

871F 4-Wire DC Complementary Output**Flat Pack Style**

871F DC Mini
Quick-Disconnect Style



871F DC Micro
Quick-Disconnect Style

Features

- 4-wire operation
- 4-pin 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
- cULus Listed and CE Marked for all applicable directives
- DIN Rail mounting option on quick-disconnect and cable models

Specifications

Load Current, Max.	200 mA
Load Current, Min.	1 mA
Leakage Current	≤10 μA
Operating Voltage	10...30V DC
Voltage Drop	≤2.5V
Repeatability	≤2%
Hysteresis	≤5% typical
Protection Type	False pulse, transient noise, reverse polarity, short circuit, overload
Certifications	cULus Listed and CE Marked for all applicable all directives
Enclosure Type Rating	NEMA 1, 2, 3, 4, 6, 6P, 12 and 13; IP67 (IEC529), 1200 psi (8270 kPa) washdown; micro connector versions also meet IP69K (IEC529)
Connection Type	Quick-Disconnect: 4-pin mini, 4-pin micro; Conduit Opening: 1/2 - 14NPT thread, PG 13.5 thread
LED	Green: Power, Orange: Output Energized
Operating Temperature [C (F)]	-25...+70 ° (-13...+158 °)
Shock	30 g, 11 ms
Vibration	55 Hz, 1 mm 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

Inductive Proximity Sensors
871F 4-Wire DC Complementary Output
Flat Pack Style

Product Selection

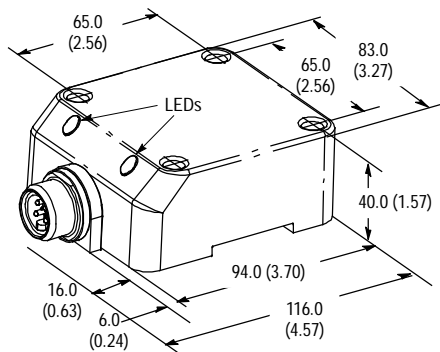
Head Size [mm (in.)]	Nominal Sensing Distance [mm (in.)]	Shielded	Output Configuration		Switching Frequency [Hz]	Cat. No.			
						Mini QD Style	Micro QD Style	Conduit 1/2 NPT	Conduit PG13.5
83 (3.27)	50 (1.97) ★	Yes	N.O. and N.C.	PNP	100	871F-P50BP80-N4	871F-P50BP80-D4	871F-P50BP80-T4	871F-P50BP80-Q4
				NPN		871F-P50BN80-N4	871F-P50BN80-D4	871F-P50BN80-T4	871F-P50BN80-Q4
	65 (2.56)	No		PNP		871F-N65BP80-N4	871F-N65BP80-D4	871F-N65BP80-T4	871F-N65BP80-Q4
				NPN		871F-N65BN80-N4	871F-N65BN80-D4	871F-N65BN80-T4	871F-N65BN80-Q4
				Recommended Standard QD Cordset (-6F = 1.8 m (6 ft), -2 = 2 m (6.5 ft))					889N-F4AFC-6F

★ Must be fully embedded in mild steel to achieve maximum sensing distance.



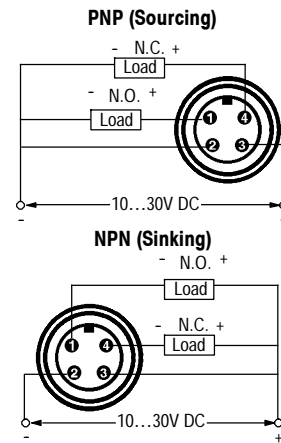
Approximate Dimensions [mm (in.)]

Mini QD Style



Wiring Diagram

Complementary Normally Open and Normally Closed Outputs

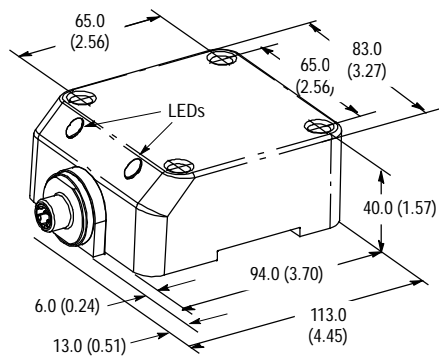


871F 4-Wire DC Complementary Output

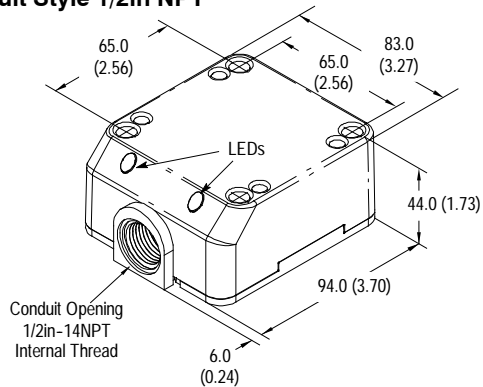
Flat Pack Style

Approximate Dimensions [mm (in.)]

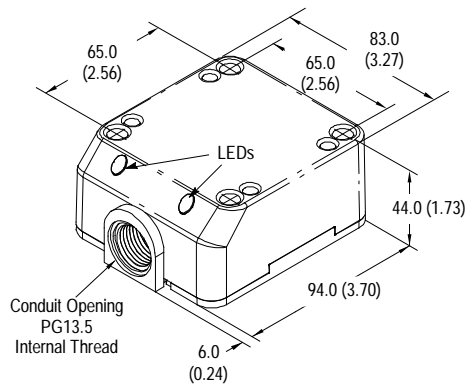
Micro QD Style



Conduit Style 1/2in NPT



Conduit Style PG13.5

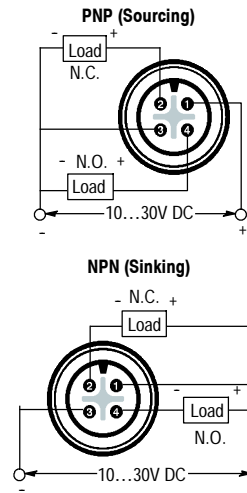


QD Cordsets and Accessories

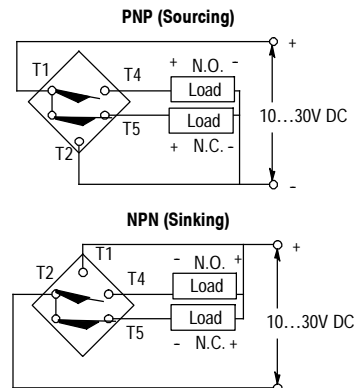
Description	Page Number
Other Cordsets Available	8-2

Wiring Diagram

Complementary Normally Open and Normally Closed



Complementary Normally Open and Normally Closed Outputs



Complementary Normally Open and Normally Closed Outputs

