

BERKELEY® 6TS SERIES

SPECIFICATIONS 6TS SUBMERSIBLE TURBINE PUMPS

A. Scope

This specification covers a deep well submersible turbine pump with above ground discharge and furnished with suitable driver and accessories. The pumping unit shall be designed and furnished in accordance with the latest Hydraulic Institute and AWWA Standards for submersible turbine pumps.

B. Service Conditions

The pump shall be designed and constructed to operate satisfactorily with a reasonable service life, when installed in a dependable and adequate water resource location. The pump shall be the product of, and manufactured by Berkeley Pumps. Other manufacturers will be considered providing the unit offered is an approved equal in all respects to the brand and model preferred by the customer. Factory pump performance curves for alternate pumps shall be submitted with the bid.

C. Operating Conditions

Design conditions: _____ Gallons per minute

Maximum allowable speed: _____ RPM

Design head: _____ Feet total dynamic head (TDH)

Pump bowl setting: _____ Feet

Minimum pump efficiency of: _____ Percent

Well diameter I.D.: _____ Inches

D. Pump Construction

- Bowl assembly:** The bowls shall be fabricated of 304 stainless steel. Internal features shall also be 304 stainless steel cold resistance welded for maximum corrosion resistance. All bowls shall be fitted with sleeve type Buna bearings and Buna wear rings.
- Impellers:** The impellers shall be constructed from 304 stainless steel and shall be the enclosed type. They shall be cold resistance welded to maximize corrosion resistance.
- Investment cast 304 stainless steel motor adapter:** The inlet motor adapter shall be investment cast ASTM A743 Gr. CF8 S30400 stainless steel. Bracket to motor fit to comply with NEMA standard 6" or 4" submersible motor.
- Stainless Steel Inlet Screen and Internal Coupling Screen:** The inlet and coupling area shall be protected with a 304 stainless steel screen designed for a velocity of less than 5 ft/sec at BEP.
- Investment-Cast 304 Stainless Steel Discharge:** The discharge adapter shall be investment cast ASTM A743 Gr. CF8 S30400 stainless steel. It shall have wrench flats to provide positive grip during installation.
- Shaft:** The pump shaft shall be of ASTM 582 type 416 stainless steel.
- Coupling:** The shaft coupling shall be of ASTM 582 type 416 stainless steel and be capable of transmitting the total torque and total thrust of the bowl assembly in either direction of rotation.
- Top guide bearing:** Top guide bearing shall hard chrome-plated.
- Straps:** To be one piece with no joints or welds
- Check Valve:** Built-in Check Valve to prevents backflow and reverse rotation. Must be self aligning to insure positive closure.
- 100% Lead-free Components Meet all U.S. federal guidelines for safe drinking water**
- Built-in Thrust Protection:** Built-in up-thrust protection to protect pump during periods of high demand and start-up.

