

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

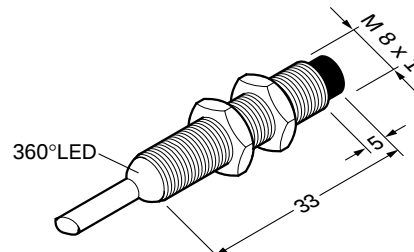
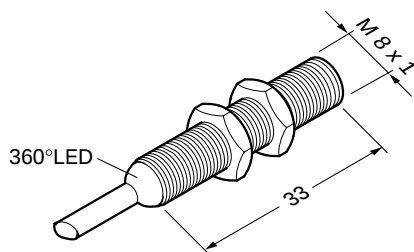
- Up to 2 times sensing distance of standard sensors
- Up to 1.5 times switching frequency
- Carries $\text{C}\epsilon$ mark
- High Performance Sensors with Low Pricing at OEM Volumes
- Lifetime Warranty
- Manufactured in an ISO 9001 Facility

- 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

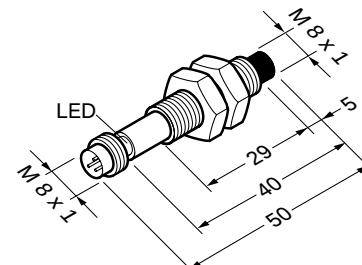
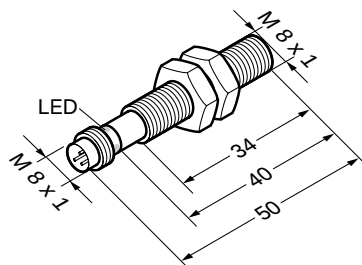
Fixed Cable

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.



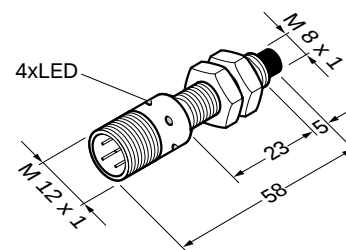
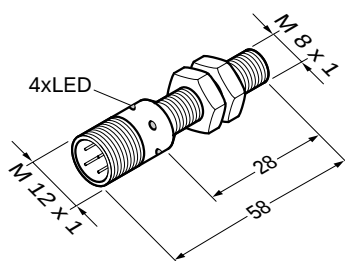
64 Style Connector

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

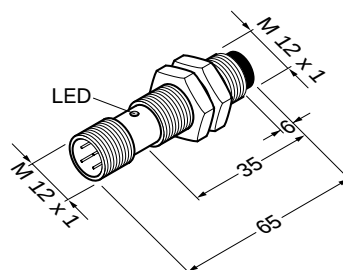
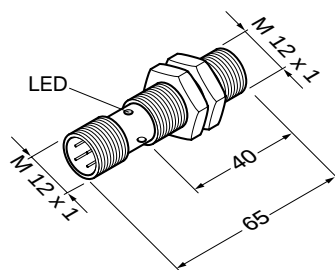
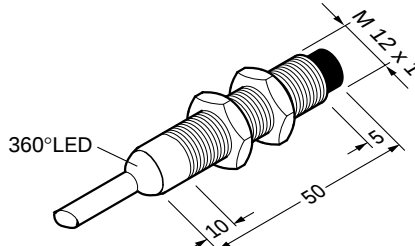
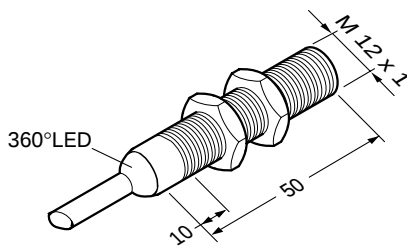
M12 Flush Mount 4mm (.16 in.)

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
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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.

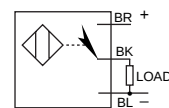
For Mounting Brackets refer to pages 114-115 of our Inductive Proximity Sensor catalog or contact ALTECH.

Wiring Diagrams

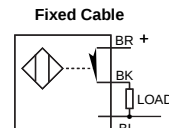
Note: Wire colors are applicable on cables purchased from Altech

PNP

Fixed Cable

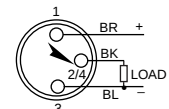


Normally Open

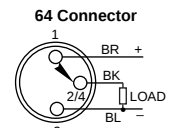


Normally Closed

64 Connector

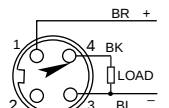


Normally Open

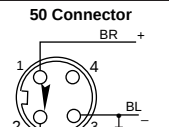


Normally Closed

50 Connector



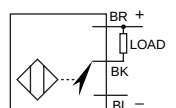
Normally Open



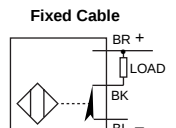
Normally Closed

NPN

Fixed Cable

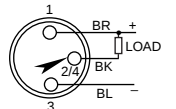


Normally Open

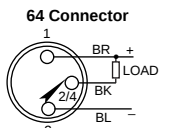


Normally Closed

64 Connector

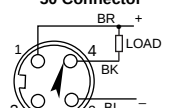


Normally Open

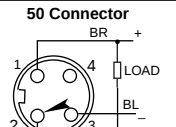


Normally Closed

50 Connector



Normally Open



Normally Closed