

871ZC 3-Wire DC Weld Field Immune

Thermoset Plastic Face/Threaded Copper Barrel



871ZC DC Micro
Quick-Disconnect Style
18mm



Specifications

Load Current	≤200mA
Minimum Load Current	1mA
Leakage Current	≤10μA
Operating Voltage	10–30V DC
Voltage Drop	≤2.4V
Repeatability	≤10%
Hysteresis	10% typical
False Pulse Protection	Incorporated
Transient Noise Protection	Incorporated
Reverse Polarity Protection	Incorporated
Short Circuit Protection	Incorporated
Overload Protection	Incorporated
Weld Field Immunity	20,000 A at 1in
Approvals	UL listed, c-UL certified and CE marked for all applicable directives
Enclosure	NEMA 1, 2, 3, 4, 12 and 13, IP67 (IEC 529) Copper barrel, thermoset plastic face
Connections	Quick-Disconnect: 4-pin micro style
LED	Red: Target Present
Operating Temperature	-25°C to +70°C (-13°F to +158°F)
Shock	30g, 11ms
Vibration	55Hz, 1mm amplitude, 3 planes

Features

- 360° LED
- Copper barrel
- Weld field immunity
- 3-wire operation
- 4-pin micro QD connection
- 10–30V DC
- Normally open output
- Reverse polarity, short circuit, overload, false pulse and transient noise protection
- UL listed, c-UL certified and CE marked for all applicable directives

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	0.3-0.4

Inductive Proximity Sensors
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Product Selection

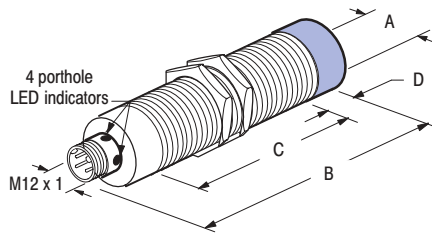
Barrel Diameter	Nominal Sensing Distance mm (inches)	Shielded	Output Configuration		Switching Frequency (Hz)	Catalog Number
						Micro QD Style
12mm	2 (0.07)	Y	N.O.	PNP	15	871ZC-MW2NP12-D4
	4 (0.15)	N				871ZC-MW4NP12-D4
18mm	5 (0.19)	Y				871ZC-MW5NP18-D4
	8 (0.31)	N				871ZC-MW8NP18-D4
30mm	10 (0.39)	Y				871ZC-MW10NP30-D4
	15 (0.59)	N				871ZC-MW15NP30-D4
Recommended Standard QD Cordset (-6F = 1.8m (6ft), -2 = 2m (6.5ft))						889D-F4WE-2

QD Cordsets and Accessories

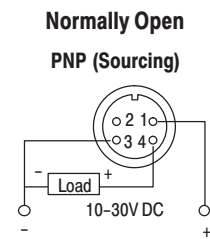
Description	Page Number
Other Cordsets Available	7-41
Terminal Chambers	7-20
Mounting Brackets	2-186 - 2-190
PTFE End Caps	2-195
Mounting Nuts	2-197 - 2-198

Dimensions—mm (inches)

Micro QD Style



Wiring Diagram



Thread Size	Shielded	mm (inches)			
		A	B	C	D
M12 X 1	Y	12.0 (0.47)	65 (2.56)	37.7 (1.48)	—
	N		70.6 (2.78)	37.7 (1.48)	6.3 (0.25)
M18 X 1	Y	18.0 (0.71)	80.0 (3.15)	52.8 (2.08)	—
	N		88.5 (3.48)	52.8 (2.08)	9.6 (0.38)
M30 X 1	Y	30.0 (1.18)	85.9 (3.38)	68.6 (2.70)	—
	N		99.0 (3.90)	68.6 (2.70)	14.5 (0.57)