

## ***XL Series Explosion Proof UltraSwitch™***

### **Introduction:**

The XL series UltraSwitch™ is U.L. listed and CSA certified to waterproof and explosion proof standards. This position indicator features “quick-set” tool-free adjustment cams for ease of position sensing adjustment. The XL comes standard with a Pharos™ position indicator or a flat top for a lower profile. Many switch options can be installed to meet each application’s needs. Each integral switch is pre-wired to a multi-point terminal block. A minimum of two spare terminals are provided for external accessories to eliminate costly junction boxes. The enclosure includes two 3/4" N.P.T. conduit connections for easy wiring access.



### **Applications:**

The XL enclosure is designed to provide accurate and reliable hazardous location position signaling. Many switch options are available to meet your electrical specifications. This watertight position indicator will mount to any rack and pinion, scotch yoke, vane, or other rotary actuator type.

The XL may be installed on any actuator conforming to the NAMUR standard for accessory mounting bolt pattern and pinion height without a coupler (see Bulletin PS0037-CV). This reduces deadband and is less expensive. Automax also offers a full line of mounting hardware for non-NAMUR actuators.

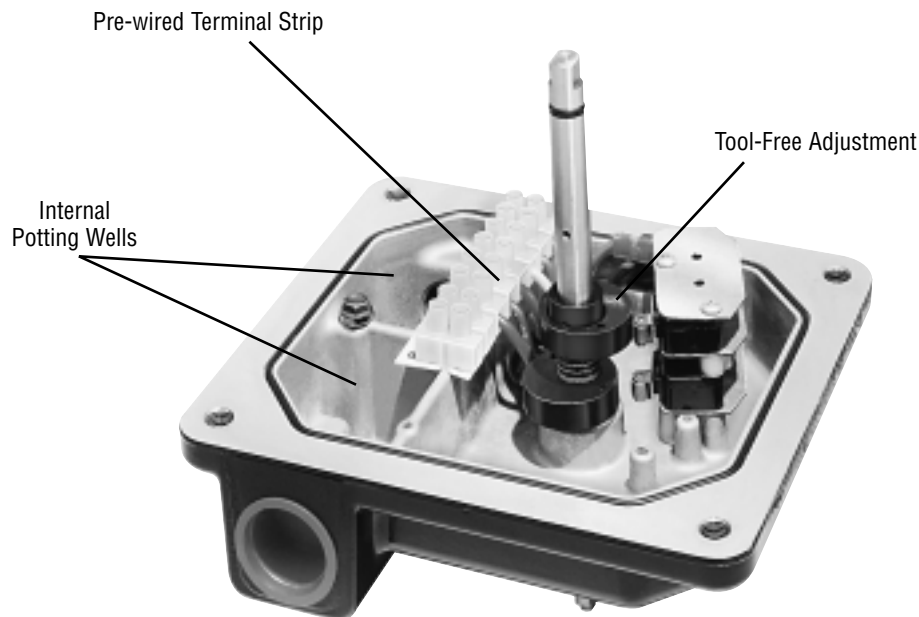
Durable aluminum construction and corrosion resistant materials/coatings provide protection against the toughest applications in all process industries including:

1. Chemical and Petro-Chemical
2. Power
3. Food and Beverage
4. Pharmaceutical
5. Municipal and Wastewater treatment

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Flow Control Division  
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Springville, Utah 84663-3004  
Phone: 801 489 8611

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Phone: 931 432 4021

**Features:**

1. **Quick-Set Cams.** Tool free adjustment of switch trip point is accomplished simply by pushing or pulling the cam and rotating it to the new position. Cams are spring-loaded and splined to maintain switch setting in any installed position. They are fully adjustable through 360° in 4° increments.
2. **Corrosion Resistant Materials.** All exposed parts are either stainless steel or aluminum treated with dichromate undercoat and polyester powder top coat to permit use in corrosive environments.
3. **Captive Cover Screws** permit calibration without potential for losing screws.
4. Optional **Pharos Visual Position Indicator** provides fully adjustable, high-contrast, full-angle viewing of valve position.
5. Numbered, pre-wired Multi-point **Terminal Strip** for easy hookup. Two spare terminals are provided with every switch to accommodate additional field devices, such as solenoid valves, to eliminate the cost of any additional junction boxes.
6. Each UltraSwitch™ enclosure includes a **Detailed Wiring Diagram** permanently attached inside the cover.
7. **Internal Grounding Screw** for ground wire hookup.
8. **Internal Potting Wells.** Within the housing at the conduit entries are two potting wells available for factory-sealed leads. Designed to U.L. and CSA specifications, they eliminate the need for costly conduit seals.

