

## ELS-1200RE Enables Switch Replacement without Downtime!

These Electro-Optic switches feature a one piece removable electronics module with 1/2" NPT conduit connection and an internal O-ring seal to protect against external moisture intrusion. Simply unthread the 1/2" NPT conduit connection for easy replacement of the electronics module without the inconvenience of emptying or depressurizing tanks. ELS-1200RE switches feature glass prisms fused to zinc/nickel plated, carbon steel housings. Select from either 1/2" NPT mounting connections, or 3/4"-16 UNJF-3A straight thread connections with an external O-ring seal. They monitor high pressure liquid processes with very little intrusion into tanks or piping.

### Specifications

<b>Mounting</b>	1/2" NPT, 3/4"-16 UNJF-3A Thread
<b>Materials</b>	
<b>Housing</b>	Zinc/Nickel-Plated Carbon Steel
<b>Prism</b>	Fused Glass
<b>Operating Pressure</b>	0 to 2500 PSI, Maximum*
<b>Operating Temperature</b>	
<b>12 VDC</b>	-40°F to +212°F (-40°C to +100°C)
<b>24/120 VAC Prism Tip</b>	-20°F to +240°F (-29°C to +116°C)
<b>Electronics</b>	-20°F to +162°F (-29°C to +72°C)
<b>Current Consumption</b>	
<b>12 VDC</b>	~45 mA
<b>24/120 VAC</b>	~6 mA
<b>Output</b>	
<b>12 VDC</b>	TTL/CMOS Compatible. Transistor Output with 10K Pull Up Resistor May Sink 18 mA.
<b>24/120 VAC</b>	Switch Rating 225 mA @ Rated Voltage @ 77°F (25°C); 60 mA @ Rated Voltage @ 161°F (72°C)
<b>Electrical Termination**</b>	
<b>12 VDC</b>	22 AWG, Polymeric, 12" to 14" Extended Lead Wires
<b>24/120 VAC</b>	20 AWG, Polyester, 12" to 14" Extended Lead Wires
<b>Repeatability</b>	±1 mm
<b>Approvals</b>	U.L. Approved – File No. E180359

\*For straight thread mounting units when installed with tube fitting per MS 33649.

\*\*Consult GEMS for cable options.

### How To Order

Specify Part Number based on desired Input Power, Output Condition, and Mounting Type.

Input Power	Probe Condition at Current Sink	Mounting Type	
		1/2" NPT Thread	3/4"-16UNJF Thread
12 VDC*	Wet	<b>160646</b>	<b>161433</b>
	Dry	<b>160954</b>	–
24 VAC	Wet	<b>166852</b>	–
	Dry	<b>166854</b>	<b>168422</b>
120 VAC	Wet	<b>164219</b> ⚡	–
	Dry	<b>164222</b> ⚡	–

\*12 VDC input power units switch a maximum 5 VDC on output.

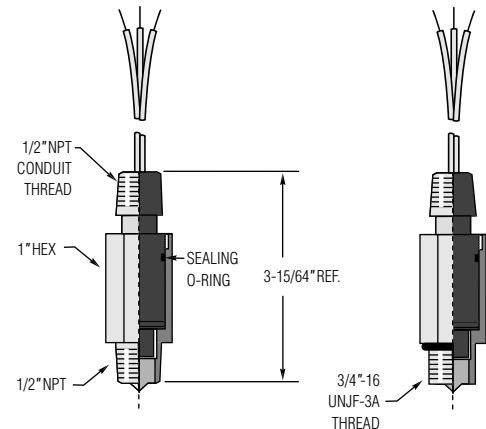
Notes:

- 24 VDC available on request.
- Delay option available on VAC versions. Please contact Gems factory.

⚡ – Stock Items.

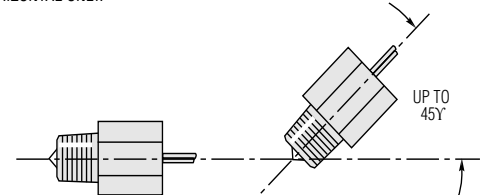


### Dimensions



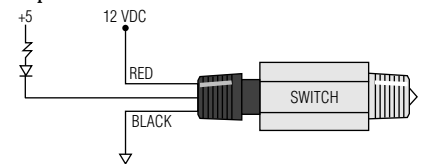
### Mounting Attitude

THESE UNITS MUST BE MOUNTED HORIZONTALLY OR UP TO 45° FROM HORIZONTAL ONLY.

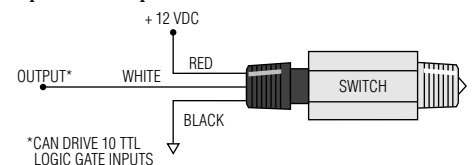


### Wiring Diagrams

#### Transistor Output – 12 VDC Version



#### TTL Compatible Output – 12 VDC Version



#### SPST, 24 or 120 VAC Version Output

