



**AC - 2 WIRE-STANDARD**  
**Brass, Nickel Plated (BN), Cylindrical,**  
**Threaded, 90-250V AC, 250mA,**  
**LED for Output Energized**

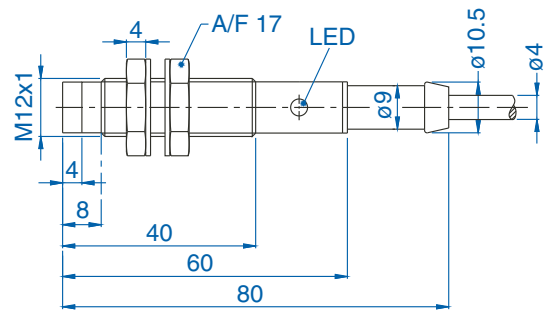
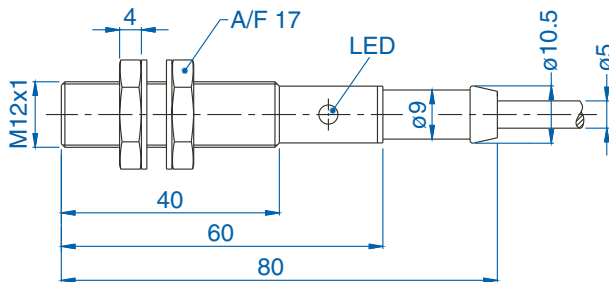
- IEC (529) IP67 (NEMA 1, 3, 4, 6, 12, 13) Protection
- Overload Protection
- Wire Break Resistance
- Transient Voltage Protection
- Temperature Range: -25 to 70°C (-13 to 158°F)



	M12 Flush Mount	M12 Non-Flush Mount
<b>Sensing Distance</b>	<b>2mm (.08 in.)</b>	<b>4mm (.16 in.)</b>
<b>Cable or Connector Style Cat. No.</b>	<b>Cable</b>	<b>Cable</b>
Normally Open 	AIS12F02AW220-2M	AIS12N04AW220-2M
Normally Closed 	-	-
Ripple Voltage	-	-
Voltage Range	90-250V	90-250V
Supply Current	≥10mA	≥10mA
Max. Load Current	250 mA	250 mA
Voltage Drop Across Sensor	≤9V	≤9V
Max. Leakage Current	≤3mA	≤3mA
Switching Frequency	10 Hz	10 Hz
Hysteresis	≤0.4mm	≤0.6mm
Temperature Drift	≤±4μm/K	≤±8μm/K
Repeatability	≤0.1mm	≤0.4mm

**Fixed Cable**

PVC 2m (6ft. 6in.) encapsulated oil resistant cable. For other cable lengths and/or PUR cable, please consult Altech. Supplied with brass, nickel plated locknuts.



## Metric/in. Conversion Table

1.5 mm = .06 in.	23.0 mm = .89 in.
2.0 mm = .08 in.	28.0 mm = 1.10 in.
4.0 mm = .16 in.	30.0 mm = 1.18 in.
5.0 mm = .20 in.	32.0 mm = 1.26 in.
6.0 mm = .23 in.	34.0 mm = 1.34 in.
8.0 mm = .31 in.	40.0 mm = 1.57 in.
10.0 mm = .39 in.	50.0 mm = 1.97 in.
12.0 mm = .47 in.	51.0 mm = 2.01 in.
15.0 mm = .59 in.	60.0 mm = 2.36 in.
18.0 mm = .70 in.	80.0 mm = 3.12 in.

This table converts millimeters to inches in reference to the illustrations included on these pages.

If you do not see a converted dimension, multiply mm by 0.03937 to convert to inches.

M18 Flush Mount	M18 Non-Flush Mount
<b>5mm (.20 in.)</b>	<b>8mm (.31 in.)</b>
<b>Cable</b>	<b>Cable</b>
AIS18F05AW220-2M	AIS18N08AW220-2M
AIS18F05RW220-2M	AIS18N08RW220-2M
-	-
90-250V	90-250V
10mA	≥10mA
250 mA	250 mA
9V	≤9V
3mA	≤3mA
10 Hz	10 Hz
0.5mm	≤0.8mm
≤±10μm/K	≤±16μm/K
≤0.2mm	≤0.4mm

## Wiring Diagrams

Note: Wire colors are applicable on cables purchased from Altech

