

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	
Housing and Prism	Polysulfone or Nylon
Operating Pressure	0 to 150 PSI, Maximum
Operating Temperature*	0°F to 176°F (-17.8°C to +80°C)
Current Consumption	18 mA, Approximately
Output†	TTL/CMOS Compatible. Open Collector Output May Sink 40 mA Up to 30 VDC.
Repeatability	±1 mm
EMI Susceptibility	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 liquids.
 † See Page C-1 for Wiring Diagrams.



Dimensions

	1/4" NPT Mounting	1/4" NPT Mounting with 3/8" Conduit	1/2" Straight Thread Mounting	M12x1-8g Straight Thread with O-Ring	"Fish" Pull Ring
Electrical Termination	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	Nylon	Polysulfone
5 VDC	Wet	138167 ⚡	144225	175631	144235	166541	175630	139293
	Dry	142700 ⚡	143585 ⚡	157750	143580	169555	175620	143577
10-28 VDC	Wet	143570	143590	175632	143575	169556	175610	148973
	Dry							

⚡ - 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.

ELS-1100HT Handles Temperatures to 212°F

Slightly larger than the ELS-1100, the "HT" or High Temperature version is made from high performance Isoplast® plastic. This material provides extended temperature, durability and chemical compatibility... all at a low cost!

Specifications

Materials	
Housing and Prism	Isoplast®
Operating Pressure	0 to 150 PSI, Maximum
Operating Temperature*	-40°F to + 212°F (-40°C to +100°C)
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
Electrical Termination	Lead Wires, 22 AWG, Polymeric, 12" to 14" Extended.

* These switches are not for use in freezing liquids.

How To Order

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

Input Power	Probe Condition at Current Sink	
	Wet	Dry
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.

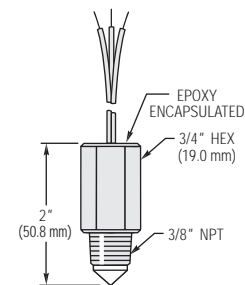
⚡ – Stock Items.

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

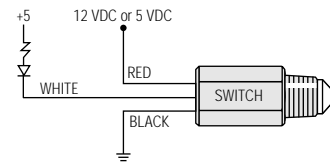
Converts TTL output signal to 5 Amp relay output. Available as open circuit board or mounted in a NEMA 4X enclosure (pictured). See Page C-7.



Dimensions



Wiring Diagrams Transistor Output



TTL Compatible Output

