

## 871C 2-Wire AC

Plastic Face/Threaded Plastic Barrel



871C AC Cable Style  
18, 30mm



### Specifications

| Barrel Diameter            | 18mm   | 30mm   |
|----------------------------|--|--------|
| Load Current               | ≤180mA   | ≤300mA |
| Inrush Current (1 cycle)   | ≤1A  | ≤3A    |
| Leakage Current            | ≤1.7mA   |        |
| Operating Voltage          | 24–250V AC   |        |
| Voltage Drop               | ≤11V   |        |
| Hysteresis                 | ≤20% typical   |        |
| Transient Noise Protection | Incorporated   |        |
| Approvals                  | CE marked for all applicable directives                      |        |
| Enclosure                  | NEMA 1, 2, 3, 4, 4X, 12, 13 IP67 (IEC 529)<br>Plastic barrel |        |
| Connections                | Cable: 2m (6.5ft) length<br>2-conductor PVC                  |        |
| LED                        | Red: Output energized  |        |
| Operating Temperature      | -25°C to +55°C (-13°F to +131°F)                             |        |
| Shock                      | 30g, 11ms  |        |
| Vibration                  | 55Hz, 1mm amplitude, 3 planes                                |        |

### Features

- 2-wire operation
- 2-conductor connection
- 24–250V AC
- Normally open or normally closed output
- Transient noise protection
- 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           |

**Product Selection**

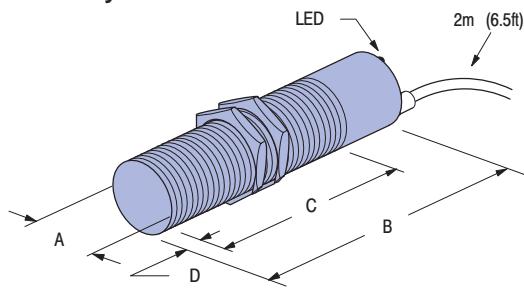
| Barrel Diameter | Nominal Sensing Distance<br>mm (inches) | Shielded | Output Configuration | Switching Frequency (Hz) | Catalog Number |
|-----------------|---|----------|----------------------|--------------------------|----------------|
|                 |   |          |                      |                          | Cable Style    |
| 18mm            | 5 (0.20)                                | Y        | N.O.                 | 8                        | 871C-C5S18     |
|                 |   |          | N.C.                 |                          | 871C-D5S18     |
|                 | 8 (0.31)                                | N        | N.O.                 |                          | 871C-C8R18     |
|                 |   |          | N.C.                 |                          | 871C-D8R18     |
| 30mm            | 10 (0.39)                               | Y        | N.O.                 |                          | 871C-C10S30    |
|                 |   |          | N.C.                 |                          | 871C-D10S30    |
|                 | 15 (0.59)                               | N        | N.O.                 |                          | 871C-C15R30    |
|                 |   |          | N.C.                 |                          | 871C-D15R30    |

**Accessories**

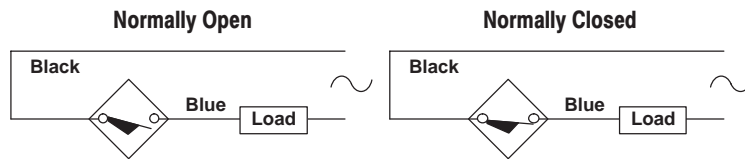
| Description       | Page Number     |
|-------------------|-----------------|
| Terminal Chambers | R8-2            |
| Mounting Brackets | R2-196 - R2-200 |
| End Caps          | R2-206          |
| Mounting Nuts     | R2-207 - R2-208 |

**Dimensions—mm (inches)**

**Cable Style**



**Wiring Diagram**



**Note:** Load can be switched to black wire.

| Thread Size | Shielded | mm (inches) |             |             |            |
|-------------|----------|-------------|-------------|-------------|------------|
|             |          | A           | B           | C           | D          |
| M18 X 1     | Y        | 18.0 (0.71) | 81.0 (3.19) | 61.0 (2.40) | 2.0 (0.08) |
|             | N        |             |             |             |            |
| M30 X 1.5   | Y        | 30.0 (1.18) | 81.0 (3.19) |             |            |
|             | N        |             |             |             |            |

Unshielded proximity sensors require a metal-free zone around the sensing face. Any metal immediately opposite the sensing face should be no closer than 3 times the rated nominal sensing distance of the sensor.