

# Arc-Flash Detection

## PGA-LS20 Series

### Fiber Optic Sensor



### Description

The PGA-LS20 series is an arc-detection, fiber-optic sensor that is designed to detect arcs along its entire length. This sensor is meant to be installed with the fiber along the back wall of switchboards to form the detection range across all 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.

### Features & Benefits

FEATURES	BENEFITS
<b>Direct line of sight</b>	Improves detection capability
<b>Fiber-optic material</b>	Rugged and flexible 5 cm bending radius
<b>Length: 8 m active, 10 m total</b>	Enhances usage

### Applications

- For use with Littelfuse arc-flash relays

### Specifications

<b>Type</b>	Fiber-optic sensor
<b>Detection Zone</b>	360° along fiber
<b>Output</b>	0–35 mA
<b>Electrical Cable</b>	Shielded 3-wire 20 AWG (0.5 mm <sup>2</sup> ) electrical cable
<b>Factory Cable Length</b>	8 m (26 ft) active; 10 m (33 ft) total (2 m (7 ft) shielded) 2 x 10 m (33 ft) electrical cable
<b>Max. Elec. Cable Length</b>	50 m (164 ft)
<b>Sensor Check</b>	Built-in LED for visual feedback
<b>Dimensions</b>	Transmitter and Receiver: 32 x 56 x 19 mm (1.3 x 2.2 x 0.7 in)
<b>Enclosure</b>	IP 30

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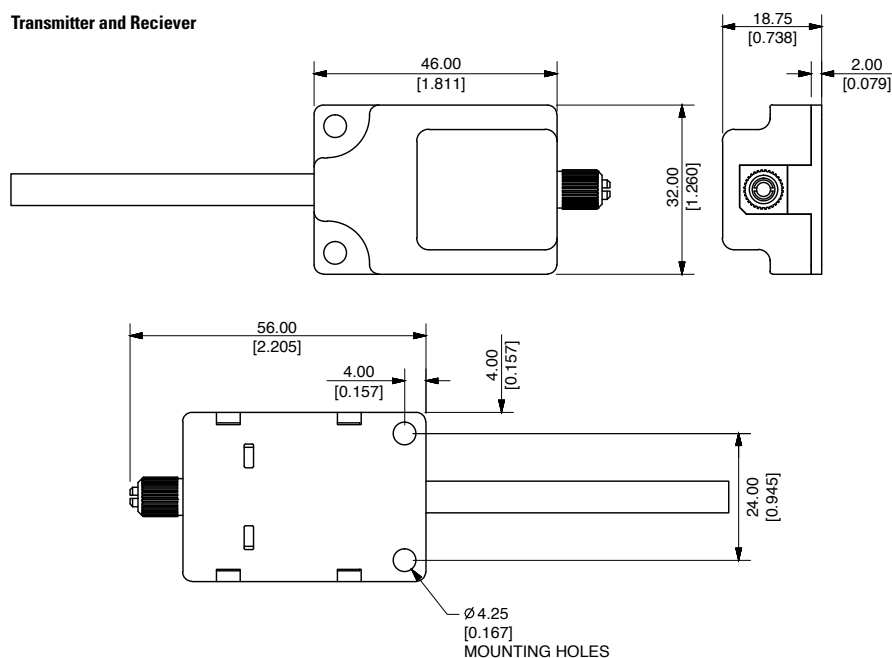
## PGA-LS20 Series

### Ordering Information

ORDERING NUMBER	DESCRIPTION
PGA-LS20	Pre terminated fiber-optic sensor with transmitter, receiver, 2 x 10 m of cable, and connectors

### Dimensions Millimeters (in)

Transmitter and Receiver



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