– Pump motor shall be of the sealed submersible type rated HP at RPM, 60 Hertz Motor shall be for three phase 200 volts 230 volts 460 volts or 575 volts Motor shall be NEMA B type.
Stator winding shall be of the open type with Class H insulation good for 150°C maximum temperature. Winnsul1xTÆT Q0.24 0
guide bushing directly above the lower seal to take radial load and act as flame path for seal chamber. Ball bearings shall be designed for 50,000 hours B-10 life. Stator shall be heat shrunk into motor housing.
A heat sensor thermostat shall be attached to and embedded in the winding and be connected in series with the motor starter contactor coil to stop motor if temperature of winding is more than 130°C. Thermostat to reset automatically when motor cools to safe operating temperature. The common pump, motor shaft shall be of 416 stainless steel.
— Motor shall be protected by two mechanical seals mounted in tandem with a seal chamber between the seals. Seal chamber shall be oil filled to lubricate seal face and to transmit heat from shaft to outer shell.
Seal face shall be carbon and ceramic and lapped to a flatness of one light band. Lower seal faces shall be carbide (optional).
A double electrode shall be mounted in the seal chamber to detect any water entering the chamber through the lower seal. Water in the chamber shall cause a red light to turn on at the control box. This signal shall not stop motor but shall act as a warning only, indicating service is required.
— The impeller shall be ductile iron and of the 2-vane solids handling enclosed type. Vane inlet tips shall be carefully rounded to prevent stringy material from catching in vanes. Pump-out vane shall be used in front and back chamber. Impeller shall be dynamically balanced. Impeller shall be driven by stainless steel shaft key and impeller held in place with lock screw and washer. Impeller and motor shall lift off case as a unit without disturbing discharge piping. Impeller neck shall run in bronze wear ring that is pressed into volute case.

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