

DC - 3 WIRE-STANDARD
M8 Stainless Steel (SS), M12 Brass, Nickel Plated (BN),
Cylindrical, Threaded, 10-30V DC, 250mA,
LED for Output Energized

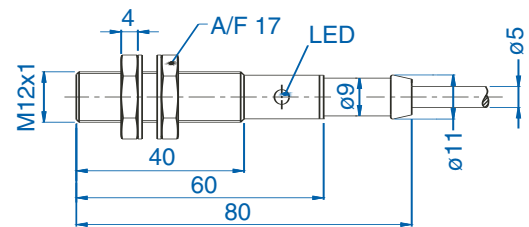
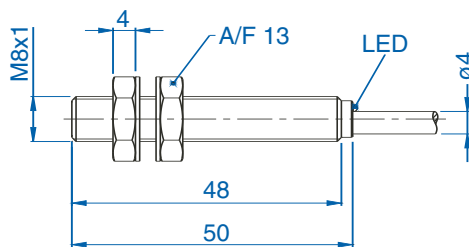
- IEC (529) IP67 (NEMA 1, 3, 4, 6, 12, 13) Protection
- Short Circuit Protection
- Overload Protection
- Reverse Polarity Protection
- Wire Break Resistance
- Transient Voltage Protection
- Temperature Range: -25 to 70°C (-13 to 158°F)



M8 Flush Mount			M12 Flush Mount			
Sensing Distance 1.5mm (0.06 in.)			2mm (.08 in.)			
Cable or Connector Style	Cat. No.	Cable	65	Cable	65	
PNP	Normally Open		AIS08F1.5AP024-2M	AIS08F1.5AP024-Q65	AIS12F02AP024-2M	AIS12F02AP024-Q65
	Complementary NO/NC*				AIS12F02UP024-2M	AIS12F02UP024-Q65
NPN	Normally Open		AIS08F1.5AN024-2M	AIS08F1.5AN024-Q65	AIS12F02AN024-2M	AIS12F02AN024-Q65
	Complementary NO/NC*				AIS12F02UN024-2M	AIS12F02UN024-Q65
Ripple Voltage			≤ 10%		≤ 10%	
Voltage Range			10-30V		10-30V	
No-Load Current			≤ 11 mA		≤ 15mA	
Max. Load Current			250 mA		250 mA	
Voltage Drop Across Sensor			≤ 1.3V		≤ 2.5V	
Max. Leakage Current			≤ 1 µA		1µA	
Switching Frequency			2000 Hz		1000 Hz	
Hysteresis			≤ 0.15mm		≤ 0.2mm	
Temperature Drift			≤ ±3µm/K		±4µm/K	
Repeatability			≤ 0.05mm		≤ 0.1mm	

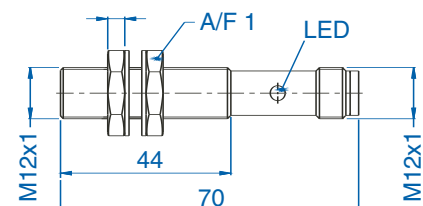
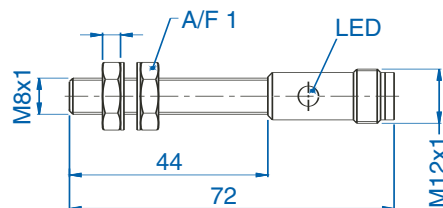
Fixed Cable

PVC 2m (6ft. 6in.). For other cable lengths and/or PUR cable, please consult Altech. M8 is supplied with stainless steel locknuts and M12 is supplied with brass, nickel plated locknuts.



65 Style Connector

4-pin, Micro style, 12mm (.47 in.). M8 is supplied with stainless steel locknuts and M12 is supplied with brass, nickel plated locknuts.



* Note short circuit protection is pending; contact Altech.

Note: Sensor dimensions in mm.

