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# **Control Valve Terminology**

Approved May 14, 2019

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ISA 67 T.W. Alexander Drive P.O. Box 12277 Research Triangle Park, North Carolina 27709

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J. ScaliseE. SkovgaardBechtel Power Corp.Control Valve Solutions

This standard was approved for publication by the ISA Standards and Practices Board on April 24, 2019.

## NAME COMPANY

C. Monchinski, Vice President Automated Control Concepts Inc
D. Bartusiak ExxonMobil Research & Engineering

D. Brandl BR&L Consulting
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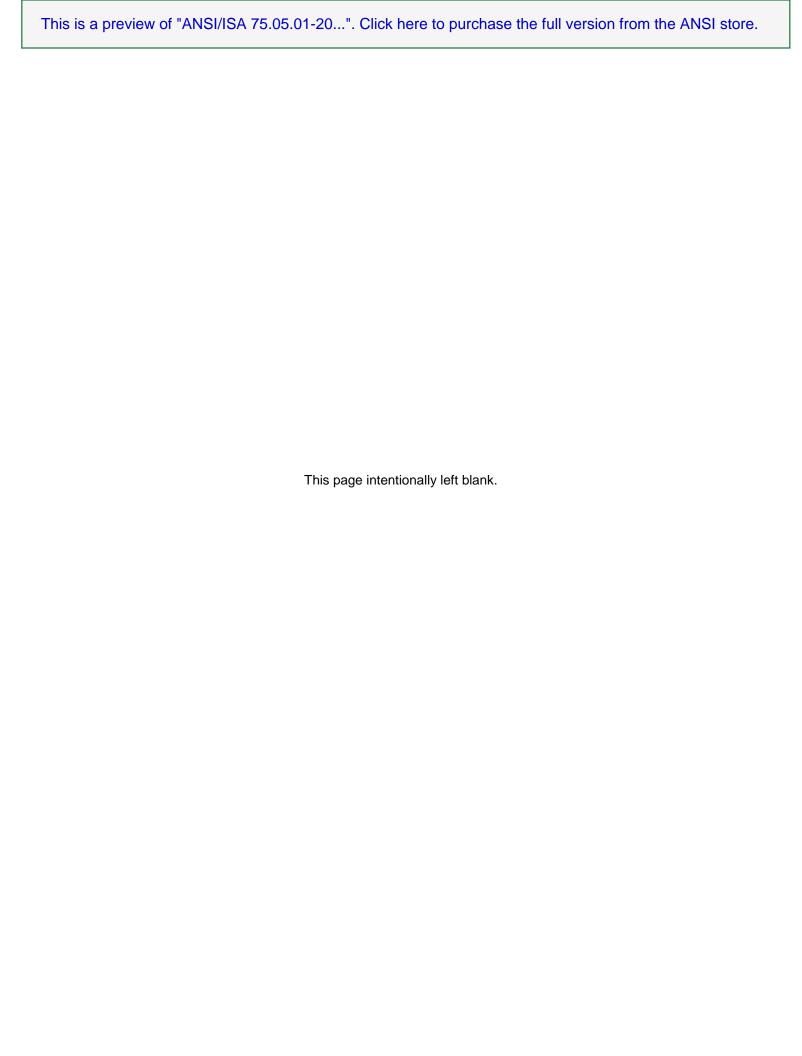
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# 1 Scope

This document contains terminology for control valves.

# 2 Purpose

To provide a glossary of definitions commonly used in the control valve industry.

## 3 Definitions

#### 3.1 accessories:

devices usually attached to the actuator for various control functions such as positioners, relays, solenoid valves, airsets, handwheels, and limit switches.

#### 3.2 accuracy:

the degree of deviation of an indicated value from the true value commonly expressed as a percentage error.

#### 3.3 actuator:

a pneumatic, hydraulic, or electrically powered device that supplies force and motion to position a valve's closure member at or between the open or closed position.

#### 3.3.1 bellows actuator:

a fluid powered device in which the fluid acts upon a flexible convoluted component, the bellows.

#### 3.3.2 diaphragm actuator:

a fluid powered device in which the fluid acts upon a flexible component, the diaphragm. (See Figure 1.)

#### 3.3.3 double-acting actuator:

a device in which power is supplied in either direction. (See Figure 2.)

# 3.3.4 electrohydraulic actuator:

a device that converts electrical energy to hydraulic pressure and into motion.

# 3.3.5 electromechanical actuator:

a device that converts electrical energy into motion.

#### 3.3.6 hydraulic actuator:

a fluid device that converts the energy of an incompressible fluid into motion.

#### 3.3.7 piston actuator:

a fluid powered device in which the fluid acts upon a movable piston to provide motion to the actuator stem. (See Figure 2.)

#### 3.3.8 pneumatic actuator:

a device that converts the energy of a compressible fluid, usually air, into motion.

#### 3.3.9 single-acting actuator:

a device in which the power supply acts in only one direction, e.g., a spring diaphragm actuator or a spring return piston actuator. (See Figures 1 and 2.)