

ORDER IT!

Ordering is Easy! See Instructions on Page E-2.



LEVEL SWITCHES

ULS-11 Series – Single Point

Self-Contained Relay Saves Space

- ▶ 1 Amp Relay Output
- ▶ 9 to 36 VDC Input
- ▶ Temperatures to 160°F (71.1°C)
- ▶ Lengths to 99 inches (251.5 cm)

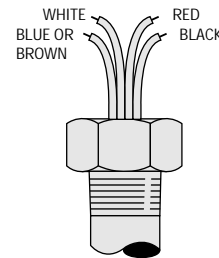
By integrating a 1 amp relay into the stem, we've made the ULS-11 our most compact ultrasonic unit. Yet, as unobtrusive as it is, the ULS-11 still delivers ultra-reliable solid-state performance in lengths up to 99 inches. Tip gap probe configuration places sensing point at 1/4 inch from probe tip for closer tank bottom sensing. Electronics are completely epoxy sealed for years of maintenance free service.

Specifications

| | |
|-----------------------|--|
| Input Power* | 9 VDC to 36 VDC |
| Leakage Current | <50 μ A |
| Gain | 300:1 |
| Output | 1 Amp, SPST Relay Output (Specify Dry Contact, N.O. or N.C.) |
| Repeatability | 2mm typical |
| Delay (On) | 0.5 Seconds |
| Operating Temperature | -20°F to +160°F (-28.9°C to +71.1°C) |
| Pressure, PSIG, Max. | 1000 |
| Protection | Transient Reverse Polarity |
| Lead length | 12" PVC** |

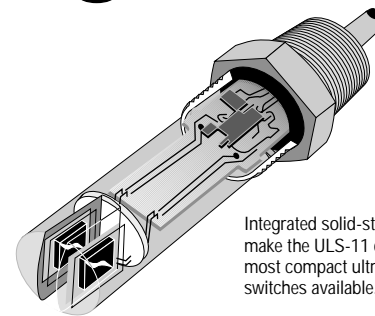
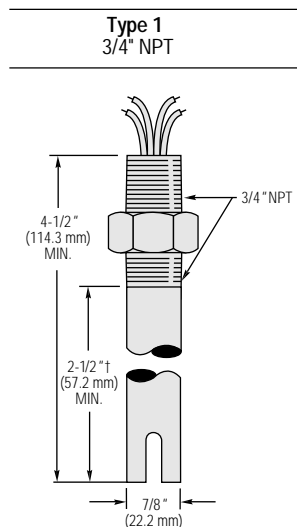
* Contact GEMS for optional AC input versions.
 ** Consult factory for longer lead lengths.

Wiring Diagram



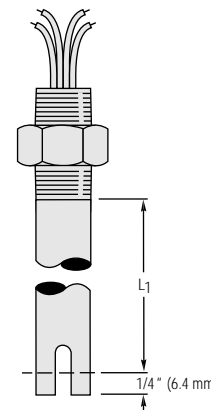
Color Code
 Power: Red (+)
 Black (-)
 Relay: Common - White
 N.O. - Blue
 N.C. - Brown

1. Mounting Type



Integrated solid-state electronics make the ULS-11 one of the most compact ultrasonic level switches available.

2. Actuation Level Dimensions



Switch actuation level (L_1) is determined following the guidelines below.
 $L_1 = 2\text{-}1/4"$ (57.2 mm) Minimum
 99" (251.5 cm) Maximum

| | |
|-------------------------------|----------------------|
| Mounting and Sensor Materials | 316 Stainless Steel* |
|-------------------------------|----------------------|

* Other materials available. See Page E-3.
 † 2-1/4" units are standard stock units. All other lengths are custom and require 5 piece minimum order.