



Bell & Gossett
a xylem brand

SPECIFICATIONS

SERIES 80-SC ENGINEERING

Engineering Specifications

Furnish and install pumps with capacities as shown on plans. Pumps shall be split-coupled in-line, singlestage design, for installation in a vertical position motor up, capable of being serviced without disturbing piping connections.

Pump volute shall be of Class 30 cast iron. It shall be designed with a base ring matching an ANSI 125# or 250# flange for pump support.

The impeller shall be of cast bronze, enclosed type, balanced to Hydraulic Institute Standards (ANSI/HI 9.6.4.5-2000, figure 9.6.4.15B). The allowable residual imbalance conforms to ANSI grade 6.3, keyed to the stainless steel shaft and locked. The pump shaft shall be guided by a carbon graphite lower throttle bushing.

The combination motor bracket and volute coverplate shall be properly designed unit to ensure concentric alignment of the motor to the pump casing. The liquid cavity shall have a tapped flush line with manual valve to remove air from the seal chamber for fast initial start-up.

(Optional) The seal flush line shall be fitted with a factory installed 50 micron cartridge filter (cyclone separator when pump differential pressure exceeds 30 psig).

The mechanical seal shall have a compact Rotating Unitized Seal Head design with EPR elastomer bellows and a positive metal to-metal drive system to reduce the torsional stress on the bellows. The bellows will be pressure supported without creases or folds for long life.

Optional mechanical seal shall be stainless steel outside multi-spring balanced type with EPR (optional Viton) secondary seal.

The spacer coupling shall be of high tensile aluminum, split to allow the servicing of the seal without disturbing the pump or motor.

The motor bracket shall contain a carbon steel coupler guard conforming to both ANSI B15.1-2000 and OSHA 1910.219 standards for safety.

Pumps shall be rated for continuous operation at a minimum of 175 psi working pressure (optional 250 psi) and 250°F. The volute shall have gauge tapings at the suction, and discharge nozzles and vent and drain tapings at the top and bottom.

Motor shall be NEMA Premium Efficient (NEMA MG-1 Table 12-12; 1 HP and up; three phase) complying with NEMA or IEC specifications and shall be the size, voltage and enclosure called for on the plans. It shall have heavy-duty grease-lubricated ball bearings, completely adequate for the maximum load for which the pump is designed.

Each pump shall be hydrostatically tested at the factory per Hydraulic Institute standards. It shall then be thoroughly cleaned and painted with at least one coat of high-grade machinery enamel prior to shipment.

Pumps shall be Series 80-SC as manufactured by Bell & Gossett.

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Let's Solve Water

Xylem Inc.
8200 N. Austin Avenue
Morton Grove, Illinois 60053
Phone: (847) 966-3700
Fax: (847) 965-8379
www.bellgossett.com

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