Product Overview
The Silver Bullet is a Magnum hermetically sealed proximity switch, double encapsulated in a 316 stainless steel enclosure using an epoxy resin and shock absorbent polymer. This helps to create a sensor solution that is highly resistant to shock and vibration stresses and chemical and environmental exposure.

316 – Stainless steel casing, SPDT switch element
316 DB – Stainless steel casing, DPDT switch element

Features and Benefits
• Available with SPDT or DPDT switches.
• Integrated FieldSet trigger system permits easy calibration of position limits.
• Mounting kits available for all control and knife gate valves.
• Standard 4 foot lead accommodates mounting to large valve, with optional 20 foot lead for more remote mounting.
• Rhodium contact option for use with low power I/O's for longer contact life. (See Technical Specifications page 2.)

Maintenance
All Silver Bullets are bolted to heavy duty stainless steel brackets. Sensor triggering is accomplished by stainless steel encapsulated ferromagnetic actuators. Eventually, as valve seats wear, a slight readjustment of position sensors becomes necessary. The Fieldset™ triggering system allows fast resetting by the simple turning of a bolt rather than the disconnecting of rigid conduit systems.

Agency Approvals:
Class I, Division 1; Groups A, B, C & D
Class II, Division 1; Groups E, F & G
Dimensions

Technical Specifications

Enclosure: 316 stainless steel
Temp. range: -40°F to +220°F
Operating time: 3.0 milliseconds
Repeatability: 0.005 inch
Hysteresis: 0.030 inch
Hermetic seal: Glass (vacuum)
Potting: Epoxy resin
Sensing: 0.100 inch end sensing

Available Switches
- Magnum, SPDT hermetically sealed switches, with Tungsten contacts
- Magnum, SPDT hermetically sealed switches, with Rhodium contacts

Electrical ratings same as XT90 see reference section

Ordering Guide

Part Number
316  SPDT with 4 ft. lead (standard)
316-20  SPDT with 20 ft. lead
316DB  DPDT with 4 ft. lead
316-R  SPDT with Rhodium contacts with 4' lead (standard)
316-20-R  SPDT with Rhodium contacts with 20' lead
316DB-R  DPDT with Rhodium contacts with 4' lead

Important Application Notes: For very low power sensing applications, Power ≤ 240 mW (24 VDC @ 10 mA for example) Magnum sensors with Rhodium contacts, M12 (SPDT), MUST be used.

Magnum and Sensors Only PLC input modules utilize capacitors to filter out electrical noise. Newer, more sensitive designs have higher input impedances and lower operating currents and thus require higher values of capacitance for filtration.

If the DI card Capacitance ≥ 0.01 µF a resistor of appropriate size MUST be used in series with the switch contacts to prevent the capacitive discharge from damaging the switch contacts. As an alternative, specify the MagPAC. Please contact your sales representative for resistor sizing, capacitance measurement procedure and other required information.

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