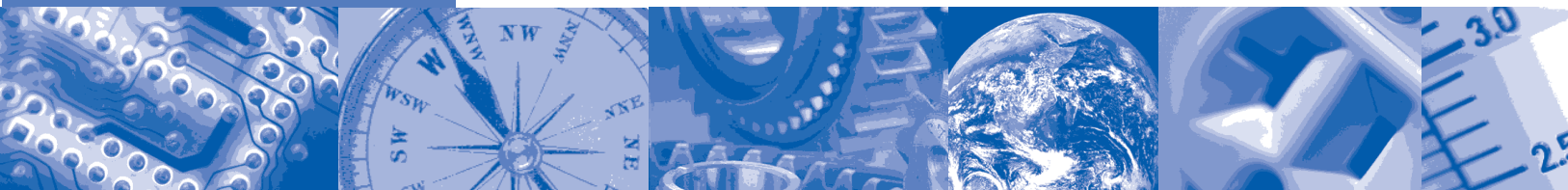


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Control Valve Terminology



**ISA—The Instrumentation,
Systems, and
Automation Society**

Approved 10 January 2001

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1 Scope

This standard contains terminology for control valves.

2 Purpose

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

3 Definitions

3.1 Accuracy:

the degree of conformity of an indicated value to a recognized accepted standard value or ideal value.

3.2 Accessories:

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

3.3 Actuator:

a pneumatic, hydraulic, or electrically powered device which 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 which 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.)