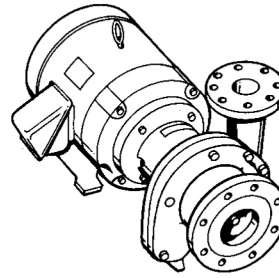
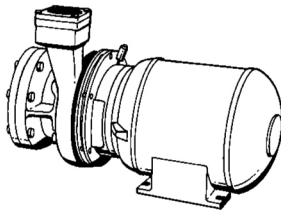


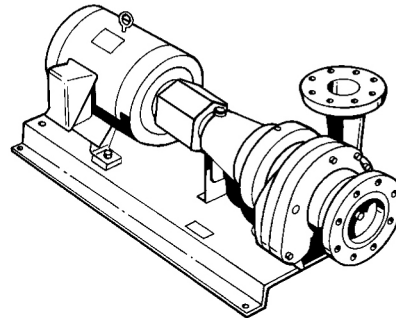
B35
VERTICAL FLANGE MOUNTED
OR VERTICAL FOOT MOUNTED



HORIZONTAL
DB 2-STAGE



HORIZONTAL HB35 &
HORIZONTAL HB17



DB-F BASE MOUNTED
HORIZONTAL 2-STAGE

Domestic[®] Pump Series B35[™], HB35, HB17, DB and DB-F

2' NPSH CENTRIFUGAL PUMP



Bell & Gossett

a xylem brand

Division 23 -Heating, Ventilating and Air Conditioning (HVAC)
Section 23 20 00 - HVAC Piping and Pumps

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Unit shall be a Domestic® Pump series B35, HB35, HB17, DB or DB-F, 2 Ft. NPSH centrifugal pump as manufactured by Bell & Gossett.
- B. Furnish and install an extended life pump with a capacity as indicated in the plans.

1.02 RELATED SECTIONS

- A. Section 23 22 23 - Steam Condensate Pumps
- B. Section 23 22 23.13 - Electric Driven Condensate Pumps
- C. Section 23 22 23.23 - Pressure Powered Steam Condensate Pumps

1.03 REFERENCES

- A. HI - Hydraulic Institute.
- B. ANSI - American National Standards Institute.
- C. NEMA - National Electrical Manufacturers Association.
- D. UL - Underwriters Laboratories.
- E. ETL - Electrical Testing Laboratories.
- F. CSA - Canadian Standards Association.
- G. NEC - National Electric Codes.
- H. ISO - International Standards Organization.
- I. IEC - International Electrotechnical Commission.

1.04 SUBMITTALS

- A. Submit data cover sheet.
- B. Unit description sheet.
- C. Dimensional print(s).
- D. Sales bulletin.
- E. Piping diagram(s).
- F. Wiring diagram(s).
- G. Installation, operation & maintenance manual.

1.05 QUALITY ASSURANCE

- A. The manufacturer shall have a minimum of 30 years experience in the design and construction of condensate return equipment.
- B. The pump manufacturer shall be fully certified by the International Standards Organization per ISO 9001. Proof of this certification shall be furnished at the time of submittal.
- C. The manufacturer shall carry a minimum product liability insurance of \$5,000,000.00 per occurrence.
- D. The pump manufacturer shall test according to the ANSI/Hydraulics Institute Standard 14.6, Grade 1, for Rate of Flow, Total Head and Power Consumption.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Subject to compliance with these specifications, the following manufacturers shall be acceptable:
 - 1. Bell & Gossett Domestic Pump series B35, HB35 or HB17.
 - 2. Pre-approved equal.

2.02 COMPONENTS.

A. Water pump

1. The water pump shall be two-staged, centrifugal design, bronze fitted with enclosed cast bronze centrifugal impeller, permanently aligned and flanged mounted for vertical operation.
2. Capacities and electrical characteristics for the pump shall be scheduled on the drawings.
3. Each pump shall deliver its full capacity with condensate temperatures up to 210°F (99°C) at sea level, at 2 ft. NPSH (net positive suction head) or with condensate temperatures up to 212°F (100°C) at sea level, at 2 ft. NPSH (net positive suction head) when the water column is elevated continuously 2 ft above the suction of the pump.
4. Carbon/ceramic mechanical shaft seal shall be rated for 250°F (121°C).
5. Each pump shall include:
 - a. Axial flow, first-stage impeller
 - b. Dynamically balanced, cast bronze impeller
 - c. Bronze straightening vanes
 - d. Renewable bronze casing wear ring
 - e. Stainless steel shaft
 - f. Discharge gauge port tapping
 - g. Drain tapping
6. The water pump shall be constructed of one of the following:
 - a. Series HB35 or HB17 bronze fitted, centrifugal design pump, close-coupled to a 3500 RPM motor or 1750 RPM motor, respectively, permanently aligned, and flange mounted for horizontal operation.
 - b. Series B35 bronze fitted, centrifugal design pump, close-coupled to a 3500 RPM motor, respectively, permanently aligned, and flange mounted for vertical operation.
 - c. Series HB35 or HB17 bronze fitted, centrifugal design pump, close-coupled to a 3500 RPM motor or 1750 RPM motor, respectively, permanently aligned, and flange mounted for horizontal operation.
 - d. Series DB or DB-F, bronze fitted, centrifugal design pump, close-coupled and foot mounted or flexible-coupled and base mounted, respectively, to a 3500 RPM motor, permanently aligned, for horizontal operation.
7. The pump shall include:
 - a. One dynamically balanced enclosed bronze centrifugal impeller for Series HB35, HB17 or B35. Two dynamically balanced enclosed bronze centrifugal impeller for Series DB or DB-F.
 - b. One renewable bronze wearing ring for Series HB35, HB17 or B35. Two renewable bronze wearing rings for Series DB or DB-F.
 - c. One stainless steel shaft.
 - d. Suction connection 125# R.F. (250# F.F. or 400# F.F.) ANSI Flange for Series DB or DB-F.
8. The motor shall meet NEMA specifications and shall be the size, voltage, insulation class, duty rating and enclosure called for in the plans.
9. Optional TEFC or explosion proof motor as required.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install equipment in accordance with manufacturer's instructions.
- B. Power wiring, as required, shall be the responsibility of the electrical contractor. All wiring shall be performed per manufacturer's instructions and applicable state, federal and local codes.
- C. All factory wiring shall be numbered or coded for easy identification and the numbers shall coincide with those shown on the wiring diagram.
- D. The unit shall be factory tested as a complete unit and the unit manufacturer shall furnish elementary and connection-wiring diagrams and piping diagrams. Installation and operation instructions shall also be provided.
- E. The unit shall be shipped completely assembled.
- F. The factory shall provide a certified test report.
- G. Unit shall be a Domestic Pump series B35, HB35, HB17, DB or DB-F, as manufactured by Bell & Gossett, Morton Grove, IL.

END OF SECTION

Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're 12,700 people unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

For more information on how Xylem can help you, go to www.xyleminc.com



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