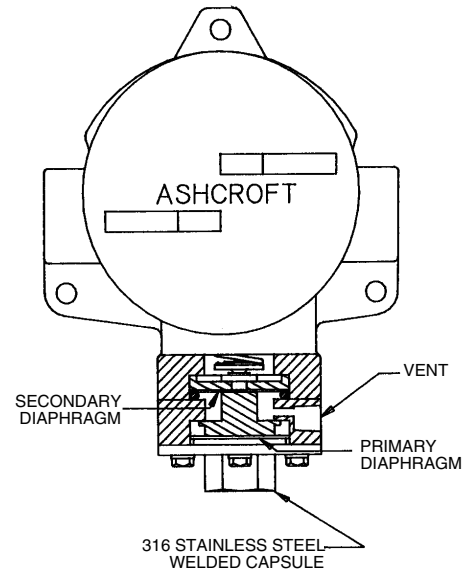


### **DUAL DIAPHRAGM PRESSURE ACTUATOR – OPTION XG7**

The Ashcroft dual diaphragm pressure actuator is designed to reduce the possibility of process fluid from leaking to the atmosphere or getting into the switch enclosure where it could follow the electrical conduit back to a junction box or control room. Our design has been proven on thousands of our limit control switches on boilers and burners over the past ten years and is now enhanced with a welded, stainless steel diaphragm and available with explosion proof enclosures for hazardous locations.



### **OPERATION**

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

The dual diaphragm design consists of a primary, or sensing diaphragm as described above and a secondary, or redundant sealing diaphragm. In the unlikely event that the primary diaphragm ruptures, the secondary diaphragm prevents process fluid from entering the switch enclosure. A 1/4 NPT vent is also provided so that process fluid may be piped off to a safe area.

The entire switch is U.L. listed under file number E38812: "Pressure Operated Switches for Use in Hazardous Locations."

For watertight only applications, see SW/PI-28A option XG6.

### **HOW TO ORDER**

