

Installation and Maintenance Instructions for ASHCROFT® Type B700XD2 & D700XD2 & P-Series Snap Action Switches with Dual Seal Rating



Note: This sheet contains information necessary for proper and safe operation and should be read by the installer or user. **DO NOT DESTROY.**

Do not exceed electrical, pressure or temperature ratings on Name plates – turn off power before removing electrical cover. Install in accordance with National Electrical Code or other Applicable specifications. Process fluid type and temperature must be compatible with the wetted materials shown on the nameplates.

The Ashcroft® dual diaphragm pressure actuator is designed to meet the requirements of ANSI/ISA-12.27.01-2003 for process sealing between electrical systems and flammable or combustible process fluids. The testing for the Dual Seal Rating was done by CSA and is part of CSA File LR 55541

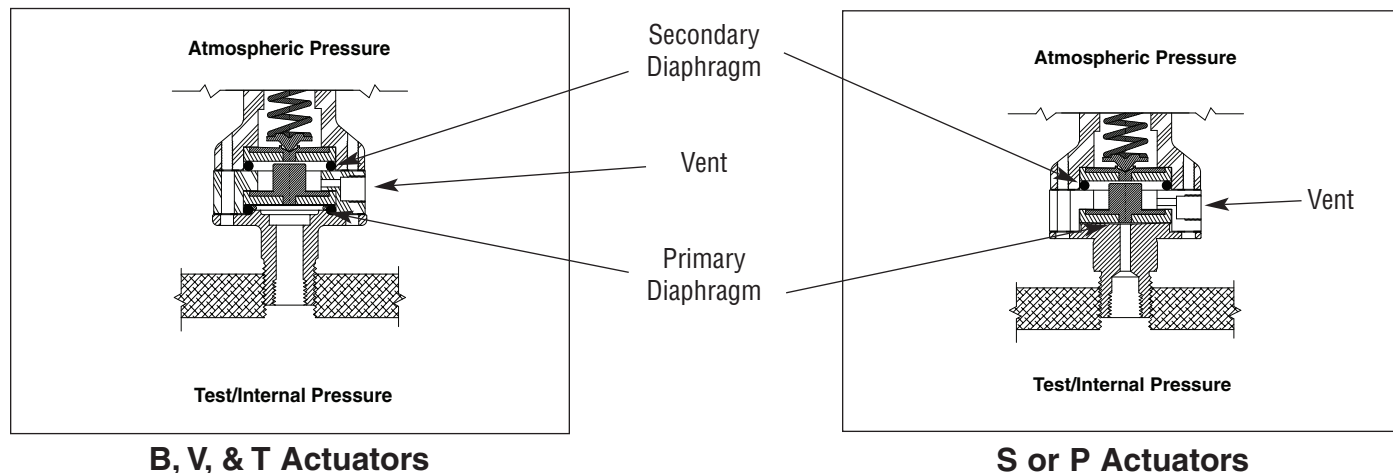
OPERATION

The basic Ashcroft pressure switch actuator consists of a sensing piston of a specific area exposed to process pressure. The pressure on this area creates a force, which is opposed by a spring until the set point is reached, at which point the switch actuates. Various area piston and springs are used to get the different ranges we offer.

The dual diaphragm design consists of a primary or sensing diaphragm as described above and a secondary or redundant seal diaphragm. In the unlikely event that the primary diaphragm ruptures, the secondary diaphragm prevents process fluid from entering the switch enclosure. A vent is provided to annunciate a primary seal failure.

Caution: The vent must not be used or blocked; gas leakage may not be visible.

The XD2 option for B700, PPA, PPD and PPS switches in the ranges of 15 psi to 600 psi.



For inches of water ranges the D700, PDA, PDD and PDS switches are used as pressure switches not differential switches. The H connection is used as the process input and the L connection as the vent.

