

DC - 3 WIRE-SHORT BODY
Brass, Nickel Plated (BN), Cylindrical,
Threaded, 10-30V DC, 250mA,
LED for Output Energized

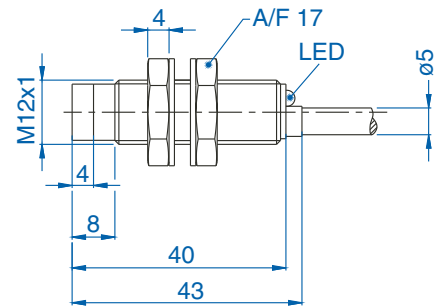
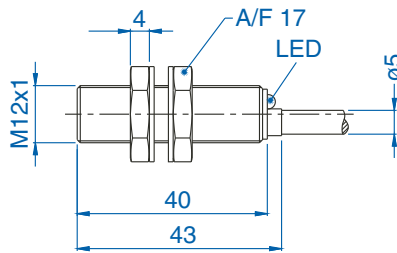
- IEC (529) IP67 (NEMA 1, 3, 4, 6, 12, 13) Protection
- Short Circuit Protection
- Overload Protection
- Reverse Polarity Protection
- Wire Break Resistance
- Transient Voltage Protection
- Temperature Range: -25 to 70°C (-13 to 158°F)



| M12 Flush Mount | | | | M12 Non-Flush Mount | | | |
|------------------------------------|---------------|-------|------------------|---------------------|------------------|-------------------|--|
| Sensing Distance 2mm (0.08 in.) | | | | 4mm (.16 in.) | | | |
| Cable or Connector Style Cat. No. | | Cable | 65 | Cable | | 65 | |
| PNP | Normally Open | | AIK12F02AP024-2M | AIK12F02AP024-Q65 | AIK12N04AP024-2M | AIK12N04AP024-Q65 | |
| | Normally Open | | AIK12F02AN024-2M | AIK12F02AN024-Q65 | AIK12N04AN024-2M | AIK12N04AN024-Q65 | |
| Ripple Voltage | | | ≤ 10% | | ≤ 10% | | |
| Voltage Range | | | 10-30V | | 10-30V | | |
| No-Load Current | | | ≤ 15 mA | | ≤ 15mA | | |
| Max. Load Current | | | 250 mA | | 250 mA | | |
| Voltage Drop Across Sensor | | | ≤ 2.5V | | ≤ 2.5V | | |
| Max. Leakage Current | | | ≤ 1 μA | | 1μA | | |
| Switching Frequency | | | 1000 Hz | | 1000 Hz | | |
| Hysteresis | | | ≤ 0.2mm | | ≤ 0.6mm | | |
| Temperature Drift | | | ≤ ±4μm/K | | ±8μm/K | | |
| Repeatability | | | ≤ 0.1mm | | ≤ 0.3mm | | |

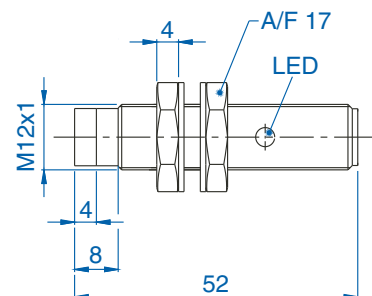
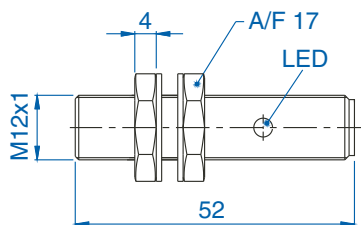
Fixed Cable

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



65 Style Connector

4-pin, Micro style, 12mm (.47 in.). Supplied with brass, nickel plated locknuts.



Note: Sensor dimensions in mm.

