

Bourdon Tube Pressure Switch (Continued)

Application

This pressure regulator is intended for use as a pilot device responsive to the change in pressure of a pressure system. It is used in conjunction with a magnetic controller to start and stop the motor automatically.

The pressure switch is suitable for use with air, fresh water, oil, or any gas or liquid that does not react chemically with the brass operating mechanism. This switch is not suitable for use with ammonia.

Operation

When the system pressure drops to the value of the low setting, the movable arm makes contact with the "low" stationary contact. This causes the pilot relay to close its contacts. When the high pressure setting is reached, the movable arm makes contact with the "high" stationary contact. This de-energizes the relay and stops the motor. Reverse operation can be specified so that a low pressure can be maintained when the system pressure tends to rise.

Description

This pressure switch consists of a Bourdon tube pressure device arranged to operate a movable electrical contact between two stationary electrical contacts. The positions of the stationary contacts are adjustable to permit changing the point at which the regulator cuts in and cuts out.

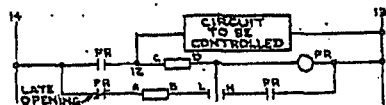
The pressure regulator contacts control a 2-pole magnetic relay mounted above the operating mechanism. One pole of the relay maintains the relay closed after it has been energized thru the pressure regulator contacts. The other pole of the relay provides a 2-wire pilot circuit for starting stopping a magnetic controller.

The complete pressure switch and relay are enclosed in a spraytight case arranged for bulkhead mounting. The enclosing case is provided with a conduit plate at the top. A threaded pipe connection to the Bourdon tube extends thru the side of the enclosing case for connection to the pressure system.

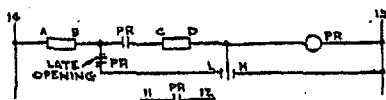
Installation

The pressure regulator should be connected to the pressure system as shown in the sketch below. With this arrangement the pulsations from the pump are dampened by the storage tank or air cushion tank and will not cause false operation of the pressure regulator and the motor.

Elementary Diagrams

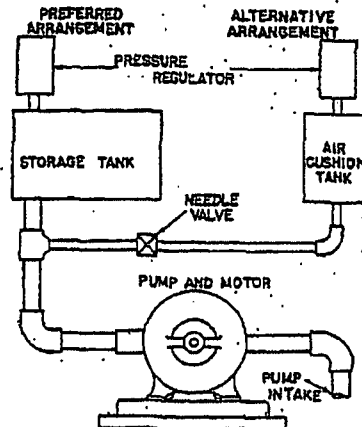


Connections for bourdon tube pressure regulator for D-C — standard operation.



Connections for bourdon tube pressure regulator for A-C — standard operation.

The End



Recommended Location of Regulator

Approximate Dimensions & Weights

