

871F 4-Wire DC Complementary Output

Flat Pack Style



871F DC Cable Style
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871F DC Mini
Quick-Disconnect Style
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871F DC Micro
Quick-Disconnect Style
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Specifications

Load Current	≤200mA
Minimum Load Current	1mA
Leakage Current	≤10μA
Operating Voltage	10-30V DC
Voltage Drop	≤2.5V
Repeatability	≤2%
Hysteresis	≤5% typical
False Pulse Protection	Incorporated
Transient Noise Protection	Incorporated
Reverse Polarity Protection	Incorporated
Short Circuit Protection	Incorporated
Overload Protection	Incorporated
Approvals	UL listed, c-UL certified, and CE marked for all applicable all directives
Enclosure	NEMA 1, 2, 3, 4, 6, 6P, 12 and 13, IP67 (IEC 529), 1200psi (8270kPa) washdown; Housing material: Valox®
Connections	Cable: 2m (6.5ft) length 4-conductor #22AWG ToughLink™ Quick Disconnect: 4-pin mini style 4-pin micro style Conduit Opening: 1/2-14 NPT thread, PG13.5 thread
LEDs	Green: Power Orange: Output Energized
Operating Temperature	-25°C to +70°C (-13°F to +158°F)
Shock	30g, 11ms
Vibration	55Hz, 1mm amplitude, 3 planes

Correction Factors

Target Material	Correction Factor
Steel	1.0
Stainless Steel	0.7-0.8
Brass	0.4-0.5
Aluminum	0.3-0.4
Copper	0.2-0.3

Features

- 4-wire operation
- 4-pin, 4-conductor or 4-terminal connection
- 10-30V DC
- Complementary normally open and normally closed outputs
- False pulse, transient noise, reverse polarity, short circuit and overload protection
- UL listed, c-UL certified, and CE marked for all applicable directives
- DIN rail mounting option on quick-disconnect and cable models
- Adjustable sensing models available

AB Drives

Inductive Proximity Sensors
871F 4-Wire DC Complementary Output
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Product Selection

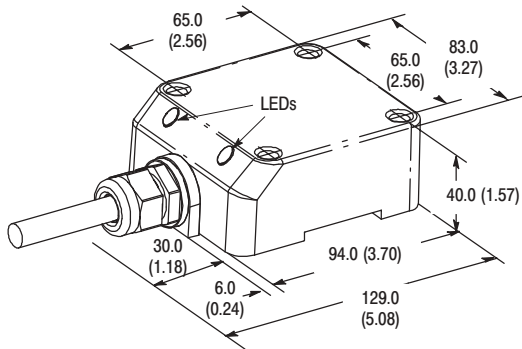
Head Size	Nominal Sensing Distance mm (in)	Shielded	Output Configuration		Switching Frequency (Hz)	Catalog Number				
						ToughLink™ Cable	Mini QD Style	Micro QD Style	Conduit 1/2 NPT	Conduit PG13.5
83 (3.27)	50 (1.97) ①	Y	N.O. and N.C.	PNP	100	871F-P50BP80-H2	871F-P50BP80-N4	871F-P50BP80-D4	871F-P50BP80-T4	871F-P50BP80-Q4
				NPN		871F-P50BN80-H2	871F-P50BN80-N4	871F-P50BN80-D4	871F-P50BN80-T4	871F-P50BN80-Q4
	PNP	871F-N65BP80-H2		871F-N65BP80-N4		871F-N65BP80-D4	871F-N65BP80-T4	871F-N65BP80-Q4		
	NPN	871F-N65BN80-H2		871F-N65BN80-N4		871F-N65BN80-D4	871F-N65BN80-T4	871F-N65BN80-Q4		
Recommended Standard QD Cordset (-6F = 1.8m (6ft), -2 = 2m (6.5ft))						889N-F4AFC-6F	889D-F4AC-2			

① 50mm when fully embedded in mild steel as shown

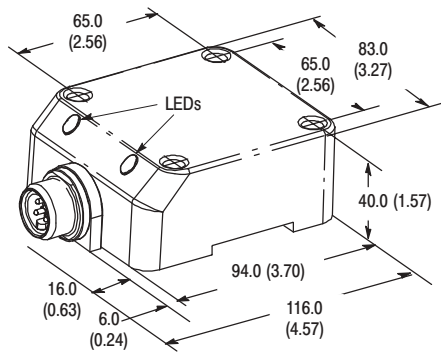


Dimensions—mm (inches)

