

**TED/RL  
OPTICAL LEVEL SENSOR FOR LIQUIDS  
w/ POWER SUPPLY & RELAY**



Flow  
Pressure  
Level  
Temperature  
measurement  
monitoring  
control



**TED Features:**

- Polysulfone, Stainless Steel or Teflon Bodies
- Compatible With Most Liquids
- Resistant to Coating of Lens
- Ultra-reliable... No Moving Parts
- No Adjustment or Calibration Required
- Low Cost

**RL-5900 Features:**

- Protection for Dry Contacts or Transistor Switches
- 110 or 220 VAC Power Supply
- 24 VDC Excitation
- SPDT Relay



N1



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Model:  
TED/RL

## Ultra-Reliable Electro-Optic Level Switch

KOBOLD's TED electro-optic level switch is the solution to your difficult level switching needs. This device operates independently of liquid properties such as color, viscosity, dielectric constant, density, conductivity, contamination, and temperature. The TED is compact, self-contained and all solid state. With no moving parts to wear out, reliability is not just a TED design goal... it's a given.

Installing the TED is easy. Simply thread the body into a container, reservoir or pipe. Polysulfone, Stainless Steel or Teflon construction insures compatibility with all metal or plastic containers. The TED's chemical resistance makes it ideal for many industrial applications.

Should your application require higher power switching capability, a 10 amp relay output is available through use of the RL-5900 power supply/relay module.

### Specifications - TED Series

#### Function

**Output:** N/O NPN Open-collector  
300 mA max. Load

**Supply Voltage:** 5-35 VDC

**Supply Current:** 33 mA (excluding load)

**Leads:** 18 inches

#### Wetted Parts

**Polysulfone:** Polysulfone

**SS:** 303 SS, Viton  
Borosilicate Glass  
Teflon (PFA)

**Teflon:**

#### Max. Pressure

**Polysulfone:** 200 PSIG

**SS:** 400 PSIG

**Teflon:** 200 PSIG

#### Fittings

**Process**

**Teflon/Polysulfone:** 3/8" NPT

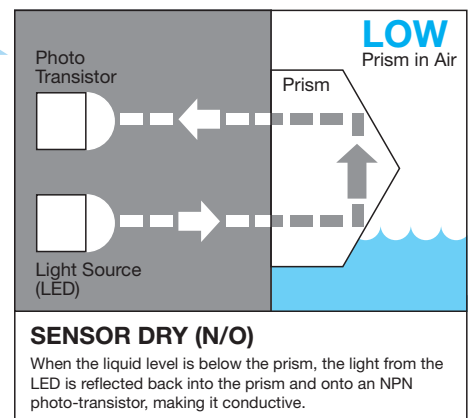
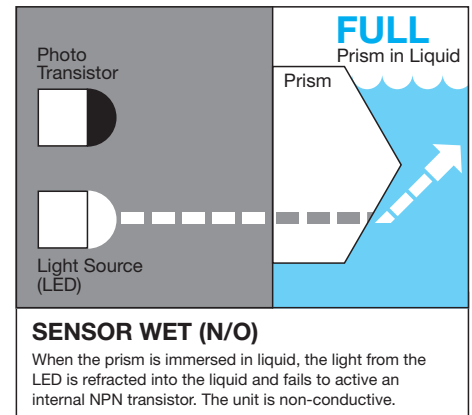
**SS:** 1/2" NPT

**Conduit:** 1/2" NPSH (SS and Polysulfone only)

#### Operating

**Temperature:** -40 to 230°F

**Storage Temperature:** -67 to 257°F



### TED Ordering Information

Material	Function	Model Number
Polysulfone	N/O	TED-2511-F
303 SS	N/O	TED-3212-A
Teflon	N/O	TED-3611

## RL-5900 Power Supply & Relay

Protect your level, flow, temperature or pressure switch investment with a Kobold power supply and relay. The RL-5900 can handle the large loads your primary switching device may not be able to handle. Additionally, it can act as a 24 VDC power supply. The ability to handle 10 amps at up to 240 VAC (resistive) gives the RL-5900 exceptional power switching capacity. Since excitation is built in, dry contacts or 24 VDC devices are equally compatible.



### Specifications - RL-5900

**Output:** SPDT Relay  
10 A @ 240 VAC  
8 A 24 VDC

**Input:** Dry contacts or PNP/NPN  
Open collectors

**Excitation:** 24 VDC ±2%  
120 mA, regulated

**Indicators:** Green LED-Power On  
Red LED-Relay Energized

**Supply Voltage:** 110, 230 ± 15 VAC

**Physical Data**

**Housing:** Molded Polyamide  
NEMA 1/IP54  
DIN rail mountable

**Operating Ranges**

**Temperature:** 0 to 130 °F

**Humidity:** 0 to 95% RH  
Non-condensing

### RL Ordering Information

Sensor Excitation	Part Number	
	Supply Voltage	
24 VDC	110 VAC	230 VAC
	RL-5901	RL-5902