

# ENGINEERED PRODUCTS

## BT4 SERIES HORIZONTAL PUMPS



### ENGINEERING SPECIFICATIONS

**1.01 SCOPE:** The contractor shall provide horizontal multi-stage pumps as manufactured by Franklin Electric or equal. All pump units shall be of one manufacturer and provided complete including electric motor drive.

#### 2.01 CONDITIONS OF SERVICE:

Equipment Item Number:

PIPE DIAMETER:

Suction (inches) NPT: 1"

Discharge (inches) NPT: 1"

#### 3.01 PRIMARY SERVICE CONDITION:

Total Head (feet):

Capacity (gpm):

Minimum Total Head at Shut-off (feet):

Efficiency (%):

Maximum Motor (hp):

Operating Speed (rpm):

**4.01 PUMP CONSTRUCTION:** Each pump shall be designed for clockwise rotation viewed from driven end and include the following design features.

**PUMP SHELL:** Pump shell shall be 304 stainless steel.

**DISCHARGE HOUSING:** Pump shall have a 1" FNPT opening made of stainless steel (cast iron optional).

**SHAFT AND COUPLING:** Pump shaft shall be a 7/16" stainless steel hexagonal rod. The coupling shall be stainless steel (brass optional) machined to the proper fit to ensure a secure motor connection with no power loss between the motor and the pump.

**MECHANICAL SEALS:** Pump shaft seals shall have a carbon rotary face, ceramic stationary face with Viton elastomers.

**IMPELLER AND DIFFUSERS:** Pump shall have glass reinforced engineered thermoplastic that should be highly resistant to abrasive and corrosive conditions. Each hydraulic stage shall be built with Franklin Electric's patented (US Patent No. 7,290,984) TRI-SEAL™ Floating Stage System that should ensure years of dependable operation.

**MATERIALS OF CONSTRUCTION:** Pump shall have Celcon® for impellers, Noryl® for diffusers.

**MOTOR BRACKET:** The motor bracket shall be made of stainless steel (cast iron optional) with a rugged support foot for horizontal or vertical mounting with a handle for portability of the unit.

**5.01 MOTOR:** Complete pump/motor assemblies shall include square flange, thermally protected, dual voltage, 115-230 V single-phase or 208-230/460 V three-phase, and hp ranging between ½ and 3. Motor should be available to meet a wide range of applications.



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