

# General Purpose ELS -1100 Series Satisfies Most Applications

These polysulfone units are both compact and economical. They feature a variety of mountings, power requirements and electrical terminations to make it easy to find a perfect match for your application.

## Specifications

<b>Materials</b>	
<b>Housing and Prism</b>	Polysulfone or Nylon
<b>Operating Pressure</b>	0 to 150 PSI, Maximum
<b>Operating Temperature*</b>	0°F to 176°F (-17.8°C +80°C)
<b>Current Consumption</b>	18 mA, Approximately
<b>Output†</b>	TTL/CMOS Compatible. Open Collector Output May Sink 40 mA UP TO 30 VDC.
<b>Repeatability</b>	±1 mm
<b>EMI Susceptibility</b>	Meets (MIL-STD-461B Part 2 Modified) Specification of 10 V/M for Frequency Range 30 to 1000 MHz (Except 609 MHz = 9 V/M and 679 MHz = 7.5 V/M).

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



U.L. Listed  
File No. E108913

## Dimensions

1/4" NPT Mounting	1/4" NPT Mounting with 3/8" Conduit	1/2" Straight Thread Mounting with O-Ring	M12x1-8g Straight Thread with O-Ring	"Fish" Pull Ring
<b>Electrical Termination</b> Lead Wires, 22 AWG, PVC Jacketed, 12" to 14" Extended				25' Cable, 22 AWG, PVC Jacketed

## How To Order

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

Input Power	Probe Condition at Current Sink	Mounting Type					
		1/4" NPT	1/4" NPT & 3/8" Conduit		1/2" Straight Thread	M12x1-8g Straight Thread	"Fish" Pull Ring
		Polysulfone	Polysulfone	Nylon	Polysulfone	Polysulfone	Polysulfone
5 VDC	Wet	138167	144225	175631	144235	166541	—
10-28 VDC	Wet	142700 ⚡	143585 ⚡	157750	143580	169555 ⚡	143577
	Dry	143570 ⚡	143590 ⚡	175632	143575	169556	148973 ⚡

⚡ - Stock Items.

## Intrinsically-Safe Versions

GEMS ELS-1100 Switches may be rendered intrinsically-safe for Class I, Division 1, Group C & D when used with appropriate GEMS Zener Barriers. Call Gems Sensors for special ELS-1100-IS (intrinsically-safe) part numbers and Installation Bulletins 148745 and 148744, File No. E44570.

## Extended Power and Switching Capabilities of 12 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). See Page A-33.

