

**DC - 3 WIRE – OEM SERIES**  
**Brass, Nickel Plated (BN),**  
**Cylindrical, Threaded,**  
**M8– 10-30V DC, 200mA,**  
**M12– 10-35V DC, 200mA,**  
**360° LED for Output Energized**

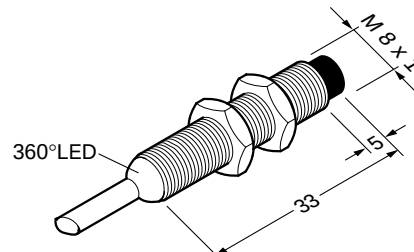
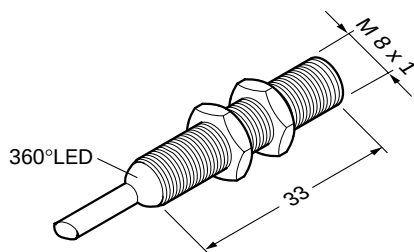
- Up to 2 times sensing distance of standard sensors
- Up to 1.5 times switching frequency
- Carries  $\text{C}\epsilon$  mark
- High Performance Sensors with Low Pricing at OEM Volumes
- Lifetime Warranty
- Manufactured in an ISO 9001 Facility

- IEC (60529) IP67 (NEMA 1, 3, 4, 6, 12, 13) Protection
- Short Circuit Protection
- Overload Protection
- Reverse Polarity Protection
- Temperature Range: -25 to 70°C (-13 to 158°F)

| M8 Flush Mount                    |                                                                                                   |                    |                    |                    | M8 Non-Flush Mount |                    |                    |
|-----------------------------------|---------------------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Sensing Distance 2mm (.08 in.)    |                                                                                                   |                    |                    |                    | 3mm (.12 in.)      |                    |                    |
| Cable or Connector Style Cat. No. |                                                                                                   | Cable              | 64                 | 50                 | Cable              | 64                 | 50                 |
| PNP                               | Normally Open    | 9981-1000          | 9981-1064          | 9981-1050          | 9981-1200          | 9981-1264          | 9981-1250          |
|                                   | Normally Closed  | 9981-1400          | 9981-1464          | 9981-1450          | 9981-1600          | 9981-1664          | 9981-1650          |
| NPN                               | Normally Open    | 9981-1100          | 9981-1164          | 9981-1150          | 9981-1300          | 9981-1364          | 9981-1350          |
|                                   | Normally Closed  | 9981-1500          | 9981-1564          | 9981-1550          | 9981-1700          | 9981-1764          | 9981-1750          |
| Ripple Voltage                    |                                                                                                   | ≤10%               | ≤10%               | ≤10%               | ≤10%               | ≤10%               | ≤10%               |
| Voltage Range                     |                                                                                                   | 10V - 30V          | 10V - 30V          | 10V - 30V          | 10V - 30V          | 10V - 30V          | 10V - 30V          |
| Supply Current                    |                                                                                                   | ≤10 mA             | ≤10 mA             | ≤10 mA             | ≤10 mA             | ≤10 mA             | ≤10 mA             |
| Max. Load Current                 |                                                                                                   | 200 mA             | 200 mA             | 200 mA             | 200 mA             | 200 mA             | 200 mA             |
| Voltage Drop Across Sensor        |                                                                                                   | ≤2.4V              | ≤2.4V              | ≤2.4V              | ≤2.4V              | ≤2.4V              | ≤2.4V              |
| Max. Leakage Current              |                                                                                                   | ≤10 μA             | ≤10 μA             | ≤10 μA             | ≤10 μA             | ≤10 μA             | ≤10 μA             |
| Switching Frequency               |                                                                                                   | 3000Hz             | 3000Hz             | 3000Hz             | 2500Hz             | 2500Hz             | 2500Hz             |
| Hysteresis                        |                                                                                                   | typ. 5%, ≤10% max. | typ. 5%, ≤10% max. | typ. 5%, ≤10% max. | typ. 5%, ≤10% max. | typ. 5%, ≤10% max. | typ. 5%, ≤10% max. |
| Temperature Drift                 |                                                                                                   | ≤10%               | ≤10%               | ≤10%               | ≤10%               | ≤10%               | ≤10%               |
| Repeatability                     |                                                                                                   | ≤2%                | ≤2%                | ≤2%                | ≤2%                | ≤2%                | ≤2%                |
| Front Cap Material                |                                                                                                   | PBTP               | PBTP               | PBTP               | PBTP               | PBTP               | PBTP               |

