

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

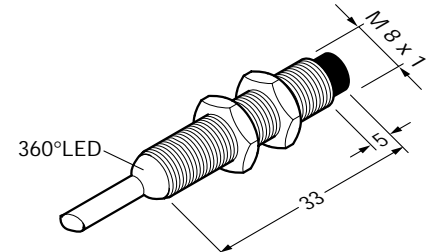
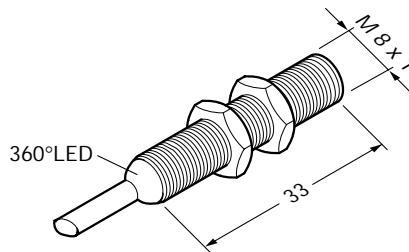
- Up to 2 times sensing distance of standard sensors
- Up to 1.5 times switching frequency
- Carries CE mark
- High Performance Sensors with Low Pricing at OEM Volumes
- Lifetime Warranty
- Manufactured in an ISO 9001 Facility

- 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				
2mm (.08 in.)				3mm (.12 in.)				
Sensing Distance		Cable	64	50	Cable	64	50	
Cable or Connector Style	Cat. No.							
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	

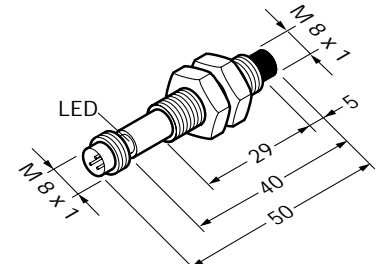
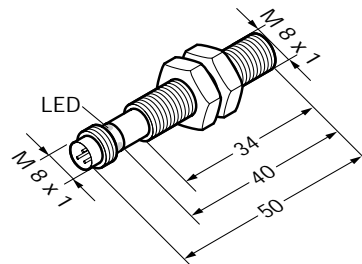
Fixed Cable

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.



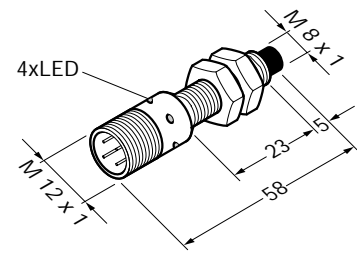
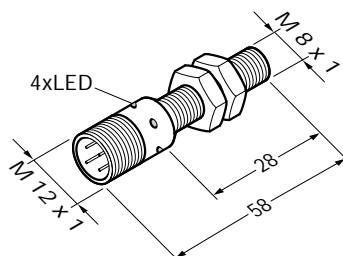
64 Style Connector

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

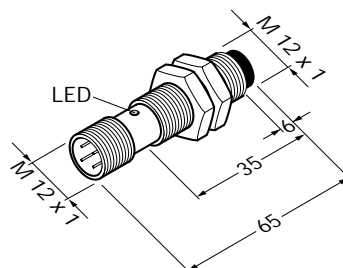
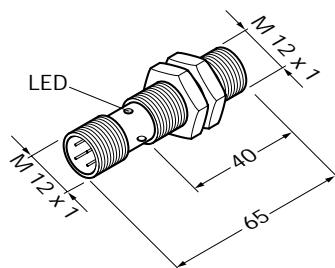
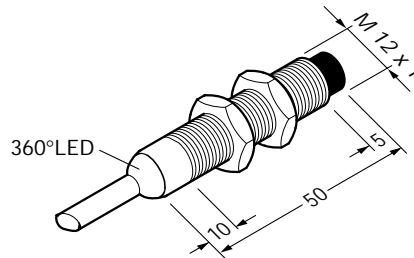
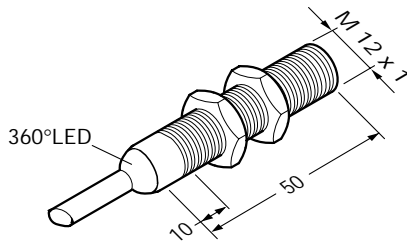
M12 Flush Mount 4mm (.16 in.)

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, PNP
- 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.

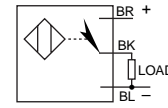
For Mounting Brackets refer to pages 114-115 of our Inductive Proximity Sensor catalog or contact ALTECH.

Wiring Diagrams

Note: Wire colors are applicable on cables purchased from Altech

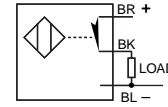
PNP

Fixed Cable



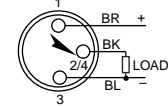
Normally Open

Fixed Cable



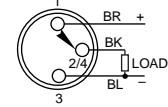
Normally Closed

64 Connector



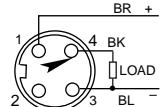
Normally Open

64 Connector



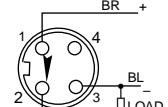
Normally Closed

50 Connector



Normally Open

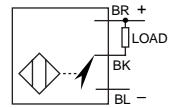
50 Connector



Normally Closed

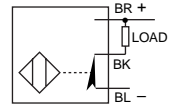
NPN

Fixed Cable



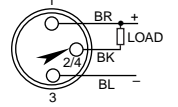
Normally Open

Fixed Cable



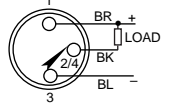
Normally Closed

64 Connector



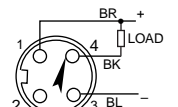
Normally Open

64 Connector



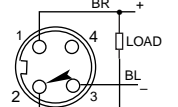
Normally Closed

50 Connector



Normally Open

50 Connector



Normally Closed