





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

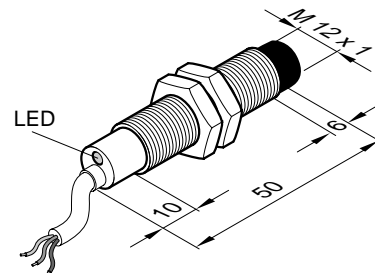
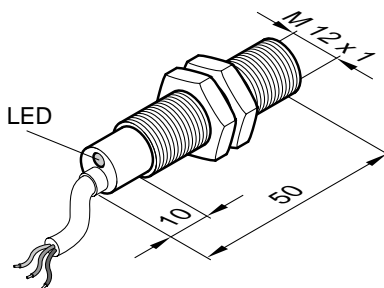
- *Circuitry that protects for electro-magnetic interference*
- *Flush models have teflon ceramic coatings to protect for weld slag*
- *Carries C ϵ mark*

- 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 2mm (.08 in.)			M12 Non-Flush Mount 4mm (.16 in.)	
Sensing Distance	2mm (.08 in.)		4mm (.16 in.)	
Cable or Connector Style Cat. No.	Cable	45	Cable	65
PNP	Normally Open 	9962-5840	9962-5845	9962-5900
	Normally Closed 			9962-5965
NPN	Normally Open 			
	Normally Closed 			
Ripple Voltage	≤10%	≤10%	≤10%	≤10%
Voltage Range	10V-30V	10V - 30V	10V - 30V	10V - 30V
Supply Current	≤10 mA	≤10 mA	≤10 mA	≤10 mA
Max. Load Current	200 mA	200 mA	200 mA	200 mA
Voltage Drop Across Sensor	≤2.4V	≤2.4V	≤2.4V	≤2.4V
Max. Leakage Current	≤10 µA	≤10 µA	≤10 µA	≤10 µA
Switching Frequency	15 Hz	15 Hz	15Hz	15 Hz
Hysteresis	≤15%	≤15%	≤15%	≤15%
Temperature Drift	≤10%	≤10%	≤10%	≤10%
Repeatability	.20mm (.008 in.)	.20mm (.008 in.)	.40mm (.016 in.)	.40mm (.016 in.)
Front Cap Material	Teflon	Teflon	PBTB	PBTB
Housing Material	Teflon Plated Brass	Teflon Plated Brass	Nickel Plated Brass	Nickel Plated Brass

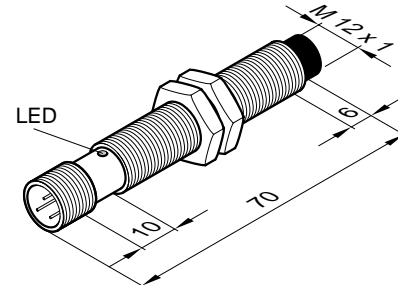
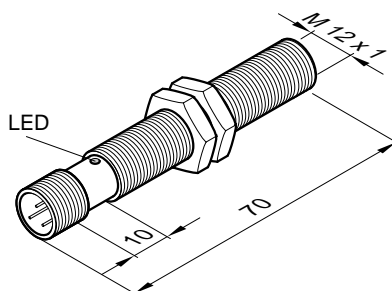
Fixed Cable

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.



45/65 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.	50.0 mm = 1.47 in.
6.0 mm = .23 in.	52.0 mm = 2.04 in.
8.0 mm = .31 in.	60.0 mm = 2.36 in.
10.0 mm = .39 in.	70.0 mm = 2.75 in.
12.0 mm = .47 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

45/65 Connector 8000-5110	PVC, Straight
45/65 Connector 8000-5120	PVC, Right Angle
45/65 Connector 8000-5150	PVC, Right Angle, 2LED, NPN
45/65 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

M18 Flush Mount

5mm (.20 in.)

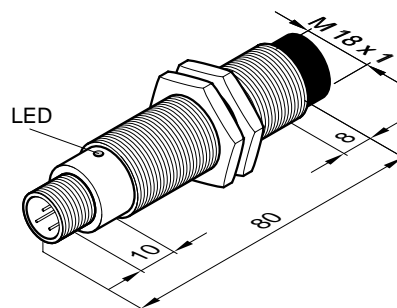
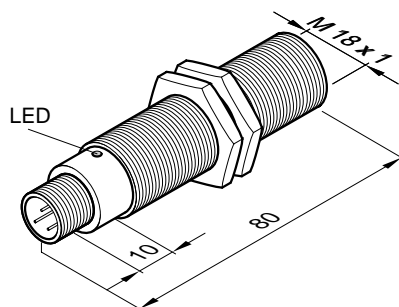
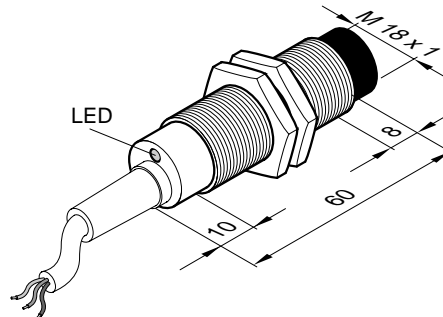
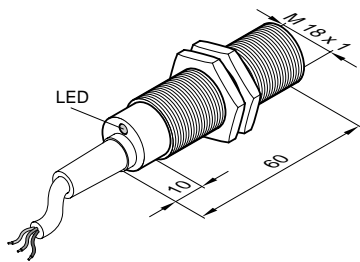
Cable	45
9964-5840	9964-5845
≤10%	≤10%
10V - 30V	10V - 30V
≤10 mA	≤10 mA
200 mA	200 mA
≤2.4V	≤2.4V
10 μA	10 μA
15 Hz	15 Hz
≤15%	≤15%
≤10%	≤10%
.50mm (.02 in.)	.50mm (.02 in.)
Teflon	Teflon
Teflon Plated Brass	Teflon Plated Brass

M18 Non-Flush Mount

8mm (.31 in.)

Cable	65
9964-5900	9964-5965
≤10%	≤10%
10V - 30V	10V - 30V
≤10 mA	≤10 mA
200 mA	200 mA
≤2.4V	≤2.4V
10 μA	10 μA
15 Hz	15 Hz
≤15%	≤15%
≤10%	≤10%
.80mm (.03 in.)	.80mm (.03 in.)
PBTB	PBTB
Nickel Plated Brass	Nickel Plated Brass

Note: Sensor dimensions in mm.

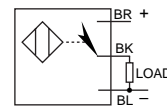


Wiring Diagrams

Note: Wire colors are applicable to cable purchased from Altech

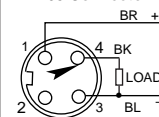
PNP

Fixed Cable



Normally Open

65 Connector



Normally Open

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Altech:](#)

[9964-5845](#)