



SURVIVOR[®] *Survivor 4" Submersible Pumps*

Lancaster Pump offers a broad selection of SURVIVOR 4" submersible well pumps. Horsepower from ½ to 5 HP, with the most popular size range ½ to 1½ HP, available in Corrosion-Resistant Thermoplastic or Super Strength Stainless Steel. Capacity ratings are 5, 7, 10, 15 and 22 gallons per minute with heads as high as 990 feet.

INSIDE A PUMP STAGE

- Diffuser with stainless steel seal/wear surfaces for upper impeller hub
- Impeller eye surrounding lower hub
- Stage plate with stainless steel seal/wear surface for impeller eye

ASSEMBLED PUMP STAGE

- Laminated phenolic thrust washer on top of every stage provides down-thrust protection and axial sealing for the impeller inside the next stage above

BREAKDOWN

- Glass-filled Noryl[®] Discharge Head with field replaceable fluted Internal Check Valve. Molded jug handles - no need for safety cable adapter, ½ HP thru 1½ HP models. Available in Stainless Steel up to 5 HP.
- Fluted Polyurethane Bearing at top end of shaft. Excellent abrasion and wear resistance.
- Stainless Steel Cable Guard for maximum cable protection. Attached with stainless steel screws.
- Balanced Teflon[®] impregnated Impellers made of glass-filled thermoplastic, provide for lower friction for longer pump life.
- Stainless steel Hex Shaft with slotted end for test turning.
- Fully enclosed, glass-filled thermoplastic Diffusers and Stage Plates with stainless steel wear surfaces. Each stage is complete with an individual composite thrust washer for extra protection.
- Heavy wall, high quality Stainless Steel Pump Casing sized inside for perfect stage alignment.
- Glass-filled Noryl[®] Motor Support ½ HP thru 1 ½ Hp models. Available in Stainless Steel up to 5 HP.
- Stainless Steel screen, cannot snap off during installation.



SURVIVOR 4" SUBMERSIBLE PUMP MODEL NUMBER BREAKDOWN

2-2LST5007-2

Catalog Section

2 = 2 Wire

3 = 3 Wire

L = Lancaster Hydro-Force Motor
(no letter L) = Franklin Electric Motor

P = Plastic Discharge Head
Plastic Motor Support

S = Stainless Steel Discharge Head
Stainless Steel Motor Support

SP = Stainless Steel Discharge Head
Plastic Motor Support

1 = 115 Volt, Single Phase
2 = 230 Volt, Single Phase
3 = 230 Volt, Three Phase
(Additional Voltages Available)

Number of Stages

50 = 0.50 HP
75 = 0.75 HP
100 = 1.0 HP
150 = 1.5 HP
200 = 2.0 HP
300 = 3.0 HP
500 = 5.0 HP

J = 5 GPM
L = 7 GPM
T = 10 GPM
U = 15 GPM
W = 22 GPM



LANCASTER HYDRO-FORCE™

4" ENCAPSULATED SUBMERSIBLE MOTORS

SINGLE PHASE TWO-WIRE (½ - 1½ HP, 230V) & THREE-WIRE (½ - 1 HP, 230V)

EQUIPPED WITH LIGHTNING ARRESTORS

TECHNICAL FEATURES

TWO-WIRE DESIGN

- Split-phase induction run (IR) design with built-in electronic starter connected in series to a high resistance auxiliary start winding – no capacitor required – electronic starter controls disengagement of start winding as a function of starting time and starting voltage.

THREE-WIRE DESIGN

- Capacitor-start induction run (CSIR) design – control box required.
- Control box quick-disconnect design disconnects control box components from the electrical system when the lid is removed – will retrofit F.E. Q-D control boxes of same HP and voltage.
- Control box components include a 230V voltage relay for easy installation, two ground terminals, cable terminals up to AWG 8, and a start capacitor for higher starting torque.
- Control box painted steel enclosure with multiple knockouts is rated NEMA 3R for indoor or outdoor installation.

TWO-WIRE AND THREE-WIRE DESIGNS

- Stator filled with special epoxy resin and hermetically sealed for a better insulation of the winding and a greater heat exchange.
- Rotor and thrust bearings lubricated by water mixed with Propylene Glycol.
- Built-in check valve for restoring of cooling liquid (well water) as needed.
- Built-in lightning arrestors providing surge protection.
- Built-in automatic reset overload providing thermal (overheat) protection caused by high amperage and/or inadequate motor cooling.
- AISI 304 Stainless Steel motor frame shell, stator ends and liner, hermetically sealed for maximum corrosion resistance.
- AISI 303 Stainless Steel splined shaft end.
- Cationic epoxy electrocoated G20 cast iron top and bottom end brackets.
- AISI 304 Stainless Steel top and bottom end bracket covers.
- Shaft sealing system using labyrinth seal, sand slinger and lip seal.
- Pressure equalizing diaphragm.
- 4" NEMA flange.
- M8 threaded mounting studs.
- Removable plug-in lead cable.
- Degree of protection: IP68.
- Insulation: Class B.
- Time Rating: Continuous Duty.
- UL recognized component.
- UL classified water quality system component in accordance with ANSI/NSF 61 (health effects) and 372 (lead content).



FRANKLIN: Lancaster Pump is also teamed up with Franklin Electric's 4" super stainless and high thrust submersible motors, delivering high quality and dependable service.

- Corrosion-resistant stainless steel exterior
- Stainless steel splined shaft
- Hermetically-sealed windings
- Filter check valve
- Water lubrication
- Kingsbury-type thrust bearing
- Pressure-equalizing diaphragm
- Built-in lightning arrestors (All single-phase, super stainless 200 & 230V three-phase)
- Removable water bloc lead
- UL Recognized and CSA certified component
- ANSI/ NSF 61 certified
- Industry standard NEMA mounting dimensions