

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 +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 liquid
 † See Page A-33 for Wiring Diagrams



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 |
|-------------------------------|---|-------------------------------------|---|--------------------------------------|---------------------------------|
| | | | | | |
| 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 |
| 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-35.

