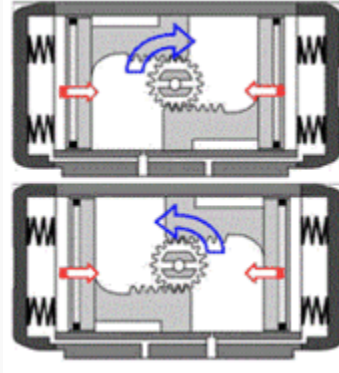


QUARTER TURN, ROTARY AND SPINDLE ACTUATORS



Single acting quarter turn actuator

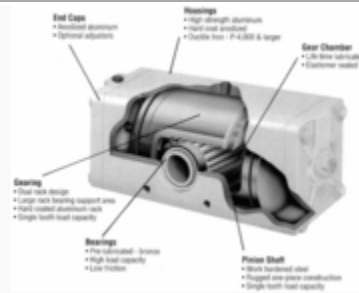


Quarter Turn Actuators

Quarter Turn Actuator is a device used for moving or controlling a mechanism or system that takes energy, usually created by air, electricity, or liquid, and converts that into some kind of motion. Quarter turn actuators are prepared with dry powder coating aluminum alloy. Quarter turn actuators are prepared with extended duty cycle induction motor. Quarter turn actuators are built in thermal protection that prevents motor burning out. High alloy lubricated steel gear trains used in quarter turn actuator provides self locking function to avoid valve back drive.

The quarter turn actuator is a rack and pinion combination that converts the linear movement of the shaft. Quarter turn actuators based on this principle exhibit an identical torque characteristic across the entire rotation angle range of 90°.

Rotary Actuators



Rotary Actuators



Rotary Actuators

Rotary Actuator is an actuator that produces a rotary motion or torque. The simplest actuator is purely mechanical, where linear motion in one direction gives rise to rotation. The most common Actuators though are electrically powered. Other actuators may be powered by pneumatic or hydraulic power, or may use energy stored internally through springs.

The motion produced by an actuator may be either continuous rotation, as for an electric motor, or movement to a fixed angular position as for servos and stepper motors. A further form, the torque motor, does not necessarily produce any rotation but merely generates a precise torque which then either causes rotation, or is balanced by some opposing torque.

Rotary actuators perform the same function as linear actuators while utilizing a different motion. Instead of providing motion over a single axis, rotary actuators use rotation through a fixed arc. As a result, rotary actuators offer benefits such as the ability to operate in limited space and the production of instant torque in either direction.

Applications

Rotary actuators are used in a vast range of applications. These require actuators of all sizes, power and operating speed. These can range from zero power actuators that are only used as display devices, such as air core gauges. Others include valve actuators that operate pipeline and process valves in the petrochemical industry, through to actuators for large civil engineering projects such as sluice gates and dams.

Spindle Actuators



Spindle Actuators are actuator which is equipped with an electric overload switch. Brackets and fastenings to be ordered separately.

Source: http://solidswiki.com/index.php?title=Rotary_Actuators