



871TM AC/ DC Cable Style
12, 18, and 30 mm



871TM AC/ DC Mini
Quick- Disconnect Style
12, 18, and 30 mm



871TM AC/ DC Micro
Quick- Disconnect Style
12, 18, and 30 mm



871TM AC/ DC EAC Micro
Quick- Disconnect Style
12 mm



871TM AC/ DC ToughLink Cable Style
12, 18, and 30 mm

Features

- Designed for low load current PLC, I/ O, and PC applications
- 2- wire operation
- 2- conductor, 3- pin or 4- pin connection
- Select high temperature models available
- 20... 250V AC/ DC (standard models), 20... 132V AC/ DC (high temperature models)
- Normally open or normally closed output
- False pulse, transient noise, and radio frequency protection □
- UL Listed, CSA Certified, and CE Marked for all applicable directives
CCC Certified (select models)

□ Radio frequency protection not available on high temperature models

Load Current	2... 25 mA
Leakage Current	£0.9 mA at 24V DC £1.7 mA at 20... 120V AC/ DC £2.5 mA at 121... 250V AC/ DC
Operating Voltage	20... 250V AC/ DC (standard models) 20... 132V AC/ DC (high temperature models)
Voltage Drop	£8V at 25 mA DC £10V at 25 mA AC
Repeatability	10% typical
Hysteresis	10% typical
Protection Type	False pulse, transient noise, radio frequency (10V per meter, frequency range 20... 1000 MHz) □
Certifications	UL Listed, CSA Certified, and CE Marked for all applicable directives CCC Certified (select models)
Enclosure Type Rating	NEMA 1, 2, 3, 3R, 4, 4X, 6, 6P, 12, 13; IP67 (IEC 529) all models; 1200 psi (8270 kPa) washdown; ToughLink™ and micro connector versions are also rated IP69K (IEC 529)
Housing Material	Stainless steel face and barrel
Connection Type	Cable: 2 m (6.5 ft) length, A2 - 2- conductor #22 AWG PVC, C2 - 2- conductor #22 AWG ToughLink, H2 - 2- conductor #18 AWG ToughLink; Quick- Disconnect: 3- pin mini style, 3- pin micro style, 4- pin EAC micro style
Indicator LEDs	Red: Output Energized
Operating Temperature [C (F)]	-25... +70 ° (-13... +158 °) (standard models) 0... 100 ° (32... 212 °) (high temperature models)
Shock	30 g, 11 ms (standard models) 5g, 11 ms (high temperature models)
Vibration	55 Hz, 1 mm amplitude, 3 planes (standard models) 30... 120 Hz, 1 mm amplitude, 3 planes (high temperature models)

□ Radio frequency protection not available on high temperature models

Correction Factors

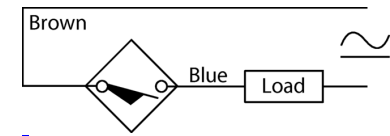
Target Material	Correction Factor
Steel	1.0
Stainless Steel	0.8... 1.0
Brass	0.4... 0.7
Aluminum	0.4... 0.7
Copper	0.2... 0.5

