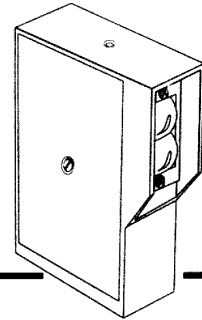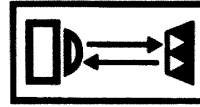# Heavy Duty | Photoelectric Sensors | Retro-Reflective

- **Non-Polarized**
- **Modulated LED**
- **Choice of Outputs**
- **Diecast Aluminum Housing Epoxy Coated**
- **Tri-Color LED Indicator**
- **Optional Plug-In Time Delays**
- **NEMA 3, 4, 12 & 13 Design**
- **-20°C to +70°C**

These beefed-up sensors are smart as well as tough. Die cast aluminum housings and totally sealed optics help make them ideal for severe environments. All models use a modulated infrared LED emitter and receiver to ignore ambient light. Plug-in time delay modules offer wide flexibility in application options.

Designed for harsh industrial environments, the EP100 Series is especially equipped to alert you to potential problems. When other sensors run into alignment or dirty optic problems, you don't know about it until they fail. The EP100 uses a unique "tri-color" LED to indicate impending problems. When the LED glows:

- Green — stable operation *>70% reflected signal strength*
- Yellow — marginal operation *40-70% reflected signal strength*
- Red — insufficient reflected signal

Target Repeatability

For best repeatability, it is recommended to have target travel in direction (1) or (2). Traveling toward lens (3) will result in slightly higher tolerance on switch point. It is not recommended to have target travel in direction (4) and (5).
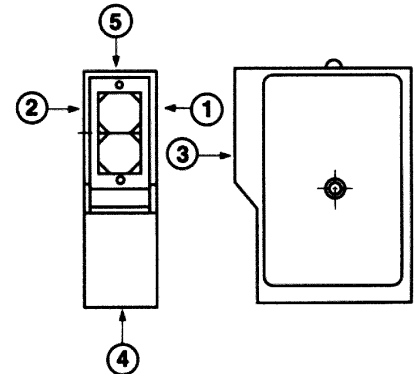
Supply Voltage	Power Consumption	Output Circuit Type	Model No.	Output Rating	Response Time On/Off	Maximum Switching Frequency	Leakage Current
RELAY OUTPUTS							
120 VAC	1.0 VA	DPDT	EP110-12001*	5A Resistive @ 250 VAC or 30 VDC	15mS/20ms	25 Hz	—
11-30 VDC	70 mA	DPDT	EP110-15001	5A Resistive @ 250 VAC or 30 VDC	15mS/20ms	25 Hz	—
TRANSISTOR OUTPUTS							
120 VAC	1.0 VA	NPN	EP110-12201*	25 mA @ 40 VDC	2mS/2ms	250 Hz	—
11-30 VDC	70 mA	NPN	EP110-15201	25 mA @ 40 VDC	2mS/2ms	250 Hz	—
TRIAC OUTPUTS							
120 VAC	1.0 VA	SPST	EP110-12901*	0.05-1.5 A @ 90-240 VAC	4mS/40ms	20 Hz	5.0 mA
11-30 VDC	70 mA	SPST	EP110-15901	0.05-1.5 A @ 90-240 VAC	4mS/40ms	20 Hz	5.0 mA

* UL Listed and CSA Approved