

872C WorldProx™ Extended Sensing 2-Wire AC**Plastic Face/Threaded Nickel-Plated Brass Barrel**

*872C AC Cable Style
12, 18, 30 mm*



*872C AC Mini
Quick-Disconnect Style
18, 30 mm*



*872C AC Micro
Quick-Disconnect Style
12, 18, 30 mm*

Specifications

Load Current, Max.	300 mA
Load Current, Min.	2 mA
Inrush Current (1 cycle)	≤2 A
Leakage Current	≤1.7 mA
Operating Voltage	20...250V AC
Voltage Drop	≤11V @ 10 mA, ≤7V @ 300 mA
Repeatability	≤5%
Hysteresis	≤10% typical
Protection Type	False pulse, transient noise, overload, and short circuit
Certifications	cULus Listed and CE Marked for all applicable directives
Enclosure Type Rating	NEMA 1, 2, 3, 4, 12, 13; IP67 (IEC 529) Nickel-plated brass barrel
Connection Type	Cable: 2 m (6.5 ft) length, 3-conductor PVC Quick-Disconnect: 3-pin micro style, 3-pin mini style
LED	Cable Models: yellow - power, green - output energized QD Models: green - power, red - 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	0.9
Brass	0.5
Aluminum	0.45
Copper	0.4

Features

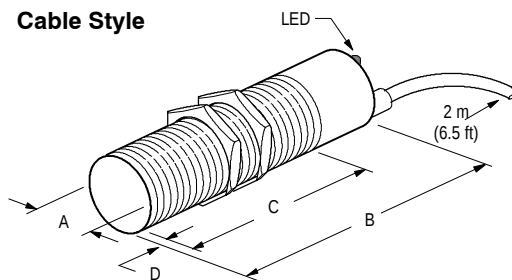
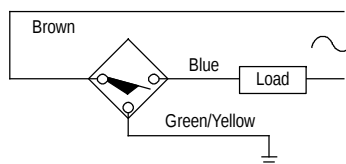
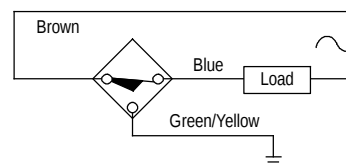
- 2-wire operation
- 3-conductor or 3-pin connection
- 20...250V AC
- Normally open or normally closed output
- False pulse, transient noise, and overload protection
- cULus Listed and CE Marked for all applicable directives

QD Cordsets and Accessories

Description	Page Number
Other Cordsets Available	8-2
Terminal Chambers	8-2
Mounting Brackets	2-210...2-214
End Caps	2-220
Mounting Nuts	2-221...2-222

Product Selection

Barrel Diameter	Nominal Sensing Distance [mm (in.)]	Shielded	Output Configuration	Switching Frequency [Hz]	Cat. No.		
					Cable Style	Mini QD Style	Micro QD Style
12 mm	4 (0.16)	Y	N.O.	20	872C-F4N12-A2	—	872C-F4N12-R3
			N.C.		872C-F4C12-A2	—	872C-F4C12-R3
	8 (0.31)	N	N.O.		872C-G8N12-A2	—	872C-G8N12-R3
			N.C.		872C-G8C12-A2	—	872C-G8C12-R3
18 mm	8 (0.31)	Y	N.O.		872C-F8N18-A2	872C-F8N18-N3	872C-F8N18-R3
			N.C.		872C-F8C18-A2	872C-F8C18-N3	872C-F8C18-R3
	12 (0.47)	N	N.O.		872C-G12N18-A2	872C-G12N18-N3	872C-G12N18-R3
			N.C.		872C-G12C18-A2	872C-G12C18-N3	872C-G12C18-R3
30 mm	15 (0.59)	Y	N.O.		872C-F15N30-A2	872C-F15N30-N3	872C-F15N30-R3
			N.C.		872C-F15C30-A2	872C-F15C30-N3	872C-F15C30-R3
	30 (1.18)	N	N.O.		872C-G30N30-A2	872C-G30N30-N3	872C-G30N30-R3
			N.C.		872C-G30C30-A2	872C-G30C30-N3	872C-G30C30-R3
Recommended standard QD cordset (-6F = 1.8 m (6 ft), -2 = 2 m (6.5 ft))						889N-F3AFC-6F	889R-F3ECA-2

Approximate Dimensions [mm (in.)]**Cable Style****Wiring Diagrams****Normally Open****Normally Closed****NOTE:** Load can be switched to brown wire.

Thread Size	Shielded	[mm (in.)]			
		A	B	C	D
M12 X 1	Y	12.0 (0.47)	70.0 (2.76)	60.0 (2.36)	—
	N			54.0 (2.13)	6.0 (0.24)
M18 X 1	Y	18.0 (0.71)	60.0 (2.36)	50.0 (1.96)	—
	N			42.0 (1.65)	8.0 (0.31)
M30 X 1.5	Y	30.0 (1.18)	60.0 (2.36)	50.0 (1.96)	—
	N			38.0 (1.50)	12.0 (0.47)

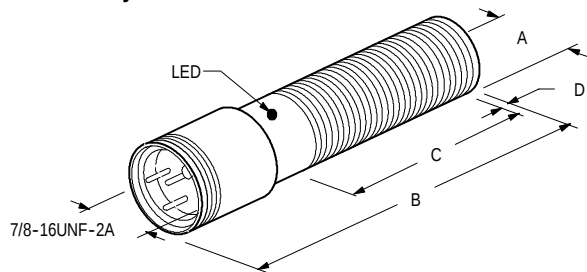
Inductive Proximity Sensors

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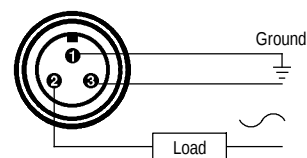
Approximate Dimensions [mm (in.)]

Mini QD Style



Wiring Diagrams

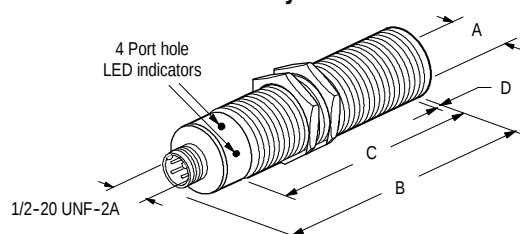
Normally Open or Normally Closed



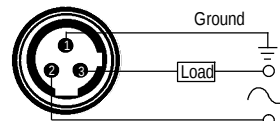
Note: Load can be switched to pin 3.

Thread Size	Shielded	[mm (in.)]			
		A	B	C	D
M18 X 1	Y	18.0 (0.71)	91.0 (3.58)	52.0 (2.05)	—
	N			44.0 (1.73)	8.0 (0.31)
M30 X 1.5	Y	30.0 (1.18)	91.0 (3.58)	52.0 (2.25)	—
	N			40.0 (1.57)	12.0 (0.47)

Micro Quick-Disconnect Style



Normally Open or Normally Closed



Note: Load can be switched to pin 2.

Thread Size	Shielded	[mm (in.)]			
		A	B	C	D
M12 X 1	Y	12.0 (0.47)	75.0 (2.95)	45.0 (1.77)	—
	N			40.0 (1.57)	6.0 (0.24)
M18 X 1	Y	18.0 (0.71)	80.0 (3.15)	60.0 (2.36)	—
	N			52.0 (2.05)	8.0 (0.31)
M30 X 1.5	Y	30.0 (1.18)	80.0 (3.15)	50.0 (1.96)	—
	N			38.0 (1.50)	12.0 (0.47)