

LR300 and PT300 Opposed Mode Remote Sensor Pair



Datasheet



WARNING:

- Do not use this device for personnel protection
- Using this device for personnel protection could result in serious injury or death.
- This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A device failure or malfunction can cause either an energized (on) or de-energized (off) output condition.

Overview

The LR300 emitter and PT300 receiver are compact, totally encapsulated opposed mode remote sensors whose right-angle design, extremely small size, and excellent operating characteristics make them ideal for many sensing applications. Mounting and alignment are very simple, due to these sensors' wide field of view. The LR300 and PT300 easily mount in place by means of their through-mounting house and two #4 screws.

300 series sensors are fully encapsulated with hermetically sealed lenses to eliminate internal condensation, and have an extremely flexible, low-profile 2-wire cable. Units may be washed down without damage.

The minimum object size required to break the beam of the LR300/PT300 opposed mode sensor pair is 1/8-inch.

Wiring Rules

1. Avoid running remote sensor cables in wireways together with power-carrying conductors.
2. Avoid running remote sensor cables through areas of known extreme electrical interference (electrical noise).
3. Always use shielded cables and only connect the shield (or drain) wire at the amplifier.
4. When splicing, never combine emitter and receiver wires into a common cable. The result is electrical crosstalk within the cable, which causes a lock-on condition of the amplifier.

Specifications

Range

Up to 2.4 m (8 ft) in opposed mode (see excess gain curve)

Effective Beam

3.6 mm (0.14 in) diameter

Operating Temperature

-40 °C to +80 °C (-40 °F to +176 °F)

Emitter Characteristics

Infrared, 880 nm

Construction

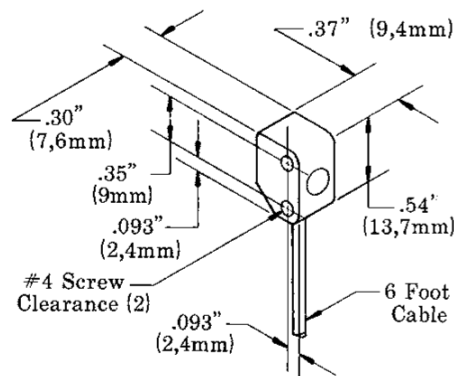
Totally encapsulated, hermetically sealed lenses. PBT polyester housing; NEMA 1, 3, 4, 12, and 13

Cable

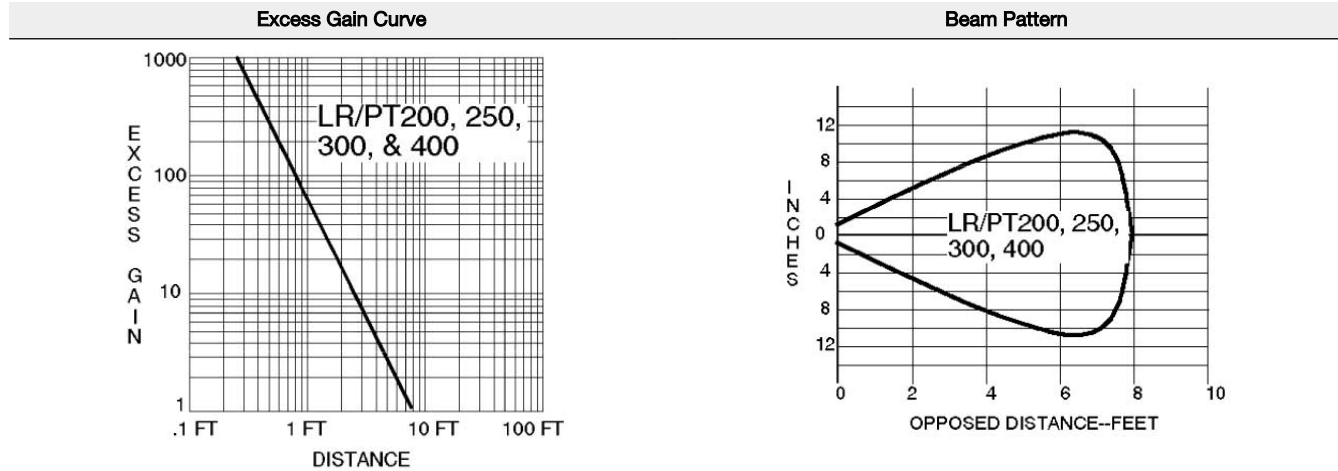
2 m (6.5 ft) unterminated low-profile 2-wire PVC cable. 9 m (30 ft) cables are available by special order

Dimensions

All measurements are listed in inches [millimeters], unless noted otherwise.



Performance Curves



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