

SECTION 23 22 23 {15131}

STEAM CONDENSATE PUMPS

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This section includes condensate and boiler feed pumps normally used in steam and steam condensate return systems.

Manufacturers listed in this section were identified as representative and not as an endorsement for meeting this specification. For additional product information, visit 4Specs at www.4specs.com, ARCAT at www.arcat.com, First Source at www.reedfirstsource.com, SpecSource at www.specsource.com, and Sweets Network at products.construction.com.

This section includes performance, proprietary, and descriptive type specifications. Edit to avoid conflicts among requirements.

Contact the CSRF Support Center at supportcenter@csrf.org to submit comments or suggestions for improvements to this specification. Visit the SPECTEXT web site at www.spectext.com for current product announcements.

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. Low pressure condensate return units.
2. High pressure condensate return units.
3. Receivers.
4. Condensate pumps.
5. Vacuum pumping units.

B. Related Sections:

1. Section 23 05 13 - Common Motor Requirements for HVAC Equipment: Product requirements for motors for placement by this section.
2. Section 23 05 23 - General-Duty Valves for HVAC Piping: Product requirements for valves used in steam and steam condensate piping systems.
3. Section 23 05 48 - Vibration and Seismic Controls for HVAC Piping and Equipment: Product requirements for vibrations isolators installed with pumps.
4. Section 23 22 13 - Steam and Condensate Heating Piping: Execution requirements for connection to pumps specified by this section.
5. Section 23 22 16 - Steam and Condensate Piping Specialties: Product and execution requirements for piping specialties installed in steam systems.
6. Section 26 05 03 - Equipment Wiring Connections: Execution requirements for electrical connections to pumps specified by this section.

C. Related Sections:

1. Section 15072 - Vibration and Seismic Controls for HVAC Piping and Equipment: Product requirements for vibrations isolators installed with pumps.
2. Section 15111 - General-Duty Valves for HVAC Piping: Product requirements for valves used in steam and steam condensate piping systems.
3. Section 15121 - Steam and Condensate Piping Specialties: Product and execution requirements for piping specialties installed in steam systems.
4. Section 15181 - Steam and Condensate Heating Piping: Execution requirements for connection to pumps specified by this section.
5. Section 16150 - Wiring Connections: Execution requirements for electrical connections to pumps specified by this section.
6. Section 16227 - Common Motor Requirements for HVAC Equipment: Product requirements for motors for placement by this section.

1.2 REFERENCES

List reference standards included within text of this section. Edit the following for Project conditions.

- A. American Society of Mechanical Engineers:
 1. ASME Section VIII - Boiler and Pressure Vessel Code - Pressure Vessels.
- B. National Electrical Manufacturers Association:
 1. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum).
- C. Underwriters Laboratories Inc.:
 1. UL 778 - Motor Operated Water Pumps.

1.3 PERFORMANCE REQUIREMENTS

Use this article carefully; restrict statements to identify system performance requirements or function criteria only.

- A. Provide pumps to operate at system fluid temperatures [indicated on Drawings] without vapor binding and cavitation, are non-overloading in parallel or individual operation, and operate within 25 percent of midpoint of published maximum efficiency curve.

1.4 SUBMITTALS

Only request submittals needed to verify compliance with Project requirements.

- A. Section 01 33 00 - Submittal Procedures {01330 - Submittal Procedures}: Submittal procedures.