

Proximity Sensors

12 to 30 mm Diameter Harsh Environment Stainless Steel  
2-wire DC Type

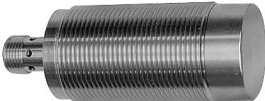
976 Series

FEATURES

- Perform in harsh environments (stainless steel housing and face)
  - Sealed to NEMA 4x, 6, 6p, 13, IP 68, washdown
  - UL listed, CSA approved
  - EMI/RFI immune, IEC 801-3, 801-4
- Temperature range of 0 to +60°C (32 to +140°F)
  - Reverse polarity protection
  - Transient/false pulse protection
  - Short circuit/overload protection (auto reset)
- LED visible for 360°
  - Low leakage current
  - Integral micro connector



ORDER GUIDE

| Sensor Package Style                                                                                 | Sensing Range mm (in.) | Sensor Type        | Sw. Freq. | SCP* | Output Type | Termination     | Catalog Listing    |
|------------------------------------------------------------------------------------------------------|------------------------|--------------------|-----------|------|-------------|-----------------|--------------------|
| 12 mm (0.47 in.)<br> | 2,0 (.08)              | 2-wire DC Shielded | 20 Hz     | YES  | N.O.        | Micro connector | 976AA2HI-A3T-LF-H  |
| 18 mm (0.71 in.)<br> | 5,0 (.20)              | 2-wire DC Shielded | 20 Hz     | YES  | N.O.        | Micro connector | 976AA3HI-A3T-LF5-H |
| 136g (4.8 oz)                                                                                        |                        |                    |           |      |             |                 |                    |
| 30 mm (1.18 in.)<br> | 7,0 (.28)              | 2-wire DC Shielded | 20 Hz     | YES  | N.O.        | Micro connector | 976AA4HI-A3T-LF7-H |

\* SCP: Short circuit protection. Sensor will turn outputs off if it senses a short circuit on input. Will detect ferrous metals/aluminum 304 and 316 stainless steel.

SPECIFICATIONS

|                       |                                     |
|-----------------------|-------------------------------------|
| Supply Voltage        | 10 to 30 VDC                        |
| Load Current          | 5 to 100 mA                         |
| Leakage Current       | 0.9 mA max. (0.7 mA typ.)           |
| Voltage Drop          | 6.0 VDC max.                        |
| Temperature Range     | 0 to 60°C (32 to 140°F)             |
| Sealing               | NEMA 4X, 6, 6P, 13, IP 68, Washdown |
| Repeatability         | ±1%                                 |
| Hysteresis            | 2 to 15% of sensing distance        |
| Output Indicator      | Red LED, 360°                       |
| Sensing Face Material | 303 Stainless Steel                 |
| Housing Material      | 303 Stainless Steel                 |
| LED                   | Red, output indicator 360°          |

CORRECTION FACTORS

| Target Material | Correction Factor |
|-----------------|-------------------|
| Steel           | 1.0               |
| 400 Series      | 1.0 - 1.15        |
| 300 Series      | .25 - .70         |
| Aluminum <.020" | .10 - .75         |

TERMINATION

| Style                               | Cable Length | Catalog Listing |
|-------------------------------------|--------------|-----------------|
| 4-Pin DC Standard Key (12 mm) Micro |              |                 |
| Straight                            | 2m (6.6')    | 803000A09M020   |
|                                     | 5m (16.4")   | 803000A09M050   |
| Right Angle                         | 2m (6.6')    | 803001A09M020   |
|                                     | 5m (16.4")   | 803001A09M050   |

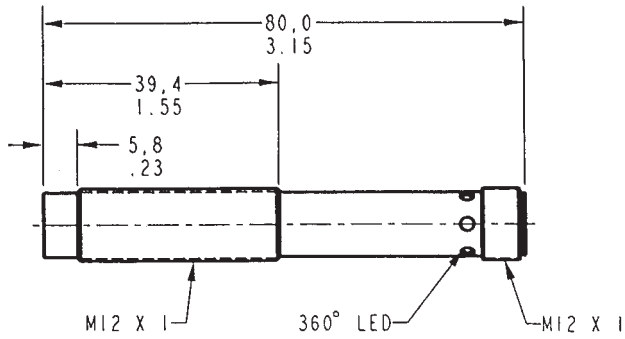
# Proximity Sensors

976 Series

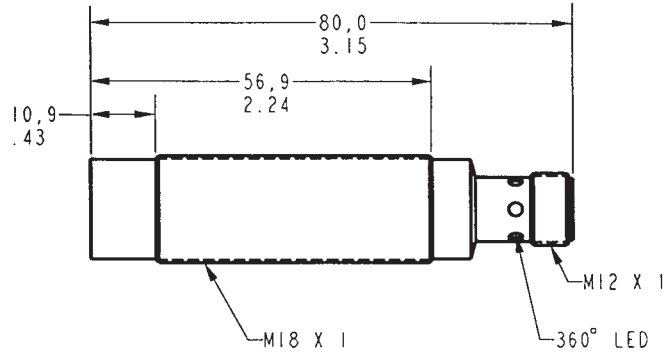
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**MOUNTING DIMENSIONS**      $\frac{\text{mm}}{\text{in.}}$   
(For reference only)

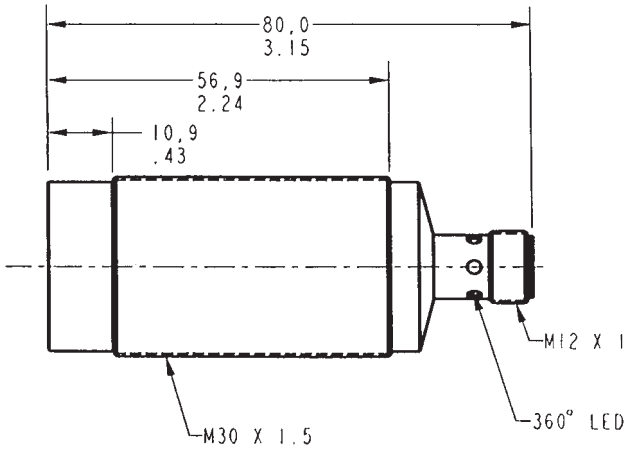
### 976 Series 12mm



### 976 Series 18 mm

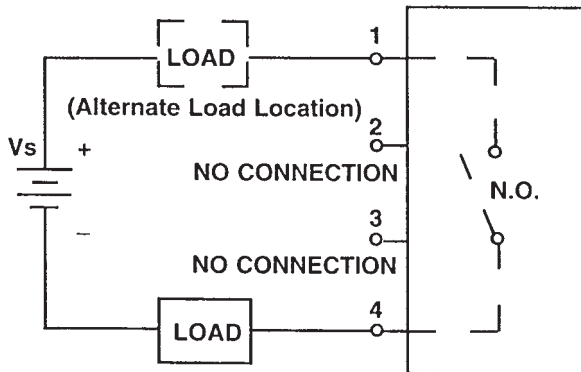


### 976 Series 30 mm



Proximity

### WIRING DIAGRAM



### PINOUT

