

Typical Specification

Types P, Q, R, & S with Small, Medium, or Large Bearing Frames -Bulletin 575

WEINMAN®

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End Suction Back Pull-Out

General

Furnish and install as shown on the plans, _____ (qty) Weinman End Suction Series 575 size (____x____x____) model _____ centrifugal pump(s). Each shall be capable of pumping _____ GPM when operating against a total pumping head of _____ feet (suction lift/suction pressure) at the temperature, specific gravity and viscosity indicated. The pump shall operate at _____ RPM and shall have _____ percent minimum efficiency at the design point. The pump(s) shall be rated for continuous service and shall be bronze fitted construction suitable for pumping a liquid with the following characteristics:

Liquid handled _____
Specific Gravity _____
Temperature _____
Viscosity of liquid at pumping temperature _____
NPSHA _____

Note: Add any additional facts concerning the nature of the liquid or installation which might affect the pump construction, application or operation.

Construction

All pump materials shall be constructed of low lead components and the pump shall be certified in accordance with NSF 372 (NSF 61 Optional). Pump shall be a back pull-out design allowing access to service the pump's internal working components, without disturbing the electrical motor alignment, connections, or piping for ease of maintenance.

The adapter to the casing is to be one piece cast iron construction capable of mounting a small, medium, or large bearing frame with mechanical seal constructed of carbon/ceramic faces and Buna elastomers rated at 180 degrees F (or optional carbon/silicon carbide faces and EPDM elastomers rated at 300 degrees F) (or optional silicon carbide/silicon carbide faces and EPDM elastomers rated at 300 degrees F) and stainless steel metal parts.

Casing shall be of cast iron ASTM-A48, Class 30 cast iron with tensile strength of 30,000 psi (or ductile iron on some models) and shall be designed to be self-venting to prevent air entrapment. Pump unit shall be capable of withstanding hydrostatic test pressures of 1.5 times the maximum working pressure. All assembly points shall be

of machine register fit to assure proper alignment. The flanged casing discharge nozzles shall mate to flanges conforming to ANSI B16.1 specifications with minimum 125 psi ratings at 230 degrees F. The impeller shall be of the enclosed design bronze constructed (< 0.25% Pb).

The bearing frame shall have a steel shaft sized for a maximum deflection of .002 inch at the seal faces when the pump is operating (at _____) maximum load conditions. The bearings shall be permanently lubricated (regreaseable option) having a 100,000 hrs minimum life (AFBMA L10) under the maximum load conditions. The shaft and bearings shall be mounted in a cast iron ASTM-A48 Class 30 frame. The pump frame and motor shall be mounted on a common fabricated heavy steel base plate (with drip pan) and mounting flanges the length of both sides, grout holes, and bolt on platform motor riser with no more than 1" high motor blocks. The pump shall be coupled to the driver through a flexible spacer type coupling covered by an OSHA type coupling guard.

The pump shaft shall be steel (optional 416 stainless steel or 316 stainless steel) and protected with a bronze sleeve (optional stainless steel) slip fit to the shaft. A neoprene deflector shall be mounted on the shaft to prevent liquid from entering the bearings.

Testing

The following (witnessed) (non-witnessed) tests are to be performed in accordance to Hydraulic Institute test standards.

_____ Pump performance (A) (B) tolerance level
_____ Routine Motor test
_____ Hydrostatic - Complete Pump

Motor

The motor shall be not less than _____ hp _____ RPM, NEMA design B squirrel cage type, (drip proof) (TEFC) EISA efficiency motor with (1.15) (1.0) service factor and suitable for operation on (115) (230) volt, 1 phase, (50) (60) Hertz power supply OR (200) (230) (460) (575) volt, 3 phase, 60 hertz power supply. Motor size shall be sufficient to prevent overloading at operating conditions or at the lowest listed head conditions, whichever point requires greater horsepower.

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