Metric/in. Conversion Table

1.5 mm = .06 in.	23.0 mm = .08 in.
2.0 mm = .08 in.	28.0 mm = 1.10 in.
4.0 mm = .16 in.	30.0 mm = 1.18 in.
5.0 mm = .20 in.	32.0 mm = 1.26 in.
6.0 mm = .23 in.	34.0 mm = 1.34 in.
8.0 mm = .31 in.	40.0 mm = 1.57 in.
10.0 mm = .39 in.	50.0 mm = 1.97 in.
12.0 mm = .47 in.	51.0 mm = 2.01 in.
15.0 mm = .59 in.	60.0 mm = 2.36 in.
18.0 mm = .70 in.	80.0 mm = 3.12 in.

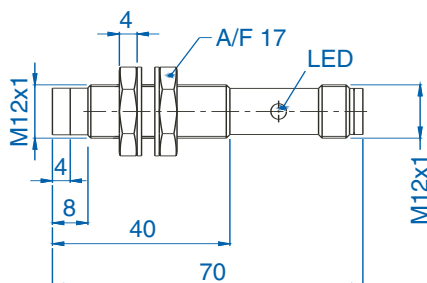
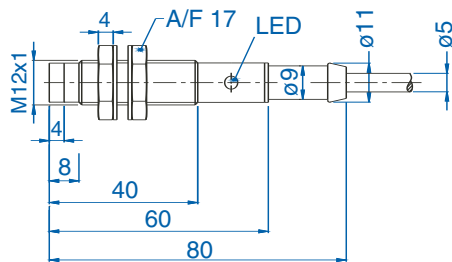
This table converts millimeters to inches in reference to the illustrations included on these pages.

If you do not see a converted dimension, multiply mm by 0.03937 to convert to inches.

M12 Non-Flush Mount

4mm (.16 in.)

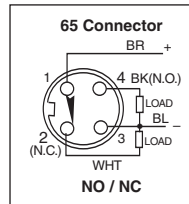
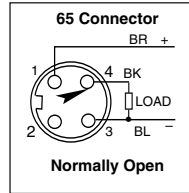
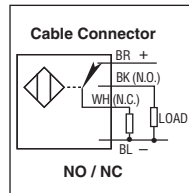
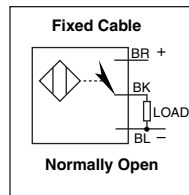
Cable	65
AIS12N04AP024-2M	AIS12N04AP024-Q65
AIS12N04UP024-2M	AIS12N04UP024-Q65
AIS12N04AN024-2M	AIS12N04AN024-Q65
AIS12N04UN024-2M	AIS12N04UN024-Q65
	≤ 10%
	10-30V
	≤ 15mA
	250 mA
	≤ 2.5V
	1μA
	1000 Hz
	≤ 0.6mm
	±8μm/K
	≤ 0.3mm



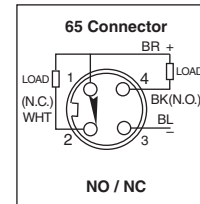
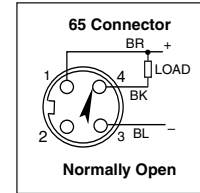
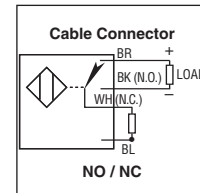
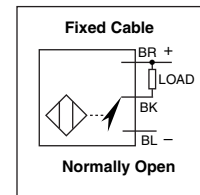
Wiring Diagrams

Note: Wire colors are applicable on cables purchased from Altech

PNP



NPN



Note: Sensor dimensions in mm.

