



872C DC Cable Style
12, 18, 30 mm



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

Features

- 2-wire operation
- 2-conductor or 4-pin connection
- 10...30V DC
- Normally open or normally closed output
- Reverse polarity, short circuit, overload, false pulse, and transient noise protection
- cULus Listed and CE Marked for all applicable directives

Specifications

| | |
|-------------------------------|--|
| Load Current | ≤100 mA |
| Minimum Load Current | 5 mA |
| Leakage Current | ≤0.9 mA |
| Operating Voltage | 10...30V DC |
| Voltage Drop | ≤6V |
| Repeatability | ≤2% |
| Hysteresis | 10% typical |
| Reverse Polarity Protection | Incorporated |
| Transient Noise Protection | Incorporated |
| Short Circuit Protection | Incorporated |
| Overload Protection | Incorporated |
| False Pulse Protection | Incorporated |
| Certifications | cULus Listed and CE Marked for all applicable directives |
| Enclosure | NEMA 1, 2, 3, 4, 6P, 12, 13 IP67 (IEC529) Nickel-plated brass barrel, plastic face (PBT) |
| Connections | Cable: 2 m (6.5 ft) length, 4.4 mm (0.175 in.) diameter, 2-conductor #26 AWG PVC Quick-Disconnect: 4-pin micro style |
| LED | Red: Output energized, 360° visibility |
| 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 |

872C WorldProx™ 2-Wire DC

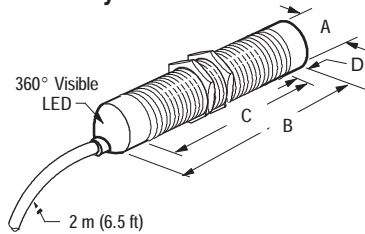
Plastic Face/Threaded Nickel-Plated Brass Barrel

Product Selection

| Barrel Diameter | Nominal Sensing Distance [mm (in.)] | Shielded | Output Configuration | Switching Frequency [Hz] | Cat. No. | |
|---|-------------------------------------|----------|----------------------|--------------------------|-----------------------|-----------------------|
| | | | | | Cable Style | Micro QD Style |
| 12 mm | 3 (0.12) | Y | N.O. | 2000 | 872C-D3NE12-A2 | 872C-D3NE12-D4 |
| | | | N.C. | | 872C-D3CE12-A2 | 872C-D3CE12-D4 |
| | 4 (0.16) | N | N.O. | | 872C-D4NE12-A2 | 872C-D4NE12-D4 |
| | | | N.C. | | 872C-D4CE12-A2 | 872C-D4CE12-D4 |
| 18 mm | 5 (0.20) | Y | N.O. | 1000 | 872C-D5NE18-A2 | 872C-D5NE18-D4 |
| | | | N.C. | | 872C-D5CE18-A2 | 872C-D5CE18-D4 |
| | 8 (0.31) | N | N.O. | | 872C-D8NE18-A2 | 872C-D8NE18-D4 |
| | | | N.C. | | 872C-D8CE18-A2 | 872C-D8CE18-D4 |
| 30 mm | 10 (0.39) | Y | N.O. | 500 | 872C-D10NE30-A2 | 872C-D10NE30-D4 |
| | | | N.C. | | 872C-D10CE30-A2 | 872C-D10CE30-D4 |
| | 15 (0.59) | N | N.O. | | 872C-D15NE30-A2 | 872C-D15NE30-D4 |
| | | | N.C. | | 872C-D15CE30-A2 | 872C-D15CE30-D4 |
| Recommended standard QD cordset (-2 = 2 m (6.5 ft)) | | | | | | 889D-F4AC-2 |

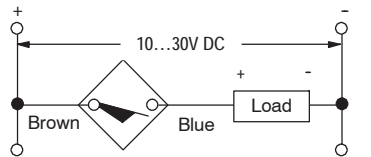
Approximate Dimensions [mm (in.)]

Cable Style

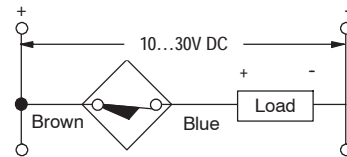


Wiring Diagrams

Normally Open



Normally Closed

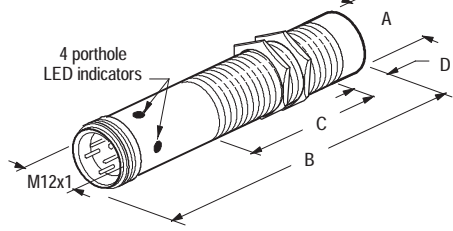


Note: Load can be switched to brown wire.

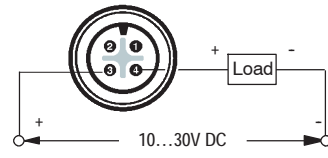
| Thread Size | Shielded | [mm (in.)] | | | |
|-------------|----------|------------|-------------|-------------|-------------|
| | | A | B (max) | C (min) | D (max) |
| M12 X 1 | Y | 12 (0.47) | 50.8 (2.00) | 46.7 (1.84) | — |
| | N | | 58.7 (2.31) | | 7.9 (0.31) |
| M18 X 1 | Y | 18 (0.71) | 50.8 (2.00) | | — |
| | N | | 63.0 (2.48) | | 12.2 (0.48) |
| M30 X 1.5 | Y | 30 (1.18) | 50.8 (2.00) | | — |
| | N | | 63.0 (2.48) | | 12.2 (0.48) |

Inductive Proximity Sensors
872C WorldProx™ 2-Wire DC
 Plastic Face/Threaded Nickel-Plated Brass Barrel

Micro Quick-Disconnect Style



Normally Open or Normally Closed



Note: Load can be switched to pin 3.

| Thread Size | Shielded | [mm (in.)] | | | |
|-------------|----------|-------------|-------------|-------------|-------------|
| | | A | B (max) | C (min) | D (max) |
| M12 X 1 | Y | 12.0 (0.47) | 65.0 (2.56) | 38.1 (1.50) | — |
| | N | | 72.4 (2.85) | | 7.9 (0.31) |
| M18 X 1 | Y | 18.0 (0.71) | 65.0 (2.56) | | — |
| | N | | 76.5 (3.01) | | |
| M30 X 1.5 | Y | 30.0 (1.18) | 65.0 (2.56) | 46.7 (1.84) | — |
| | N | | 76.5 (3.01) | | 12.2 (0.48) |