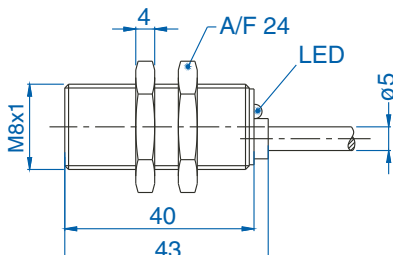
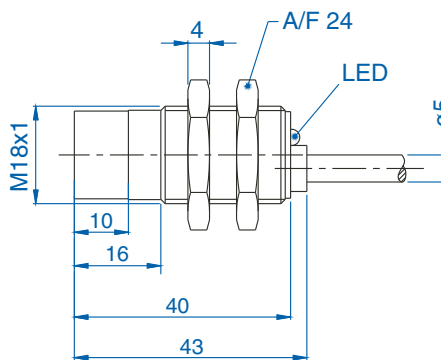
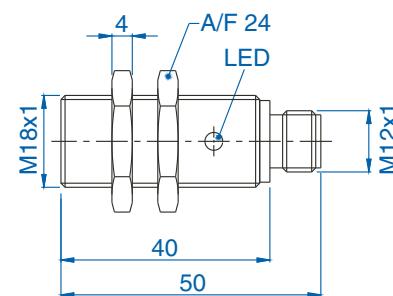
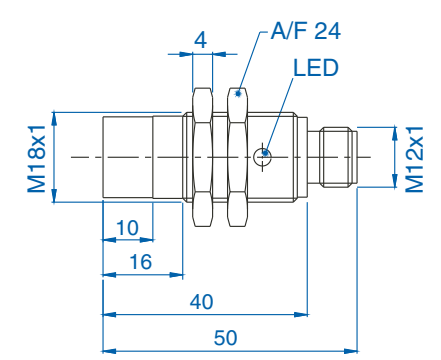
Metric/in. Conversion Table

| | |
|-------------------|--------------------|
| 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 covered dimension, multiply mm by 0.03937 to convert to inches.

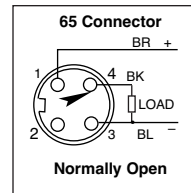
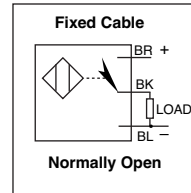
| M18 Flush Mount 5mm (.20 in.) | | M18 Non-Flush Mount 8mm (.31 in.) | |
|----------------------------------|-------------------|--------------------------------------|-------------------|
| Cable | 65 | Cable | 65 |
| AIK18F05AP024-2M | AIK18F05AP024-Q65 | AIK18N08AP024-2M | AIK18N08AP024-Q65 |
| AIK18F05AN024-2M | AIK18F05AN024-Q65 | AIK18N08AN024-2M | AIK18N08AN024-Q65 |
| | ≤10% | | ≤10% |
| | 10-30V | | 10V-30V |
| | ≤15 mA | | ≤15 mA |
| | 250 mA | | 250 mA |
| | ≤2.5V | | ≤2.5V |
| | ≤1 μA | | ≤1 μA |
| | 500 Hz | | 500 Hz |
| | ≤0.5mm | | ≤0.8mm |
| | ≤±10μm/K | | ≤±16μm/K |
| | ≤0.2mm | | ≤0.4mm |

| | |
|---|--|
|  <p>Dimensions: M8x1, 4, A/F 24, LED, 40, 43, ø5</p> |  <p>Dimensions: M18x1, 10, 16, 4, A/F 24, LED, 40, 43, ø5</p> |
|  <p>Dimensions: M18x1, 4, A/F 24, LED, 40, 50, M12x1</p> |  <p>Dimensions: M18x1, 10, 16, 4, A/F 24, LED, 40, 50, M12x1</p> |

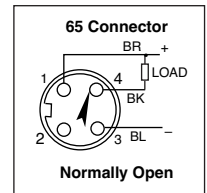
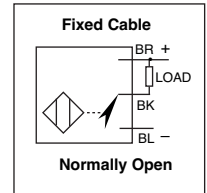
Wiring Diagrams

Note: Wire colors are applicable on cables purchased from Altech

PNP



NPN



Note: Sensor dimensions in mm.