

**Features**

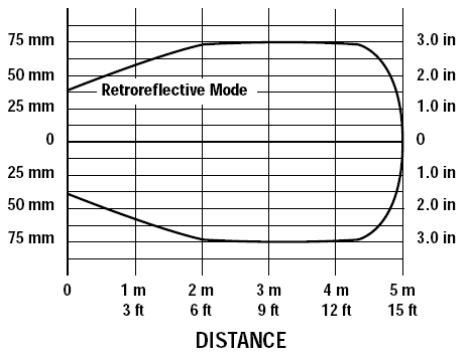
- Motion sensor: RPM, wheel speed.
- Small size and low power.
- Stainless steel housing
- Water-tight mini sure-seal® connector.

**Description**

The optical detector sends an infrared beam. When a polarizing object (adhesive reflective tape supplied) reflects it, the detector generates an electrical signal and energizes the indicator LED. The optical detector can be used to sense motion to accurately measure speed.

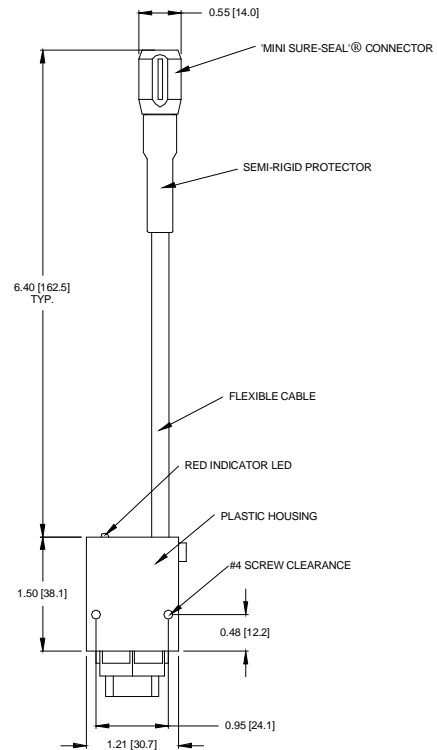


**Beam pattern:**



**Installation**

- Attach the DTCOPT to the chassis within 5m of the rotating body. Carefully align indexing rib when mating mini sure-seal® connectors.
- Connect the DTCOPT to a DTC port of the Recorder.
- Install the reflective tape on the rotating body such that its trajectory intercepts the red beam emitted by the detector. The reflection angle should be as close as possible to 0°.
- Do not expose detector to water, oil or fuel.
- Do not install detector near sources of interference, such as ignition coils, plug leads, electronic modules or antennas.
- Verify that the cable is not pinched or stretched by surrounding moving parts.
- Do not bend cable with curvature radius smaller than 1.60" [40 mm].



All dimensions are in inches [millimeters].

Specifications

| Description           | Symbol     | Min      | Typ      | Max       | Unit      |
|-----------------------|------------|----------|----------|-----------|-----------|
| Power Supply          |            |          |          |           |           |
| Input Voltage         | $V_{In}$   | 10       |          | 30        | V         |
| Supply Current        | $I_{In}$   |          |          | 25        | mA        |
| Operating Temperature | $T_{Oper}$ | -20 (-4) |          | 70 (158)  | C         |
| Sensing range         |            | 0<br>(0) |          | 5<br>(15) | m<br>(ft) |
| Output Type           |            |          | NPN/PNP  |           |           |
| Output Response time  | $T_{res}$  | 1.0      |          |           | ms        |
| Weight                | w          |          | 40 (1.4) |           | g (oz)    |

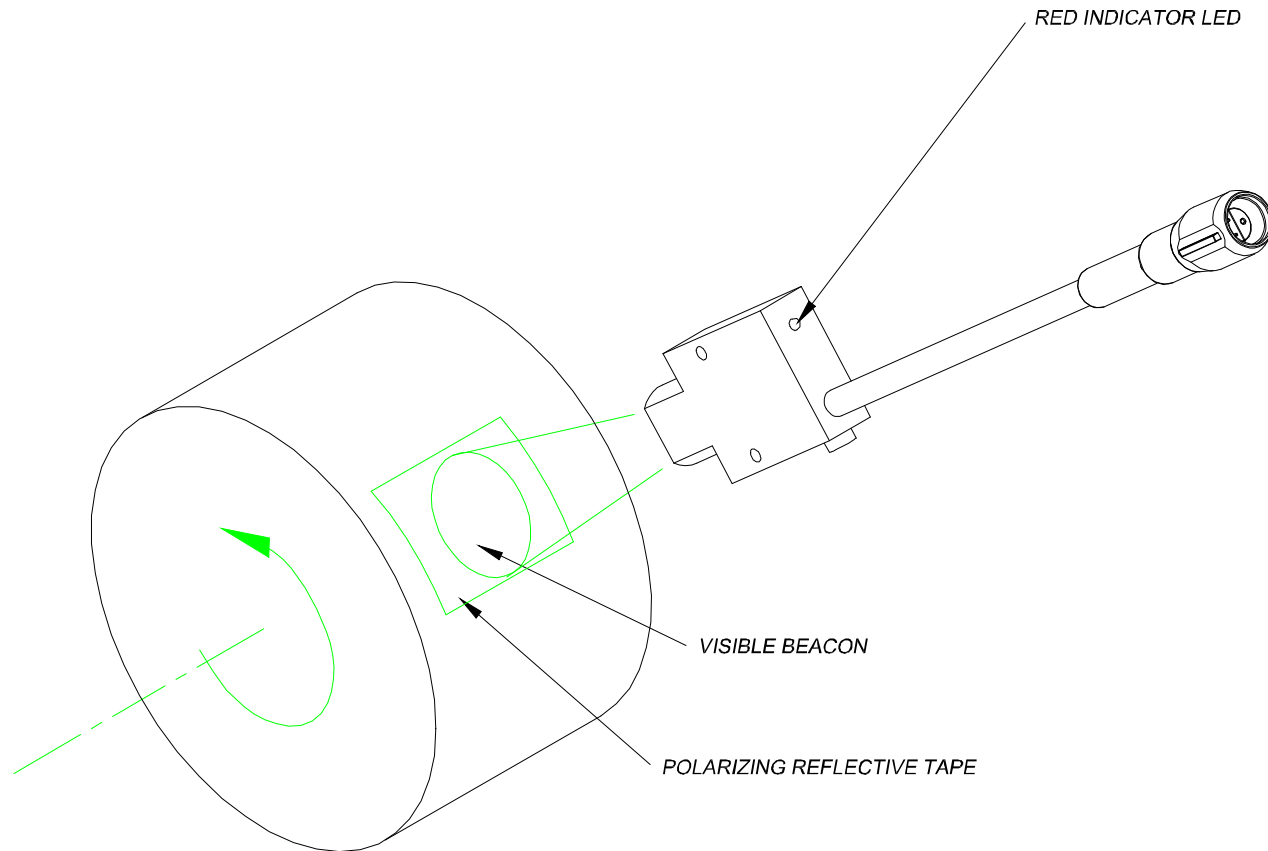


Figure 1: Optical detector installation.