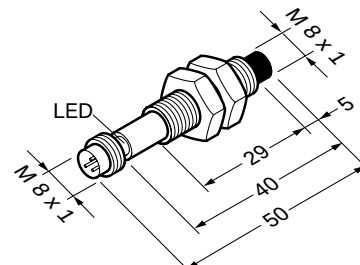
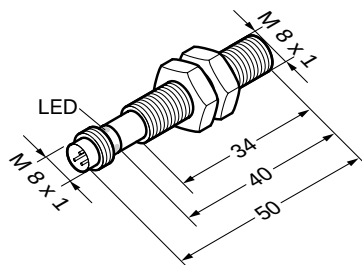
**Fixed Cable**

PVC 2m (6 ft. 6 in.). For 5m (16 ft. 5 in.) cable length, change the last two digits of the part number to 02. For other cable lengths and/or PUR cable, please consult Altech. Supplied with Brass, Nickel Plated (BN) locknuts.



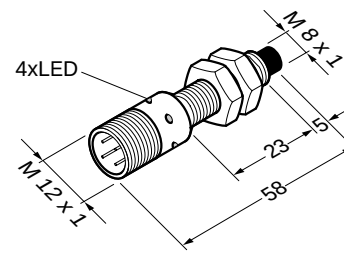
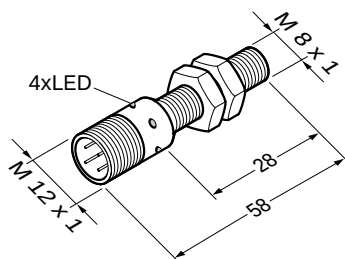
**64 Style Connector**

3-pin, Pico style, 8mm (.31 in.) supplied with Brass, Nickel Plated (BN) locknuts.



**50 Style Connectors**

4-pin, Micro style, 12mm (.47 in.) supplied with Brass, Nickel Plated (BN) locknuts.



## Metric/in. Conversion Table

|                    |                    |
|--------------------|--------------------|
| 1.0 mm = .04 in.   | 33.0 mm = 1.30 in. |
| 5.0 mm = .20 in.   | 34.0 mm = 1.34 in. |
| 6.0 mm = .23 in.   | 35.0 mm = 1.37 in. |
| 8.0 mm = .31 in.   | 40.0 mm = 1.58 in. |
| 10.0 mm = .39 in.  | 45.0 mm = 1.77 in. |
| 12.0 mm = .47 in.  | 50.0 mm = 1.97 in. |
| 23.0 mm = .91 in.  | 58.0 mm = 2.28 in. |
| 28.0 mm = 1.10 in. | 65.0 mm = 2.56 in. |
| 29.0 mm = 1.14 in. |                    |

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

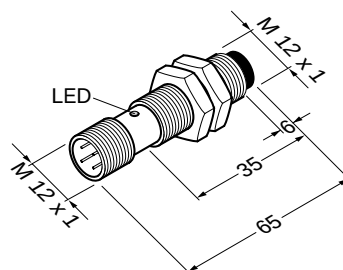
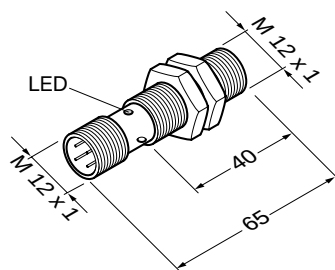
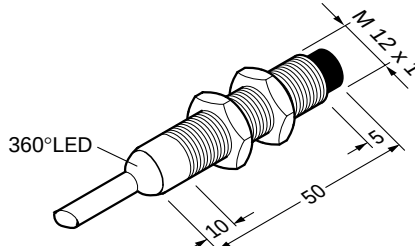
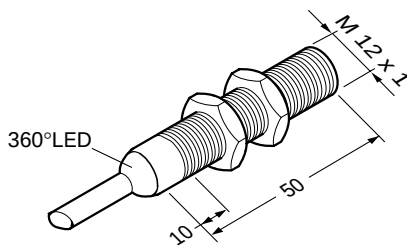
## M12 Flush Mount 4mm (.16 in.)

