# 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**

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

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



#### **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	
	LEAD WIRES  EPOXY ENCAPSULATED  5/8*HEX (15.9 mm)  1/4* NPT	3/8 * NPT MOUNTING 5/8 * HEX (15.9 mm) (54.7 mm)	2-5/32" (15.9 mm)	2-5/32" (15.9 mm) VITON® (54.7 mm) — M12 x 1-8g	CABLE  5/8 HEX. (15.9 mm)  2-5/8 REF.  PVC FISH PULL RING	
Electrical Termination		25´ Cable, 22 AWG, PVC Jacketed				

#### How To Order

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

	Probe Condition at Current Slnk	Mounting Type						
Input Power		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 🗲	

## 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.