Barrel Dia. [mm]	Nominal Sensing Distance [mm (in.)]	Shielded	Output Config.	Switching Freq. [Hz]	Cat. No.									
					PVC Cable		ToughLink™ Cable		Mini QD Style		Micro QD Style		EAC Micro QD Style	
12	2 (0.08)	Yes	N.O.	75	□	871TM- BH2N12- A2	□	871TM- BH2N12- C2	□	871TM- BH2N12- N3	□	871TM- BH2N12- R3	□	871TM- BH2N12- B4
	4 (0.16)	No		35	□	871TM- BH4N12- A2	871TM- BH4N12- C2		871TM- BH4N12- N3		871TM- BH4N12- R3		—	
	2 (0.08)	Yes	N.C.	75	—		—		—		871TM- BH2C12- R3		—	
	4 (0.16)	No		35	—		—		—		871TM- BH4C12- R3		—	
18	5 (0.20)	Yes	N.O.	65	□	871TM- BH5N18- A2	871TM- BH5N18- H2		§	871TM- BH5N18- N3	871TM- BH5N18- R3		—	
	8 (0.31)	No		30	□	871TM- BH8N18- A2	□	871TM- BH8N18- H2	♣	871TM- BH8N18- N3	871TM- BH8N18- R3		—	
	5 (0.20)	Yes	N.C.	65	—		—		—		871TM- BH5C18- R3		—	
	8 (0.31)	No		30	—		—		—		871TM- BH8C18- R3		—	
30	10 (0.39)	Yes	N.O.	45	□	871TM- BH10N30- A2	871TM- BH10N30- H2		Δ	871TM- BH10N30- N3	□	871TM- BH10N30- R3	—	
	15 (0.59)	No		20	□	871TM- BH15N30- A2	871TM- BH15N30- H2		871TM- BH15N30- N3		871TM- BH15N30- R3		—	
	10 (0.39)	Yes	N.C.	45	871TM- BH10C30- A2		871TM- BH10C30- H2		871TM- BH10C30- N3		871TM- BH10C30- R3		—	
	15 (0.59)	No		20	871TM- BH15C30- A2		871TM- BH15C30- H2		871TM- BH15C30- N3		871TM- BH15C30- R3		—	
Recommended Standard QD Cordset (-6F = 1.8 m (6 ft), -2 = 2 m (6.5 ft))									889N- F3AFC-6F		889R- F3ECA-2		889B- F3AC-2	

- CCC Certified
- For high temperature model, order Cat. No. 871TM- BX22- H2
- § For high temperature model, order Cat. No. 871TM- BX21- N3
- ♣ For high temperature model, order Cat. No. 871TM- BX22- N3
- Δ For high temperature model, order Cat. No. 871TM- BX23- N3

Cable Style

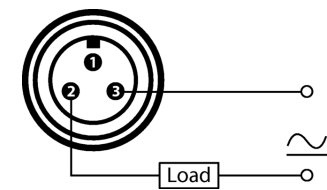
Normally Open



Note: Attach housing to ground.
Note: Load can be switched to brown wire.

Mini QD Style

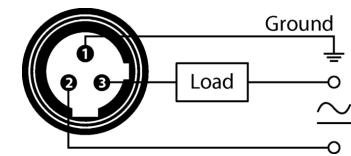
Normally Open



Note: Attach housing to ground.
Note: Load can be switched to pin 3.

Micro QD Style

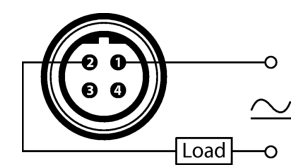
Normally Open



Note: Attach housing to ground.
Note: Load can be switched to pin 2.

EAC Micro QD Style

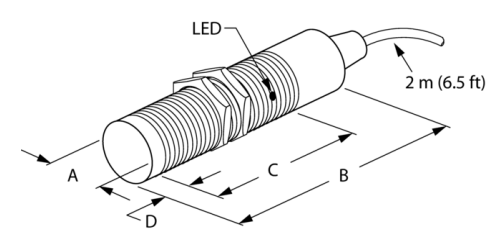
Normally Open



Note: No ground pin. Attach housing to ground.
Note: Load can be switched to pin 2.

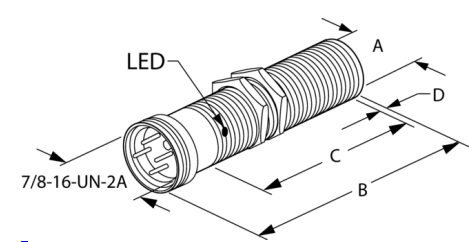
Dimensions are shown in mm (in.). Dimensions are not intended to be used for installation purposes.

