

# “BULLET PROXIMITY SWITCH” FOR DIVIDER BLOCK LUBRICATION SYSTEMS



## WHY USE PATTON'S “BULLET PROXIMITY SWITCH?”

### ELIMINATES PHANTOM COMPRESSOR SHUTDOWNS & BROKEN SPRINGS IN COLD WEATHER & HIGH PRESSURE APPLICATIONS

Due to the method of construction and superior performance the bullet field sensitive proximity sensor is the compressor industry's choice for divider block systems, and replace the traditional proximity switches with springs in the magnet housing. Patton's Bullet proximity switch is your best choice and is not affected by oil viscosities or temperature.

**“Advanced Design Protects Your Compressor From Phantom Shutdowns Caused By Proximity Switches With Oil Filled Spring Actuated Switches!”**

### “BULLET PROXIMITY SWITCH”

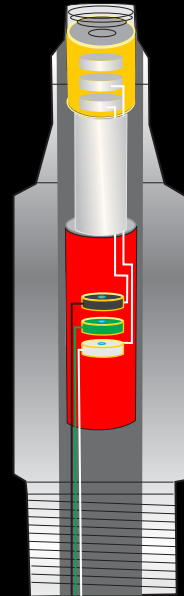


Made in USA

Part # FSPS - BULLET

#### SPECIFICATIONS:

- 5 Amp 24 Vdc - SPST N/O
- One-Piece Construction
- Permanent Magnets
- Operating Temp -4°C + 80°C
- Pressure Rating 3500 PSI
- Consumes No Power



#### FEATURES:

- Triple Magnets Eliminate Contact Chatter in High Vibration & High Pressure Applications
- No Springs to Break
- 316 S.S. Construction
- Epoxy Encapsulation Protects Against Moisture & Dust

*“Every hour the compressor is down,  
equates to thousands of dollars in lost revenue”*

**PATTON DIVIDER BLOCK SYSTEMS**

**Pro-Tecting “Your” Compressor**

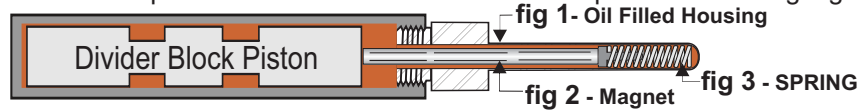
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**THE PROBLEM:**

Premature/phantom shutdowns in cold weather or when the compressor is operating at high discharge pressures are directly attributed to the current design of the oil filled, spring loaded proximity switch used with No-Flow Shutdowns such as the DNFT, ProFlo products & Proximity Switches.



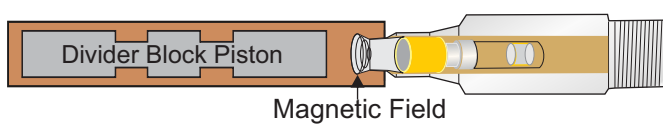
**EXPLANATION: COLD WEATHER:** The spring actuated proximity switch magnet assembly is full of oil (fig. 1), when the divider block piston slides the magnet (fig. 2) into the housing, the oil behind the magnet is forced back into the divider block with each piston cycle. When ambient temperature drops to a specific range, the cold oil in the magnet housing causes the divider block to build pressure, slam the magnet into the housing, increases cycle time of the divider block and the no-flow device shuts down the compressor. The same scenario can take place when using high viscosity lubricants.



**WHAT CAUSES BROKEN SPRINGS IN NO-FLOW SWITCHES & PROXIMITY SWITCHES?** Divider block systems in high pressure applications (over 1500 psi differential) "MUST" have all injection points balanced to eliminate piston slap in the divider block. When the system is NOT balanced, the divider block piston will slap hard against the magnet, over compressing the spring, causing it to fail prematurely (fig. 3)

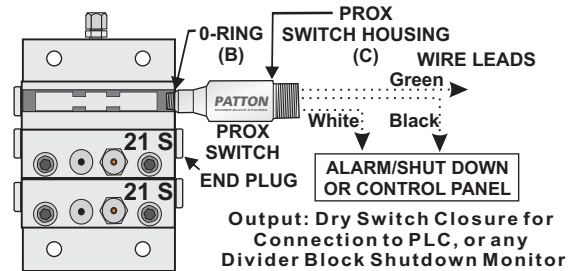
**SOLUTION & OPERATION – "PATTON'S FIELD SENSITIVE "BULLET" PROXIMITY SWITCH**

Fluid flow in the divider block moves the piston within magnetic range of the end of the housing, which causes the internal magnet to close the dry contacts, sending a switch closure to the PLC control panel, or to any industry standard flow monitoring shutdown device. PATTON'S FIELD SENSITIVE "BULLET" PROXIMITY SWITCH, is designed for use with all divider block systems and IS NOT AFFECTED BY OIL VISCOSITY OR LOW TEMPERATURES!



**INSTALLATION:**

1. Remove end plug (A) from divider block where proximity switch will be installed.
2. Ensure 0-ring (B) is in place on switch housing (C).
3. Install switch on any available divider block section, left or right side.
4. Torque to 6-9 foot pounds max.
5. **CAUTION:** Switch Must Not come in contact with divider block piston. Piston contact with the end of the switch will cause premature failure!



**WIRING DIAGRAM to MINUTEMAN SHUTDOWN**

