AMERICAN NATIONAL STANDARD

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# General Requirements for Clamp or Pinch Valves

Approved 28 October 2008

ANSI/ISA-75.10.01-2008 General Requirements for Clamp or Pinch Valves

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## 1 Scope

1.1 This document applies to valves, sizes 1 inch through 26 inches, of the clamp or pinch valve design, incorporating clamp or pinch elements.

## 2 Purpose

2.1 The purpose of this document is to establish requirements for clamp or pinch valves. The following requirements are established:

- a) Tests for pressure retaining parts and shutoff integrity prior to shipment
- b) Marking requirements
- c) Procedures for determining the flow coefficient and other related sizing factors
- 2.2 This document excludes solenoid actuated valves and direct fluid actuated valves.

## 3 Definitions

3.1 For definitions of terms used in this document, see ANSI/ISA-75.05.01, Control Valve Terminology.

#### 4 Bibliography

4.1 Manufacturers Standardization Society of the Valve and Fitting Industry, Inc., MSS SP-25, Standard Marking System for Valves, Fittings, Flanges and Unions.

4.2 ISA, ANSI/ISA-75.02.01, Control Valve Capacity Test Procedures.

4.3 Fluid Controls Institute, Inc. ANSI/FCI 70-2, American National Standard for Control Valve Seat Leakage.

4.4 American Society of Mechanical Engineers, ANSI/ASME B31.1, Power Piping.

4.5 American Society of Mechanical Engineers, ANSI/ASME B31.3, Process Piping.

4.6 ISA, ANSI/ISA-75.05.01, Control Valve Terminology.

#### 5 Test procedures

#### 5.1 Pressure test

When specified by the purchaser, a complete valve assembly shall be given a pressure test. The valve shall be tested in the 90% to fully closed position at a gauge pressure not less than 1.5 times the manufacturer's 38° C (100° F) rating, rounded off to the next higher 1 bar (14.7 psi) increment. The test shall be made with water or another suitable liquid that has a viscosity (at temperatures less than 52° C or 125° F) that is equal to or less than the viscosity of water. Air or other non-hazardous gases may be used if proper safety measures are taken and provision is made to detect leakage. Visually detectable leakage through the flexible element wall is not acceptable. Test duration shall be at least 30 seconds. If the valve ordered is not to ANSI/ASME B31.1 or B31.3, then the 1.5 multiplier may be reduced to 1.0.