Cable Style



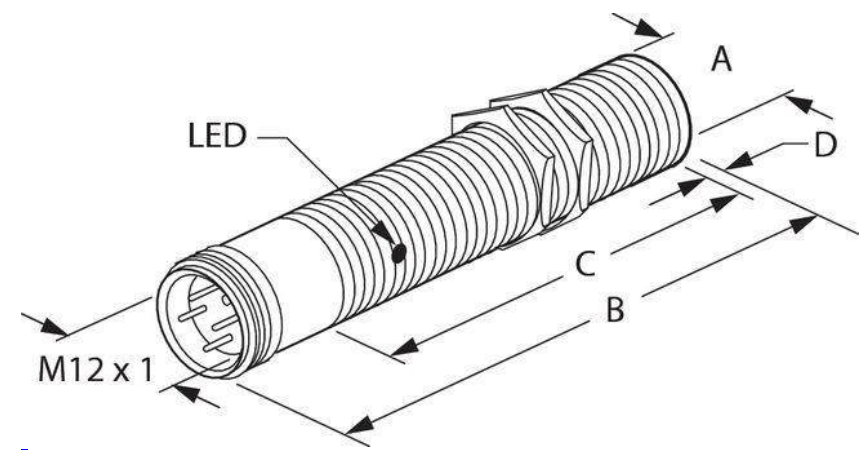
Thread Size	Shielded	[mm (in.)]			
		A	B	C	D
M12 x 1	Yes	12.0 (0.47)	49.8 (1.96)	26.4 (1.04)	2.5 (0.10)
	No			19.5 (0.77)	9.4 (0.37)
M18 x 1	Yes	18.0 (0.71)	55.4 (2.18)	41.7 (1.64)	2.5 (0.10)
	No				14.5 (0.57)
M30 x 1.5	Yes	30.0 (1.18)	57.9 (2.28)	41.9 (1.65)	2.5 (0.10)
	No			39.4 (1.55)	18.0 (0.71)

Mini QD Style



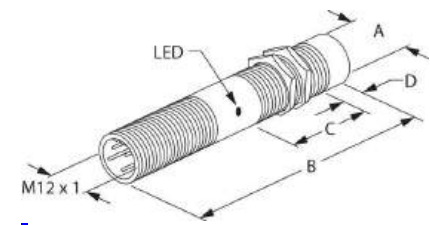
Thread Size	Shielded	[mm (in.)]			
		A	B	C	D
M12 x 1	Yes	12.0 (0.47)	63.5 (2.50)	25.4 (1.00)	2.5 (0.10)
	No			18.5 (0.73)	9.4 (0.37)
M18 x 1	Yes	18.0 (0.71)	56.1 (2.21)	35.1 (1.38)	2.5 (0.10)
	No			29.2 (1.15)	14.5 (0.57)
M30 x 1.5	Yes	30.0 (1.18)	68.1 (2.68)	41.9 (1.65)	2.5 (0.10)
	No			39.4 (1.55)	18.0 (0.71)

Micro QD Style



Thread Size	Shielded	[mm (in.)]			
		A	B	C	D
M12 x 1	Yes	12.0 (0.47)	61.0 (2.40)	26.4 (1.04)	2.5 (0.10)
	No			19.6 (0.77)	9.4 (0.37)
M18 x 1	Yes	18.0 (0.71)	65.0 (2.56)	41.7 (1.64)	2.5 (0.10)
	No				14.5 (0.57)
M30 x 1.5	Yes	30.0 (1.18)	66.3 (2.61)	41.9 (1.65)	2.5 (0.10)
	No			39.4 (1.55)	18.0 (0.71)

EAC Micro QD Style



Thread Size	Shielded	[mm (in.)]			
		A	B	C	D
M12 x 1	Yes	12.0 (0.47)	61.0 (2.40)	26.4 (1.04)	2.5 (0.10)

Cordsets and Accessories

Other Cordsets Available and Terminal Chambers	See Cordsets & Field Attachables
Mounting Brackets	See Mounting Brackets
End Caps	See End Caps
Mounting Nuts	See Mounting Nuts for Tubular Proximity Sensors