Cable Style

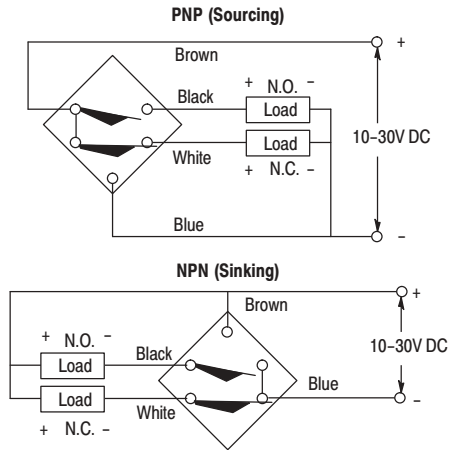


Mini QD Style

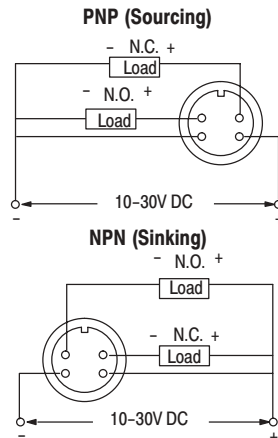


Wiring Diagram

Complementary Normally Open and Normally Closed



Complementary Normally Open and Normally Closed Outputs

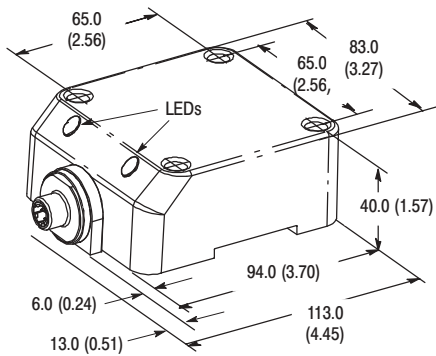


871F 4-Wire DC Complementary Output

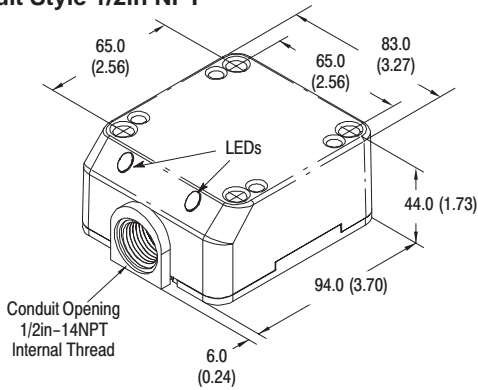
Flat Pack Style

Dimensions—mm (inches)

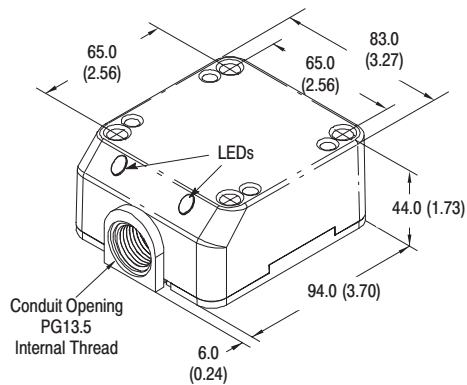
Micro QD Style



Conduit Style 1/2in NPT



Conduit Style PG13.5

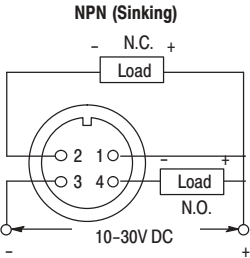
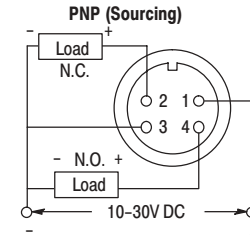


QD Cordsets and Accessories

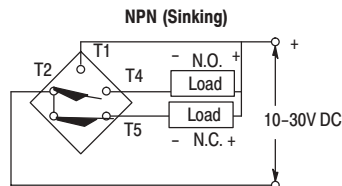
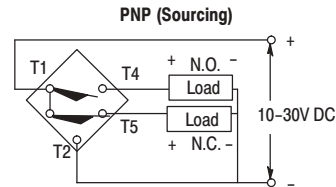
Description	Page Number
Other Cordsets Available	NO TAG, 7-68

Wiring Diagram

Complementary Normally Open and Normally Closed



Complementary Normally Open and Normally Closed Outputs



Complementary Normally Open and Normally Closed Outputs

