

# ELS -1100HT

## Handles Temperatures to 100°C (212°F)

Slightly larger than the ELS-1100, the “HT” or High Temperature version is made from high performance Isoplast® plastic. While maintaining broad chemical compatibility, these units also handle fluid temperatures to 100°C (212°F). They feature 3/8” NPT mountings and are the shortest of any of our plastic electro-optic switch bodies – HTS versions are a mere 13 mm long, with the option of M16 mounting.

### Typical Applications

- Coolant reservoir monitoring
- Medical diagnostic and sterilizer equipment
- Low lubricant warning on machine tools
- Low level warning in hydraulic reservoirs

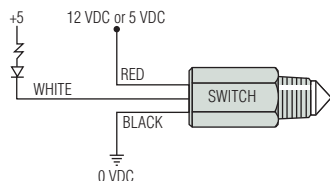
### Specifications

Materials	
Housing and Prism	Isoplast®
Operating Pressure	0 to 10 bar (0 to 150 PSI), Maximum
Operating Temperature*	-40°C +100°C (-40°F to +212°F)
Current Consumption	45 mA, Approximately
Output	TTL/CMOS Compatible. Transistor Output with 10K Pull Up Resistor May Sink 18 mA. 12 VDC input power units switch a maximum 5 VDC on output
Repeatability	±1 mm
EMI Susceptibility	CE approved per EN61000

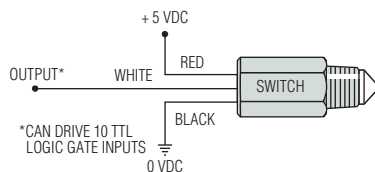
\* These switches are not for use in freezing liquids or steam/high condensation environments. Contact Gems for alternative solutions.

### Wiring Diagrams

Transistor Output



TTL Compatible Output



### How To Order

#### HT Series

Specify Part Number based on Input and Output Condition required.

Input Power	Probe Condition at Current Sink	
	Wet, N.O.	Dry, N.C.
5 VDC	153061	153062
12 VDC*	153063	153064

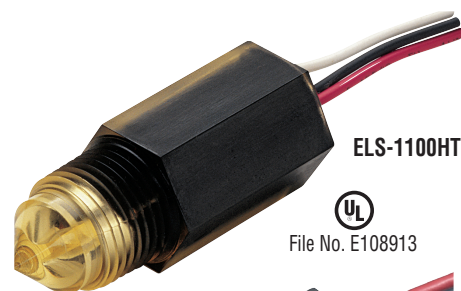
\*12 VDC input power units switch a maximum 5 VDC on output.  
Note: Extend the power and switching capabilities of 10-28 VDC models with Gems Opto-Pak Controllers.

#### HTS Series - 5 VDC Input Only

Specify Part Number based on Wet or Dry switch actuation and mounting type.

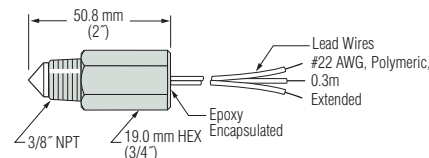
Mounting Type	Probe Condition at Current Sink	
	Wet, N.O.	Dry, N.C.
3/8” NPT	181674	<b>181675</b>
M16x2	191341	<b>191342</b>

**Bold** = Stock Items



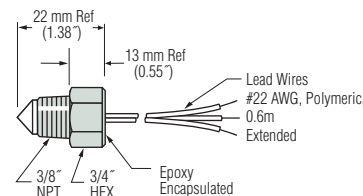
### Dimensions

#### HT Series

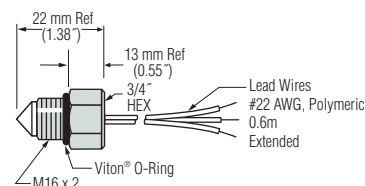


#### HTS Series

##### 3/8” NPT Mounting



##### M16 x 2 Straight Thread Mounting with O-Ring



### Extended Power and Switching Capabilities of 10 to 28 VDC Models with Gems.

Converts TTL output signal to 5 Amp relay output. Available as open circuit board or mounted in a NEMA 4X enclosure (pictured).

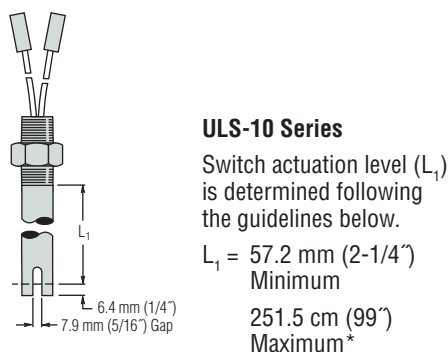
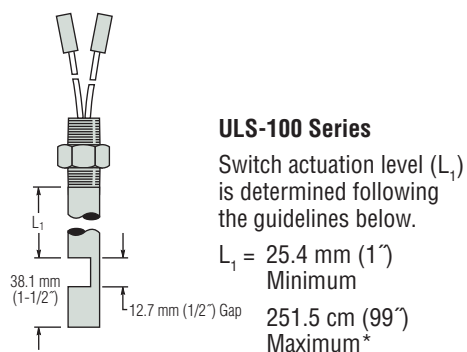


## 1. Mounting Type\*

Integral Electronics 3/4" NPT		Remote Electronics 3/4" NPT	
Uls-100 Series	Uls-10 Series	Uls-100 Series	Uls-10 Series
<b>Mounting and Sensor Materials</b>		316 Stainless Steel (Standard) Consult Factory For Other Materials.	

\*Flanges also available; consult factory for sizes and materials.

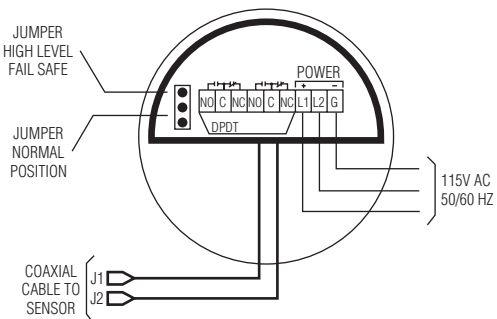
## 2. Actuation Level Dimensions



\*Consult factory for longer lengths.

## Wiring Diagrams

### DPDT – ULS-10 and ULS-100 Series



Note:  
For 24 VDC or 12 VDC Models  
Connect Positive (+) to L1-Terminal  
Connect GND (-) to G - Terminal

### 4-20mA – ULS-10 Series only

