

ELS-1200 Series with Integral Electronics for Pressurized Vessels to 2500 PSI!

High pressure liquid processes can now be monitored effectively with very little intrusion into tanks or piping. ELS-1200 switches feature fused glass prisms fused to zinc/nickel plated, carbon steel housings. You'll find them to be a compact, reliable and durable solution to liquid level monitoring of refrigerant, compressor oil, hydraulic system reservoirs and machine tools.

Specifications

Materials	
Housing	Zinc/Nickel-Plated Carbon Steel
Prism	Fused Glass
Operating Pressure	
	0 to 2500 PSI, Maximum
Operating Temperature*	
	-40°F to +212°F (-40°C to +100°C)
Current Consumption	
	~45 mA
Output	
	TL/CMOS Compatible. Transistor Output with 10K Pul UP Resistor. May Sink 18 mA. 12 VDC Input Power Units Switch A Maximum 5 VDC on Output.
Electrical Termination**	
	22 AWG, Polymeric, 12" to 14" Extended Lead Wires
Repeatability	
	±1 mm
Approvals	
	U.L. Approval

* These switches are not for use in freezing liquids. Consult factory for higher temperature units.

** Consult GEMS for cable options.

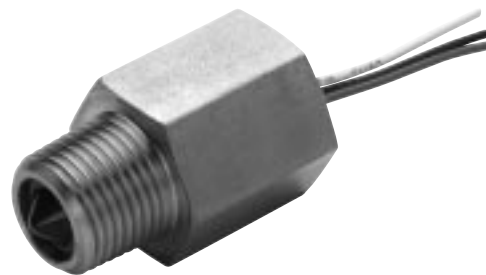
How To Order

Specify Part number based on desired Input Power, Output Condition and Electrical Termination.

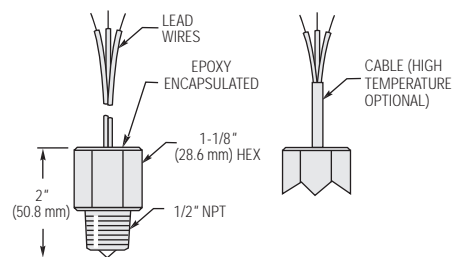
Input Power	Probe Condition at Current Sink	
	Wet	Dry
5 VDC	153842	154177
12 VDC*	153843 ⚡	154178

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

⚡ - Stock Items.

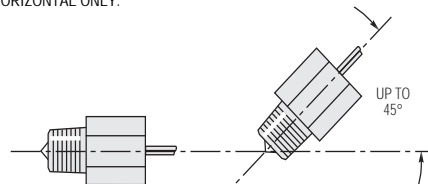


Dimensions



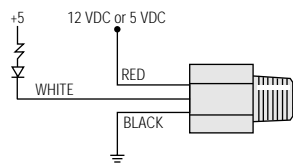
Mounting Attitude

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

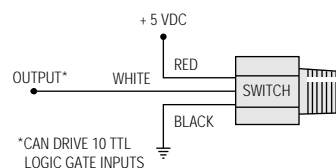


Wiring Diagrams

Transistor Output



TTL Compatible Output



ELS-1200 Series with Removable Electronics Module and Conduit Connection

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-1200 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

Mounting	1/2" NPT 3/4"-16 UNJF-3A Thread
Materials	
Housing	Zinc/Nickel-Plated Carbon Steel
Prism	Fused Glass
Operating Pressure	0 to 2500 PSI, Maximum*
Operating Temperature	
5/12 VDC	-40°F to +212°F (-40°C to +100°C)
24/120 VAC	
Prism Tip	-20°F to +240°F (-29°C to +116°C)
Electronics	-20°F to +162°F (-29°C to +72°C)
Current Consumption	
5/12 VDC	~45 mA
24/120 VAC	~6 mA
Output	
5/12 VDC	TTL/CMOS Compatible. Transistor Output with 10K Pull Up Resistor May Sink 18 mA.
24/120 VAC	Switch Rating 225 mA @ Rated Voltage @ 77°F (25°C); 60 mA @ Rated Voltage @ 161°F (72°C)
Electrical Termination**	
5/12 VDC	22 AWG, Polymeric, 12" to 14" Extended Lead Wires
24/120 VAC	20 AWG, Polyester, 12" to 14" Extended Lead Wires
Repeatability	±1 mm
Approvals	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
5 VDC	Wet	171574	161431
	Dry	160953	161432
12 VDC*	Wet	160646	161433
	Dry	160954	161434
24 VAC	Wet	166852	168174
	Dry	166854	168422
120 VAC	Wet	164219	166848
	Dry	164222	166850

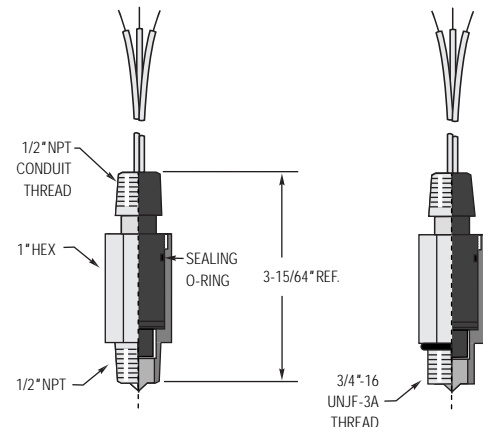
*12 VDC input power units switch a maximum 5 VDC on output.

Notes:

1. 24 VDC available on request.
2. Delay option available on VAC versions. Please contact Gems factory.

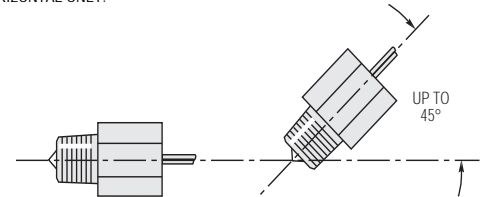


Dimensions



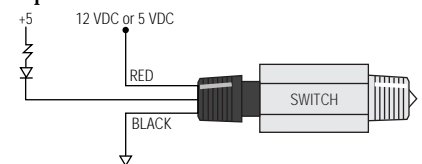
Mounting Attitude

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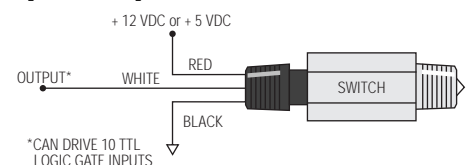


Wiring Diagrams

Transistor Output – 5 VDC and 12 VDC Version



TTL Compatible Output – 5 VDC and 12 VDC Version



SPST, 24 or 120 VAC Version