DC - 3 WIRE-STANDARD
Brass, Nickel Plated (BN), Cylindrical,
Threaded, 10-30V DC, 250mA,
LED for Output Energized

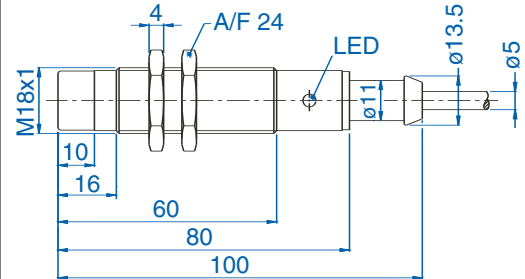
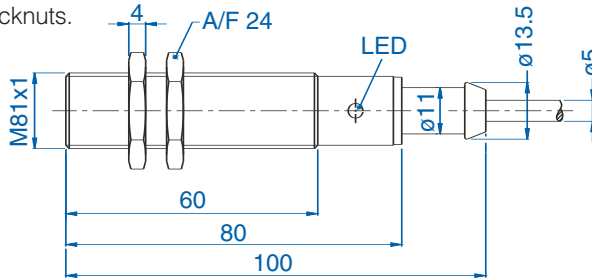
- IEC (529) IP67 (NEMA 1, 3, 4, 6, 12, 13) Protection
- Short Circuit Protection
- Overload Protection
- Reverse Polarity Protection
- Wire Break Resistance
- Transient Voltage Protection
- Temperature Range: -25 to 70°C (-13 to 158°F)



M18 Flush Mount			Non-Flush 18 Flush Mount		
Sensing Distance 5mm (.20 in.)			8mm (.31 in.)		
Cable or Connector Style Cat. No.	Cable	65	Cable	65	
PNP	Normally Open	AIS18F05AP024-2M	AIS18F05AP024-Q65	AIS18N08AP024-2M	AIS12N02AP024-Q65
	Complementary NO/NC*	AIS18F05UP024-2M	AIS18F05UP024-Q65	AIS18N08UP024-2M	AIS12N02UP024-Q65
NPN	Normally Open	AIS18F05AN024-2M	AIS18F05AN024-Q65	AIS18N08AN024-2M	AIS18N08AN024-Q65
	Complementary NO/NC*	AIS18F05UN024-2M	AIS18F05UN024-Q65	AIS18N08UN024-2M	AIS18N08UN024-Q65
Ripple Voltage		≤ 10%		≤ 10%	
Voltage Range		10-30V		10-30V	
No-Load Current		≤15 mA		≤15 mA	
Max. Load Current		250 mA		250 mA	
Voltage Drop Across Sensor		≤2.5V		≤ 2.5V	
Max. Leakage Current		≤ 1 μA		1μA	
Switching Frequency		500 Hz		500 Hz	
Hysteresis		0.5mm		≤0.8mm	
Temperature Drift		≤±10μm/K		≤±16μm/K	
Repeatability		≤0.2mm		≤0.4mm	

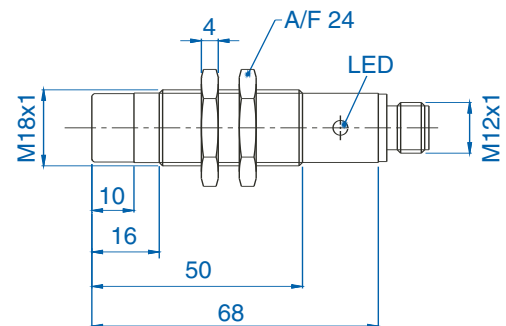
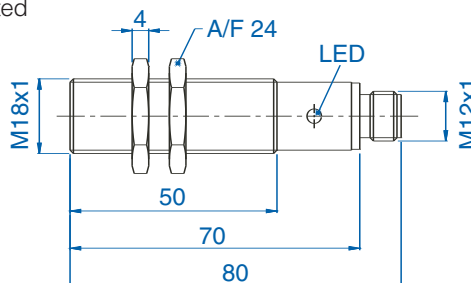
Fixed Cable

PVC 2m (6ft. 6in.). For other cable lengths and/or PUR cable, please consult Altech. Supplied with brass, nickel plated locknuts.



65 Style Connector

4-pin, Micro style, 12mm (.47 in.). Supplied with brass, nickel plated locknuts.



* Note short circuit protection is pending; contact Altech.

Note: Sensor dimensions in mm.

