

**SPECIFICATIONS** Circuit Sentry™

Pressure Independent Flow Limiting Valve

Sizes ½” thru 2½”

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SECTION 23 05 93

Testing, Adjusting, and Balancing for HVAC

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

# Unit shall be a Bell & Gossett® Circuit Sentry™ pressure independent flow limiting valve Model AC as manufactured by Xylem.

# Furnish pressure independent flow limiting valve with capabilities as indicated in the plans.

**1.02 RELATED SECTIONS**

1. Section 23 08 00 – Commissioning of HVAC

**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 Valve 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. Pressure Independent Flow Limiting Valve
   1. Xylem Inc. Bell & Gossett Circuit Sentry pressure independent flow limiting valve Model AC
   2. Pre-approved equal

**2.02 COMPONENTS**

1. Pressure Independent Flow Limiting Valve
2. Valve body shall be constructed out of DZR brass and rated for 400 PSIG working pressure.
3. Valve shall include an integrated chrome plated brass ball valve.
4. Valve body shall include two pressure\temperature ports.
5. Valve shall utilize a removable differential pressure regulating cartridge.
6. Removable differential pressure cartridge shall utilize a removable orifice plate to set the maximum flow through the valve.
7. Removable orifice plate shall be designed to maintain its size and shape while system is in operation. Additionally, the Cv through the orifice plate shall not change while the system is in operation.
8. Removable differential pressure cartridge shall feature a rolling EPDM rubber diaphragm to eliminate metal-on-metal contact and leak paths.
9. Valve body shall have the ability to accommodate a union ended tailpiece with SWTF, male NPT thread, female NPT thread connections and a union nut that can secure the tailpiece to the body of the valve to create a water-tight seal
10. Valve shall have maximum differential pressure limit of 60 psid.
11. Valve temperature range shall be from -4°F (-20°C) to 250°F (121°C).

**2.02 ACCESSORIES**

1. Pressure Independent Flow Limiting Valve Accessories
2. Extended Pressure/Temperature Ports
3. Extended Handle

**PART 3 EXECUTION**

* 1. **INSTALLATION**

1. Install pressure independent flow limiting valve in accordance with manufacturer’s instructions.

# Unit shall be a Bell & Gossett Circuit Sentry pressure independent flow limiting valve Model AC as manufactured by Xylem.

###### END OF SECTION



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