



871F DC Mini
Quick-Disconnect Style



871F DC Micro
Quick-Disconnect Style



Specifications

Load Current	≤200mA
Minimum Load Current	1mA
Leakage Current	≤10μA
Operating Voltage	10-30V DC
Voltage Drop	≤2.5V
Repeatability	≤5%
Hysteresis	≤5% typical
False Pulse Protection	Incorporated
Transient Noise Protection	Incorporated
Reverse Polarity Protection	Incorporated
Short Circuit Protection	Incorporated
Overload Protection	Incorporated
Weld Field Immunity	1600 Gauss
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	Quick Disconnect: 4-pin mini style 4-pin micro style
LEDs	Green: Power Orange: Output Energized
Operating Temperature	-25°C to +70°C (-13°F to +158°F)
Shock	5g
Vibration	55Hz, 1mm amplitude, 3 planes

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
- Weld field immune

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

871F DC Weld Field Immune

Flat Pack Style

Product Selection

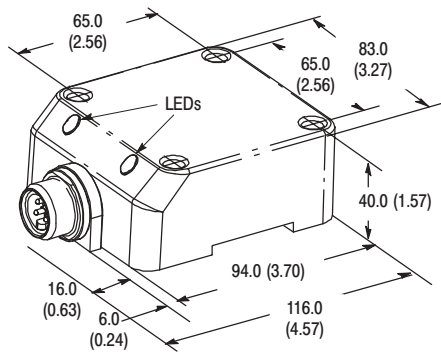
Head Size	Nominal Sensing Distance mm (in)	Shielded	Output Configuration		Switching Frequency (Hz)	Catalog Number	
						Mini QD Style	Micro QD Style
83 (3.27)	40 (1.57) ①	Y	N.O. and N.C.	PNP	15	871F-PW40BP80-N4	871F-PW40BP80-D4
				NPN		871F-PW40BN80-N4	871F-PW40BN80-D4
	PNP	871F-NW50BP80-N4		871F-NW50BP80-D4			
	NPN	871F-NW50BN80-N4		871F-NW50BN80-D4			
Recommended Standard QD Cordset (-6F = 1.8m (6ft), -2 = 2m (6.5ft))						889N-F4AFC-6F	889D-F4WE-2

① 40mm when fully embedded in mild steel as shown

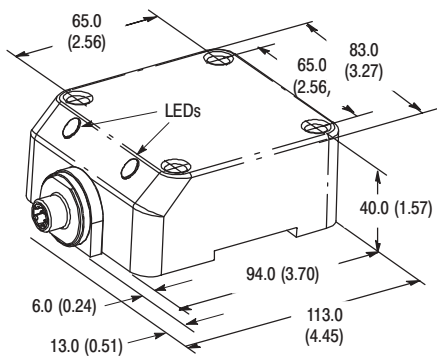


Dimensions—mm (inches)

Mini QD Style

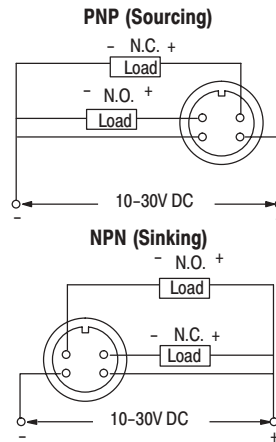


Micro QD Style



Wiring Diagram

Complementary Normally Open and Normally Closed Outputs



Complementary Normally Open and Normally Closed