Metric/in. Conversion Table

1.5 mm = .06 in.	23.0 mm = .89 in.
2.0 mm = .08 in.	28.0 mm = 1.10 in.
4.0 mm = .16 in.	30.0 mm = 1.18 in.
5.0 mm = .20 in.	32.0 mm = 1.26 in.
6.0 mm = .23 in.	34.0 mm = 1.34 in.
8.0 mm = .31 in.	40.0 mm = 1.57 in.
10.0 mm = .39 in.	50.0 mm = 1.97 in.
12.0 mm = .47 in.	51.0 mm = 2.01 in.
15.0 mm = .59 in.	60.0 mm = 2.36 in.
18.0 mm = .70 in.	80.0 mm = 3.12 in.

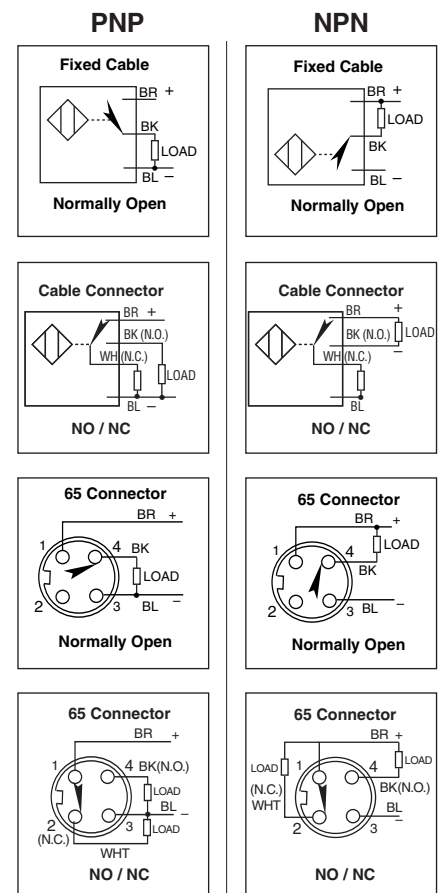
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If you do not see a converted dimension, multiply mm by 0.03937 to convert to inches.

M30 Flush Mount 10mm (.39 in.)		M30 Non-Flush Mount 15mm (.59 in.)	
Cable	65	Cable	65
AIS30F10AP024-2M	AIS30F10AP024-Q65	AIS30N15AP024-2M	AIS30N15AP024-Q65
AIS30F10UP024-2M	AIS30F10UP024-Q65	AIS30N15UP024-2M	AIS30N15UP024-Q65
AIS30F10AN024-2M	AIS30F10AN024-Q65	AIS30N15AN024-2M	AIS30N15AN024-Q65
AIS30F10UN024-2M	AIS30F10UN024-Q65	AIS30N15UN024-2M	AIS30N15UN024-Q65
	≤10%		≤10%
	10-30V		10V-30V
	≤15 mA		≤15 mA
	250 mA		250 mA
	≤2.5V		≤2.5V
	≤1 μA		≤1 μA
	300 Hz		300 Hz
	1.0mm		≤1.5mm
	≤±20μm/K		≤±30μm/K
	≤0.5mm		≤1.0mm

Wiring Diagrams

Note: Wire colors are applicable on cables purchased from Altech



Note: Sensor dimensions in mm.

