

Abstract of the Disclosure

The improved valve of the present invention is a self-contained emergency safety shutdown valve which does not require the attendance of an individual or an outside power source for its emergency shutdown. The valve illustrated is a gate valve with the gate movable between positions opening and closing flow through the valve and having a stem which is controlled by a ball shaft extending through a rotary ball nut with means for preventing rotation of ball nut in one direction and means urging stem, gate and ball shaft in a direction closing flow through the valve. The control means controlling the release of the rotation preventing means is controlled by both high and low pressure responsive devices which are interconnected to a plunger for operating the release and to a plunger for sensing the pressure downstream of the valve. At any time the sensed pressure is beyond either the low or high pressure set points, the plunger is moved to operate the release and the gate is returned by the urging means to its closed position. A means is provided by which the release means is held in the release position until manually released but is easily manually release so that the gate may be opening while the control means is ineffective to cause shutdown until normal flow conditions are established.

This Sheet Has Been Replaced