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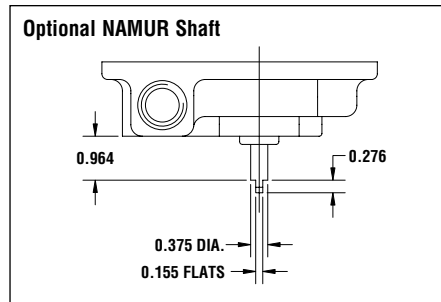
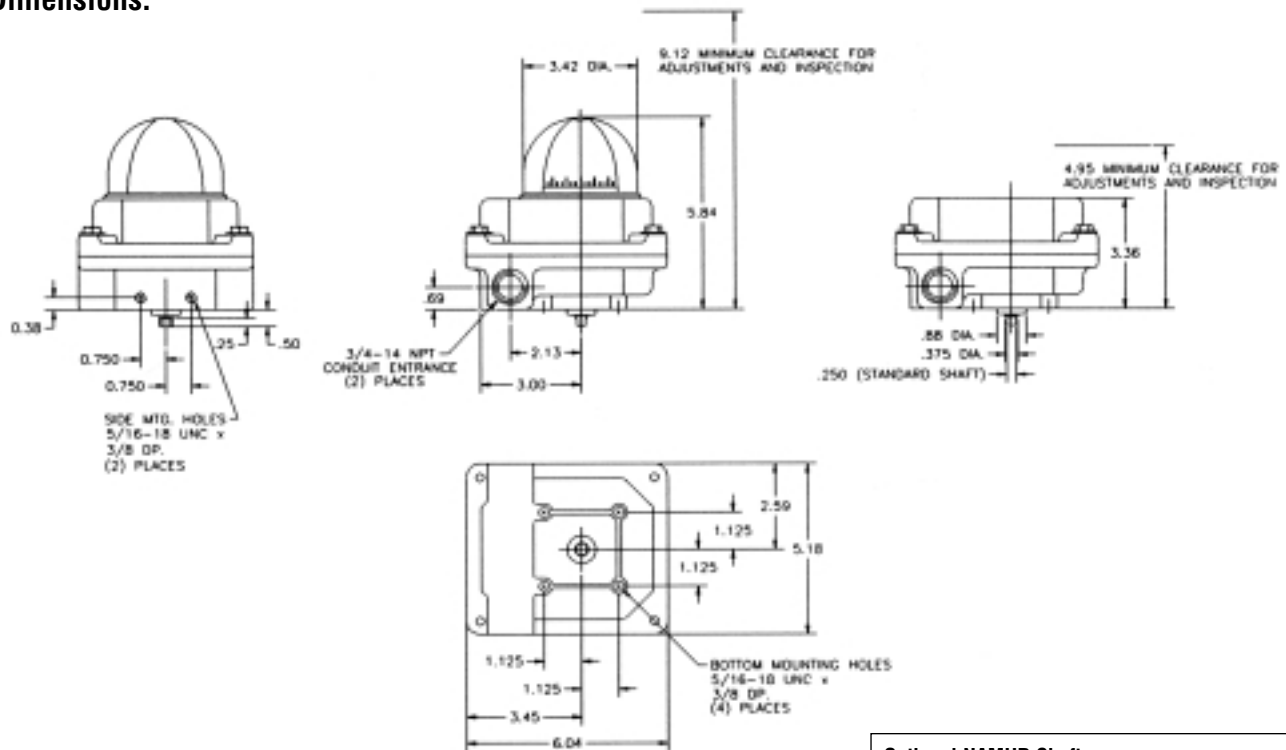
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### Materials of Construction:

Part	Materials
Housing/Cover	Aluminum w/Dichromate & Powdercoat
Shaft	Stainless Steel
Cams/Splines	Nylon
Pharos Dome and Rotor	Polycarbonate
Terminal Block	Nylon - Buchanan TBS Series
Internal Brackets	Stainless Steel or Plated Steel
All Internal Fasteners	Stainless Steel or Plated Steel
All External Fasteners	Stainless Steel

### Dimensions:



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**Principles of Operation:**

The XL series UltraSwitch™ is designed for use with any industrial rotary actuator in hazardous locations. It indicates open and closed valve positions by completing electrical circuits to remote locations. The XL series may include an analog feedback device (see bulletin PS0050-CV) to indicate continuous position for modulating packages. Local visual indication is accomplished with the Pharos™ Rotary Indicator.

**NEMA 4, 4X, 7, and 9****Hazardous Location Approvals:****Mechanical Switches****Types 1, 2, & 3**

Class 1, Groups C & D, Div. 1 & 2  
Class 2, Groups E, F & G, Div. 1 & 2

**Proximity Switches****Types 4, 5, 6, all Phazer, R & U**

Class 1, Groups C & D, Div. 1 & 2  
Class 2, Groups E, F & G, Div. 1 & 2

Class 1, Groups A & B, Div. 2 only

**Note:** When using hermetically sealed proximity switches, a conduit seal is **NOT** required (Division 2 only).

**Temperature Range:**

-40 to 180 Deg. F  
-40 to 250 Deg F: Consult Factory

**Agency Listings:**

U.L. File No. E122717  
C.S.A. File No. LR 83687

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