| Cable              | 50                 |
|--------------------|--------------------|
| 9982-1000          | 9982-1050          |
| 9982-1400          | 9982-1450          |
| 9982-1100          | 9982-1150          |
| 9982-1500          | 9982-1550          |
| ≤10%               | ≤10%               |
| 10V - 35V          | 10V - 35V          |
| ≤10 mA             | ≤10 mA             |
| 200 mA             | 200 mA             |
| ≤2.4V              | ≤2.4V              |
| ≤10 μA             | ≤10 μA             |
| 2500Hz             | 2500Hz             |
| typ. 5%, ≤10% max. | typ. 5%, ≤10% max. |
| ≤10%               | ≤10%               |
| ≤2%                | ≤2%                |
| PBTP               | PBTP               |

## M12 Non-Flush Mount 6mm (.24 in.)

| Cable              | 50                 |
|--------------------|--------------------|
| 9982-1200          | 9982-1250          |
| 9982-1600          | 9982-1650          |
| 9982-1300          | 9982-1350          |
| 9982-1700          | 9982-1750          |
| ≤10%               | ≤10%               |
| 10V - 35V          | 10V - 35V          |
| ≤10 mA             | ≤10 mA             |
| 200 mA             | 200 mA             |
| ≤2.4V              | ≤2.4V              |
| ≤10 μA             | ≤10 μA             |
| 2000Hz             | 2000Hz             |
| typ. 5%, ≤10% max. | typ. 5%, ≤10% max. |
| ≤10%               | ≤10%               |
| ≤2%                | ≤2%                |
| PBTP               | PBTP               |

Note: Sensor dimensions in mm.



## Accessories

### 2 meter (6 ft. 6 in.) DC Cable Assemblies for Quick Disconnect Sensors

|              |           |                             |
|--------------|-----------|-----------------------------|
| 64 Connector | 8000-5220 | PVC, Straight               |
| 64 Connector | 8000-5230 | PVC, Right Angle, 2LED, NPN |
| 64 Connector | 8000-5240 | PVC, Right Angle, 2LED, NPN |

### 50 Connectors, 4 PIN - 3 Wire cable (PIN 1, 3, 4)

|              |           |                             |
|--------------|-----------|-----------------------------|
| 50 Connector | 8000-5110 | PVC, Straight               |
| 50 Connector | 8000-5120 | PVC, Right Angle            |
| 50 Connector | 8000-5150 | PVC, Right Angle, 2LED, NPN |
| 50 Connector | 8000-5160 | PVC, Right Angle, 2LED, PNP |

### 50 Connectors, 4 PIN - 4 Wire cable (PIN 1, 2, 3, 4)

|              |           |                 |
|--------------|-----------|-----------------|
| 50 Connector | 8000-5280 | PVC Right Angle |
|--------------|-----------|-----------------|

Change last digit of connector number to 5 for 5 meter cable.

For additional information refer to pages 116-121 of our Inductive Proximity Sensor catalog or contact ALTECH.

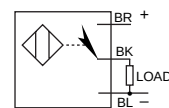
For Mounting Brackets refer to pages 114-115 of our Inductive Proximity Sensor catalog or contact ALTECH.

## Wiring Diagrams

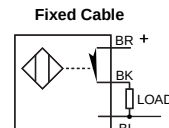
Note: Wire colors are applicable on cables purchased from Altech

### PNP

#### Fixed Cable

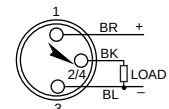


Normally Open

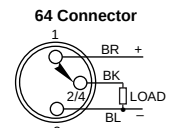


Normally Closed

#### 64 Connector

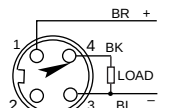


Normally Open

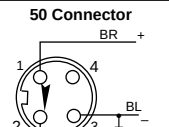


Normally Closed

#### 50 Connector



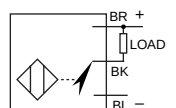
Normally Open



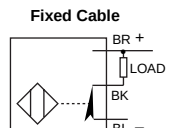
Normally Closed

### NPN

#### Fixed Cable

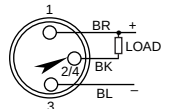


Normally Open

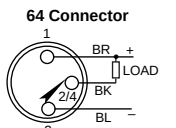


Normally Closed

#### 64 Connector

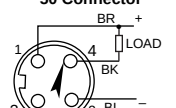


Normally Open

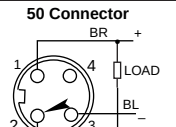


Normally Closed

#### 50 Connector



Normally Open



Normally Closed

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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