

**SPECIFICATIONS** SUCTION DIFFUSER PLUS

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SECTION 23 21 16

Hydronic Piping Specialties

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

# Unit shall be a Bell & Gossett® Suction Diffuser Plus Model \_\_-3X or \_\_-3Z, as manufactured by Xylem.

**1.02 RELATED SECTIONS**

1. Section 23 01 70 – Operation & Maintenance of Central HVAC Equipment
2. Section 23 20 00 – HVAC Piping and Pumps
3. Section 23 21 13 – Hydronic Piping
4. Section 23 21 23 – Hydronic Pumps
5. Section 23 21 23.13 – In-Line Centrifugal Hydronic Pumps
6. Section 23 21 23.16 – Base-Mounted, Centrifugal Hydronic Pumps

**1.03 REFERENCES**

1. ANSI – American National Standards Institute..
2. ISO – International Standards Organization.

**1.04 SUBMITTALS**

1. Submit data cover sheet.
2. Dimensional print(s).
3. Sales bulletin.
4. Installation, operation & maintenance manual.

**1.05 QUALITY ASSURANCE**

1. The product manufacturer shall be fully certified by the International Standards Organization   
   per ISO 9001.

# The manufacturer shall carry a minimum product liability insurance of $5,000,000.00 per occurrence.

**1.06 MAINTENANCE MATERIAL SUBMITTALS**

**PART 2 PRODUCTS**

**2.01 MANUFACTURERS**

# Subject to compliance with these specifications, the following manufacturers shall be acceptable:

1. Suction Diffuser
2. Xylem Inc. Bell & Gossett® Suction Diffuser Plus Model \_\_-3X or \_\_-3Z.
3. Pre-approved equal.

**2.02 COMPONENTS**

1. Suction Diffuser
2. The suction diffuser body shall be made of either cast iron or ductile iron.
3. The suction diffuser shall include a Flow Cone to eliminate recirculation and direct flow completely out of the body and into the pump suction.
4. The suction diffuser shall include a full-length, 4-plane, removable straightening vane.
5. The straightening vane shall be made of either carbon steel or 304 stainless steel.
6. The suction diffuser shall include a full-length removable orifice cylinder with 3/16” perforations and 51% open area.
7. The orifice cylinder shall be made of either carbon steel or 304 stainless steel.
8. The suction diffuser shall have a full-length removable start-up strainer.
9. The start-up strainer shall be made of 16 mesh bronze wire.
10. The suction diffuser shall be available with either flanged end connections or grooved end connections.
11. Flange end connections should be designed according to ANSI Class 150 Standards.
12. Suction diffuser models with either flange x flange or groove x flange end connections should be rated for 175 psi (1,207 kPa) maximum working pressure. Models with groove x groove end connections should be rated for 300 psi (2,068 kPa) working pressure.
13. The suction diffuser shall have a maximum temperature rating of 250°F (121°C).

**2.03 ACCESSORIES**

1. Suction Diffuser Accessories
2. Pressure/Temperature port.
3. Adjustable support foot.

**PART 3 EXECUTION**

* 1. **INSTALLATION**

1. Install suction diffuser in accordance with manufacturer’s instructions.

# Unit shall be a Bell & Gossett Suction Diffuser Plus Model \_\_-3X or \_\_-3Z as manufactured by Xylem.

###### END OF SECTION



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