frequent starts/stops than other manufacturers

PENTEK Submersible Motor Controls are included with all Single-Phase motors and feature:

- ▶ Higher Rated Capacitors
- ▶ Lightning Protection

LR 47013

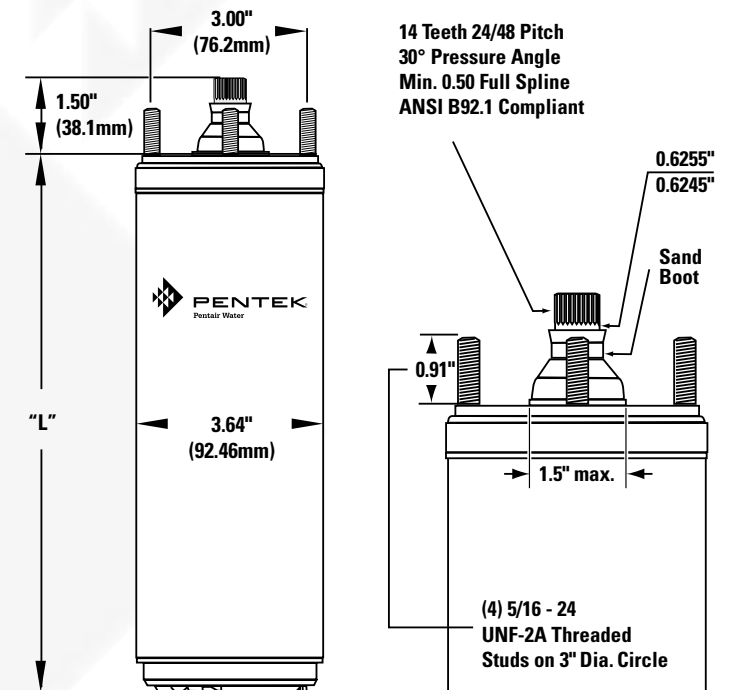


MATERIALS OF CONSTRUCTION

PARTS	MATERIALS
End Bells	Cast iron with nickel plate, with a 304-grade stamped stainless steel cover
Motor Shaft	431-grade stainless steel
Insulation	Class F, 311°F (155°C)
Max. Ambient Temp.	In water, 95°F (35°C)
Fasteners	304-grade stainless steel
Lip Seal	Nitrile
Sand Boot	Nitrile
Cable	Field-serviceable, flat type Double-insulated, heat & water-resistant 167°F/75°C, 600V
Cable Length	2 & 3 HP 67" 5 & 7-1/2 HP 106" 10 HP 138"
Diaphragm	EPDM
Thrust Bearings	Kingsbury-type, 304 SS pivot shoe, carbon graphite mating ring
Thrust Load Capacity	2 & 3 HP 675 lbs. 5, 7-1/2 & 10 HP 1350 lbs.

*Specifications subject to change without notice.

MOUNTING CONFIGURATION



Technical Data

THREE-WIRE MOTORS												T-SERIES CONTROLS CSCR w/Mag. Contactor		
HP	KW	VOLTS	PH	HZ	CATALOG NUMBER	AMP RATING (FULL LOAD)	AMP RATING (S.F.)	LOCKED ROTOR AMPS	WINDING RESISTANCE (Ohms)	LENGTH (L) IN.	MM	WEIGHT LBS.	NUMBER	WEIGHT LBS.
2	1.5	230	1	60	P43T0020A2K*	Y 11.1	Y 12.8	50	M = 1.3, S = 2.45 Main (M), Start (S)	16	406	31	SMCT-CRP2021	7
						B 9.6	B 10.6							
3	2.2	230	1	60	P43T0030A2K*	Y 15.3	Y 17.1	55	M = 1.1, S = 2.87 Main (M), Start (S)	18	457	35	SMCT-CRP3021	7
						B 12.4	B 14.2							
		460	3	60	P43T0030A4	5.6	6.0	40	5.72 - 4.68 Line to Line	16	406	30		
5	3.7	230	1	60	P43T0050A2K*	Y 23.4	Y 25.9	83	M = 0.8, S = 1.7 Main (M), Start (S)	27	685	58	SMCT-CRP5021	7
						B 19.7	B 21.5							
		460	3	60	P43T0050A4	8.9	9.6	66	0.90 - 0.73 Line to Line	24	609	51		
7-1/2	5.5	230	3	60	P43T0075A3	24.0	26.0	180	0.62 - 0.50 Line to Line	27	685	59		
						B 12.0	B 13.0							
10	7.5	460	3	60	P43T0100A4	15.4	16.6	110	2.20 - 1.80 Line to Line	30	762	67		

*Part Numbers with the 'K' suffix include PENTEK Motor Controls, as noted. Leads are included with motor. See page 34 for Motor Nomenclature.