

**DC - 3 WIRE – EXTENDED  
SENSING DISTANCE**  
**Brass, Nickel Plated (BN),  
Cylindrical, Threaded,  
10-30V DC, 200mA**  
**1 LED for Output Energized**

- **Up to 2 times sensing distance over standard sensors**
- **Reduces accidental collisions**
- **Ideal for applications where larger sensing distance is required but mounting space is tight**
- **Carries C mark**

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

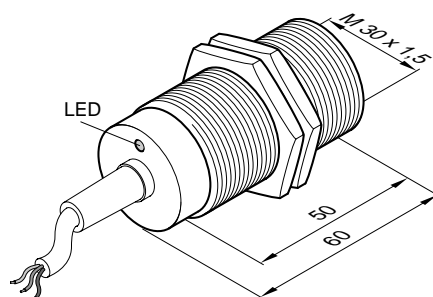
**M30 Flush Mount**

Sensing Distance		15mm (.59 in.)	
Cable or Connector Style Cat. No.		Cable	65
<b>PNP</b>	Normally Open	9966-3900	9966-3965
	Normally Closed		
<b>NPN</b>	Normally Open		
	Normally Closed		
Ripple Voltage		≤10%	≤10%
Voltage Range		10V-30V	10V - 30V
Supply Current		≤12 mA	≤12 mA
Max. Load Current		200 mA	200 mA
Voltage Drop Across Sensor		≤2.4V	≤2.4V
Max. Leakage Current		≤10 µA	≤10 µA
Switching Frequency		200 Hz	200 Hz
Hysteresis		≤15%	≤15%
Temperature Drift		≤10%	≤10%
Repeatability		1.5mm (.06 in.)	1.5mm (.06 in.)
Front Cap Material		PBTP	PBTP

**Note: Sensor dimensions in mm.**

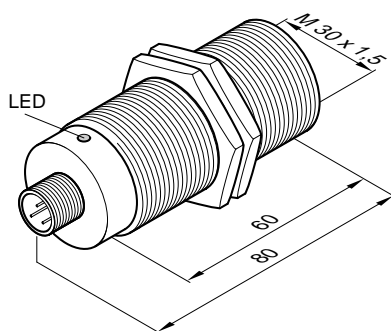
**Fixed Cable**

PVC 2m (6ft. 6in.). 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.



**65 Style Connector**

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



**Metric/in. Conversion Table**

1.5 mm	=	.06 in.
30.0 mm	=	1.20 in.
50.0 mm	=	1.47 in.
60.0 mm	=	2.36 in.
80.0 mm	=	3.12 in.

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

**Accessories**

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

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

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

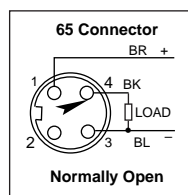
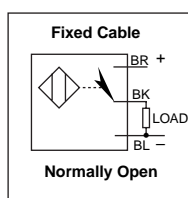
*Refer to pages 116-121 for more cable information*

**Mounting Brackets – see Pages 114-115**

**Wiring Diagrams**

Note: Wire colors are applicable to cable purchased from Altech

**PNP**






**DC - 3 WIRE  
HIGH SPEED  
Brass, Nickel Plated (BN),  
Cylindrial, Threaded,  
10-30V DC, 200mA  
1 LED for Output Energized**

- **Switching frequency of 4000 Hz**
- **Standard body length**
- **Carries  $\text{C}\epsilon$  mark**

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

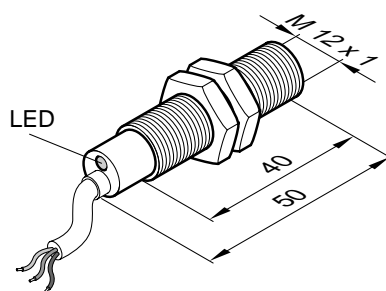
## M12 Flush Mount

Sensing Distance		2mm (.08 in.)	
Cable or Connector Style Cat.No.		Cable	65
<b>PNP</b>	Normally Open 	9962-2300	9962-2365
			
			
Ripple Voltage		≤10%	≤10%
Voltage Range		10V-30V	10V - 30V
Supply Current		≤10 mA	≤10 mA
Max. Load Current		200 mA	200 mA
Voltage Drop Across Sensor		≤2.4V	≤2.4V
Max. Leakage Current		≤10 $\mu$ A	≤10 $\mu$ A
Switching Frequency		4000 Hz to DIN 500 10	4000 Hz to DIN 500 10
Hysteresis		≤15%	≤15%
Temperature Drift		≤10%	≤10%
Repeatability		.20mm (.008 in.)	.20mm (.008 in.)
Front Cap Material		PBTP	PBTP

**Note: Sensor dimensions in mm.**

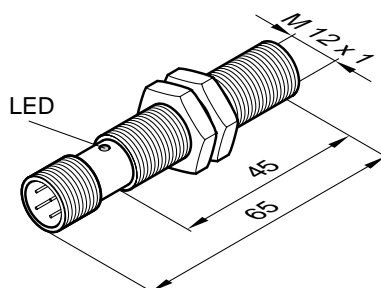
### Fixed Cable

PVC 2m (6ft. 6in.). 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.



### 65 Style Connector

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



### Metric/in. Conversion Table

1.0 mm	=	.04 in.
12 mm	=	.47 in.
40.0 mm	=	1.57 in.
45.0 mm	=	1.77 in.
50.0 mm	=	1.96 in.
65.0 mm	=	2.55 in.

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

### Accessories

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

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

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

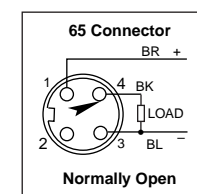
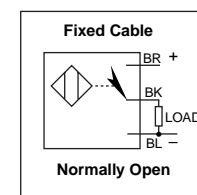
**Refer to pages 116-121 for more cable information**

**Mounting Brackets – see Pages 114-115**

### Wiring Diagrams

Note: Wire colors are applicable to cable purchased from Altech

#### PNP



# Mouser Electronics

Authorized Distributor

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[9962-2300](#) [9966-3900](#) [9962-2365](#)