Arc-Flash Detection
PGA-LS30 Series

Fiber-Optic Sensor



Description

The PGA-LS30 series Fiber-Optic Sensor is an arc-detection sensor that uses fiber to detect arcs anywhere along its length. This sensor is meant to be installed with the fiber along the back wall of switchboards to form the detection range across many compartments with just one sensor. The sensor is positioned to allow direct line of sight to all powered connections where an arc could develop. The sensor is capable of detecting the light from an arc flash from all angles. The detection radius is dependent on the arc power. The sensor is calibrated at the factory for 60 cm (24 in) of fiber in each monitored compartment. When using a fiber-optic sensor in compartments with less than 60 cm (24 in) of fiber, the sensitivity may have to be adjusted so that the sensor will detect arcs of 3 kA or more. This fiber-optic sensor and the arc-flash relay provide superior protection against the damaging effects of arc flashes and improve the lifespan of electrical equipment as well as the protection of personnel. This sensor is intended to be installed as part of an active arc flash mitigation system that uses Littelfuse arc-flash relays.

Features & Benefits

FEATURES	BENEFITS
Transmitter and receiver design with copper wiring to relay	Allows fiber to be placed only where light needs to be measured; copper wiring can easily be extended or installed in existing cable channel or tight corners
Rugged and flexible 5 cm bending radius	Can be installed easily and reliably in different sizes and shapes of switchboards or panels
Length: 18 m active, 20 m total	Protect many areas with one sensor

Applications

- For use with Littelfuse arc-flash relays

Specifications

Type	Fiber-optic sensor
Detection Zone	360° along fiber
Output	0–35 mA
Electrical Cable	Shielded 3-wire 20 AWG (0.5 mm^2) electrical cable
Factory Cable Length	18 m (59 ft) active; 20 m (66 ft) total (2 m (7 ft) shielded) 2 x 10 m (33 ft) electrical cable
Max. Elec. Cable Length	50 m (164 ft)
Sensor Check	Built-in LED for visual feedback
Dimensions	Transmitter and Receiver: 32 x 56 x 19 mm (1.3 x 2.2 x 0.7 in)
Enclosure	IP 30

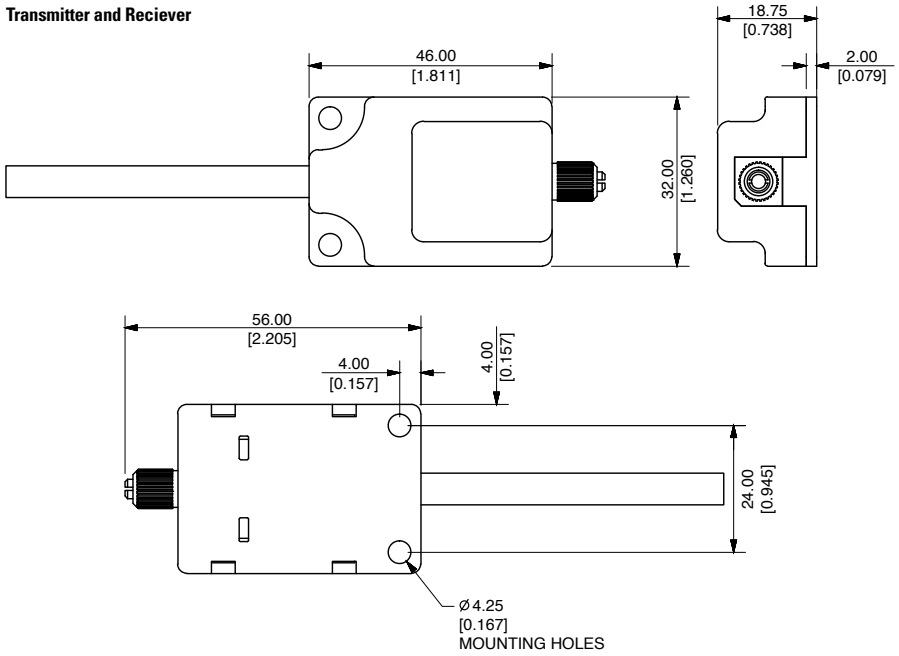
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Ordering Information

ORDERING NUMBER	DESCRIPTION
PGA-LS30	Pre terminated fiber-optic sensor with transmitter, receiver, 2 x 10 m of cable, and connector.

Dimensions Millimeters (in)

Transmitter and Reciever



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