DC - 3 WIRE-EXTENDED SENSING DISTANCE

**Brass, Nickel Plated (BN), Cylindrical,
Threaded, 10-30V DC, 200mA,
LED for Output Energized**

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

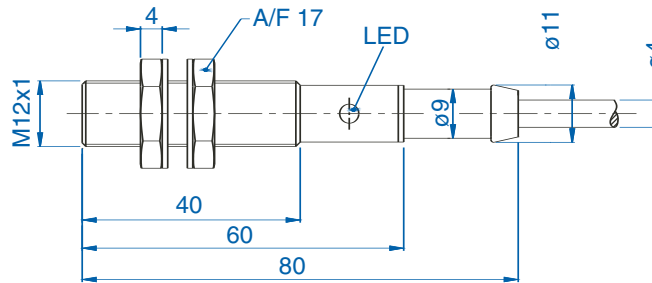


M12 Flush Mount

Sensing Distance		4mm (.16 in.)	
Cable or Connector Style	Cat. No.	Cable	65
PNP	Normally Open	AIS12F04AP024-2M	AIS12F04AP024-Q65
NPN	Normally Open	AIS12F04AN024-2M	AIS12F04AN024-Q65
Ripple Voltage			≤10%
Voltage Range			10-30V
No Load Current			≤15mA
Max. Load Current			200 mA
Voltage Drop Across Sensor			≤2.5V
Max. Leakage Current			≤1μA
Switching Frequency			1000 Hz
Hysteresis			≤0.4mm
Temperature Drift			≤±8μm/K
Repeatability			≤0.2mm

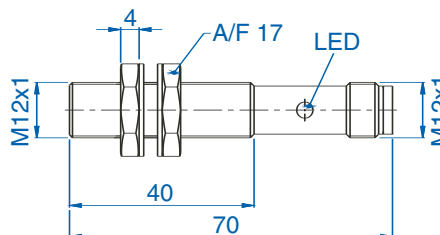
Fixed Cable

PVC 2m (6ft. 6in.). For other cable lengths and/or PUR cable, please consult Altech. Supplied with brass, nickel plated locknuts.



65 Style Connector

4-pin, Micro style, 12mm (.47 in.). Supplied with brass, nickel plated locknuts.



Note: Sensor dimensions in mm.

Metric/in. Conversion Table

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2.0 mm = .08 in.	28.0 mm = 1.10 in.
4.0 mm = .16 in.	30.0 mm = 1.18 in.
5.0 mm = .20 in.	32.0 mm = 1.26 in.
6.0 mm = .23 in.	34.0 mm = 1.34 in.
8.0 mm = .31 in.	40.0 mm = 1.57 in.
10.0 mm = .39 in.	50.0 mm = 1.97 in.
12.0 mm = .47 in.	51.0 mm = 2.01 in.
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18.0 mm = .70 in.	80.0 mm = 3.12 in.

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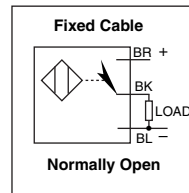
M18 Flush Mount 8mm (.31 in.)

Cable	65
AIS18F08AP024-2M	AIS18F08AP024-Q65
AIS18F08AN024-2M	AIS18F08AN024-Q65
	≤10%
	10-30V
	≤15 mA
	200 mA
	≤2.5V
	≤1 μA
	500 Hz
	≤0.8mm
	±12μm/K
	≤0.4mm

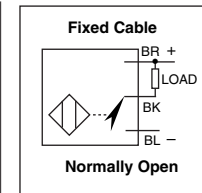
Wiring Diagrams

Note: Wire colors are applicable on cables purchased from Altech

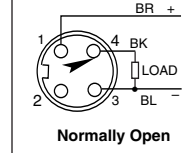
PNP



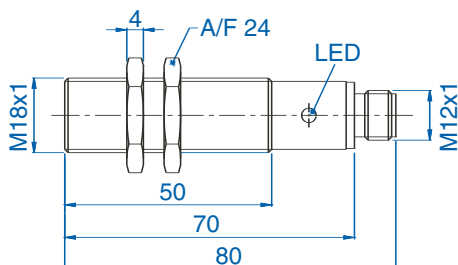
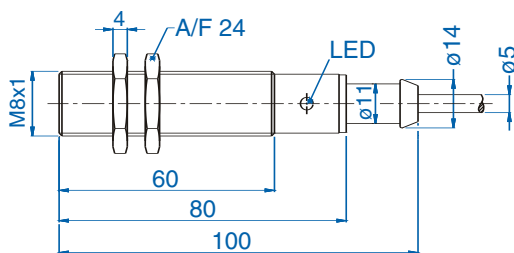
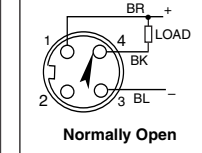
NPN



65 Connector



65 Connector



Note: Sensor dimensions in mm.