

## Specifications 4VHA and 4VHAX Series

## PUMP MODEL - Pump shall be Myers

Groups C & D hazardous location service (4VHAX only).

<u>OPERATING CONDITIONS</u> – Pump shall have a capacity of \_\_\_\_\_ GPM at a total head of \_\_\_\_\_ feet and shall use a \_\_\_\_\_ HP motor operating at \_\_\_\_\_ RPM.

<u>MOTOR</u> – 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 180°C (356°F) maximum operating temperature. Winding housing shall be filled with a clean high dielectric oil that lubricates bearings and seals and transfers heat from windings and rotor to outer shell. Air-filled motors, which do not have the superior heat dissipating capabilities of oil-filled motors, shall not be considered equal.

Motor shall have two heavy-duty ball bearings to support pump shaft and take radial and thrust loads and a sleeve guide bushing directly above the lower seal to take radial load and act as flame path for

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 120°C (248°F). Thermostat to reset automatically when motor cools to safe operating temperature. The common pump, motor shaft shall be of 416 stainless steel.

<u>SEALS</u> – 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 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.

**<u>PUMP IMPELLER</u>** – The impeller shall be cast ductile iron and of the two-vane solids handling enclosed type. Vane inlet tip(s) shall be carefully rounded to prevent stringy material from catching in

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PUMP CASE - The volute case shall be cast iron and have a flanged center line discharge. Discharge flange