

# Arc-Flash Detection Relays

## A0220 Series

### Arc Detecting Point Sensor



### Description

The A0220 series is an arc-detection, photo-electric sensor that provides superior arc-flash monitoring. These sensors react to light within a 180° detection zone. They are installed in line of sight to possible arc faults and can detect an arc as small as 3 kA within a 2 m half-sphere. These sensors include 10 m of shielded, two-wire electric cable that can easily be shortened or extended to a maximum of 50 m. This series is compatible with the D0920 Littelfuse arc-flash relays. The A0220 sensors and arc-flash relays 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>180° detection zone</b>	Wide-ranging fault detection
<b>Sensor signal is mA current signal of 0.5 mA/k lux</b>	Superior protection

### Applications

- For use with Littelfuse arc-flash relays

### Specifications

<b>Sensitivity</b>	0.5 mA/ klux
<b>Range for PGR-8800</b>	10 klux to 30 klux
<b>Ambient temperature</b>	-25 °C to +70 °C.
<b>Degree of protection</b>	IP65
<b>Type Selection Table</b>	A0220 Arc Detector includes 10 m cable

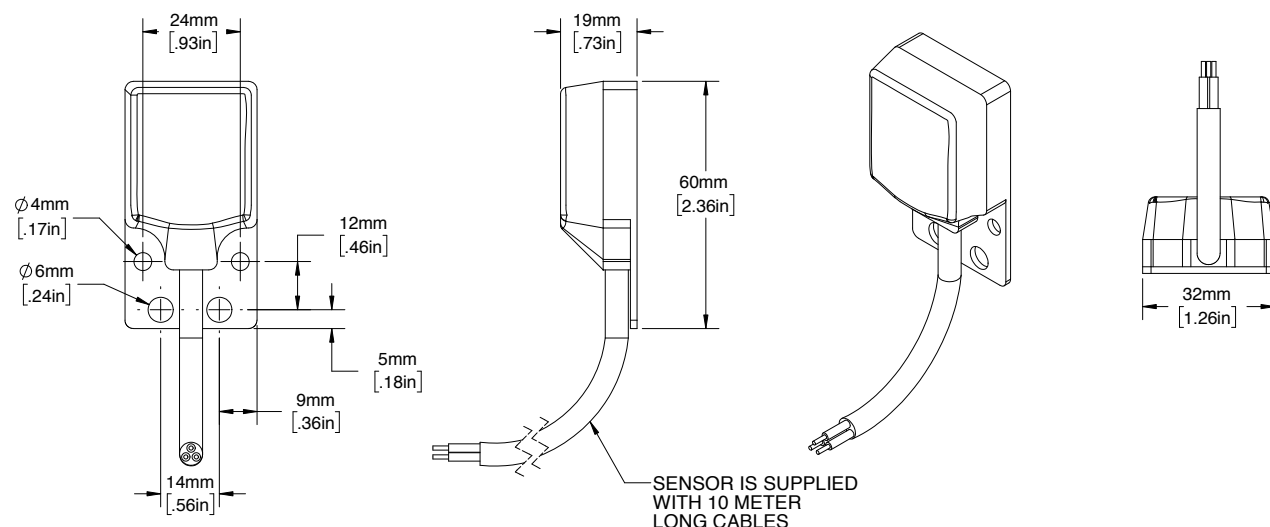
### Ordering Information

ORDERING NUMBER	CONTROL POWER
A0220.0010	Arc Detector type V, 10 m
A0220.0020	Arc Detector type V, 15 m
A0220.0030	Arc Detector type V, 10 m, CCC approved
A0220.0040	Arc Detector type V, 15 m, CCC approved

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### Dimensions Millimeters (inches)



### A0220 Sensor Installation

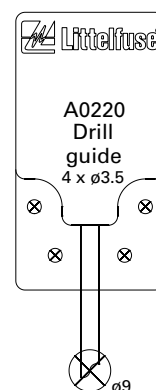
The sensors include an adhesive backed drill template for easy surface or panel-mount installation. All dimensions are shown in millimeters.

Affix the drill template where the sensor is to be mounted. Either M4 or M5 screws or pop rivets (4 mm or 5 mm) can be used.

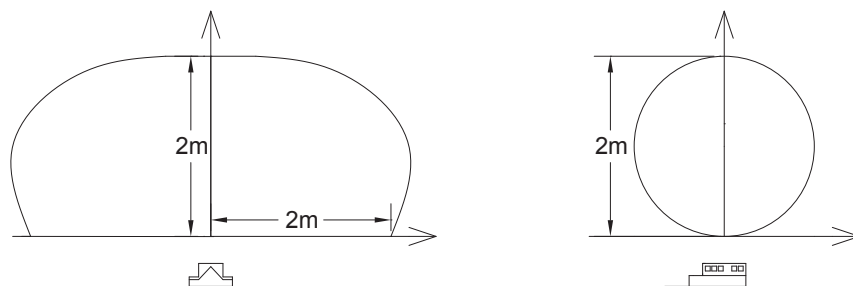
Mounting screws are M4 for the top holes. This template matches the mounting dimensions for the A1000 or PGA-LS10 sensor.

The bottom mounting holes are either for 5 mm self-drilling screws (3.5 mm drill) or for M5 (4.2 mm drill). This template matches the mounting dimensions for the A0200 and A0300 sensors.

For placement of sensors please refer to the relay manual.



### Detection range for a 3kA fault



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### Connection to D0920 relays

SENSOR WIRE	TERMINAL
Red	1
Green	2
Screen	3

### Connection to D1000 relays

SENSOR WIRE	SENSOR 1 TERMINAL	SENSOR 2 TERMINAL	SENSOR 3 TERMINAL	SENSOR 4 TERMINAL	SENSOR 5 TERMINAL	SENSOR 6 TERMINAL
Green	4	8	12	16	20	24
Red	3	7	11	15	19	23
Screen	Chassis	Chassis	Chassis	Chassis	Chassis	Chassis

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