

## Interactive Catalog Replaces Catalog Pages

Honeywell Sensing and Control has replaced the PDF product catalog with the new **Interactive Catalog**. The **Interactive Catalog** is a power search tool that makes it easier to find product information. It includes more installation, application, and technical information than ever before.



**Click this icon to try the new  
Interactive Catalog.**

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### Sensing and Control

Honeywell Inc.

11 West Spring Street

Freeport, Illinois 61032



## 12 to 30 mm Diameter Cylindrical Universal Voltage Sensors 2-Wire AC/DC Type



### FEATURES

- 20-250 VAC/VDC supply voltage
- Sealed to IP 67
- Short housings
- N.O. output
- Short circuit protection (DC only)
- Oil resistant vinyl cable
- "Exclusive" LED set indicator
- -25 to +70°C (-13 to +160°F) temperature range

**"EXCLUSIVE" LED Set Indicator** aids in positioning the sensor for optimum operate point. These sensors have a two-color LED indicator. When the LED is Red, the target is within the outer portion of the sensing zone. When the LED turns Green, the target is at the optimum sensing distance (80% of nominal sensing range). This feature aids in sensor installation and maintenance, and assures maximum operate reliability over the full temperature range.

### ORDER GUIDE

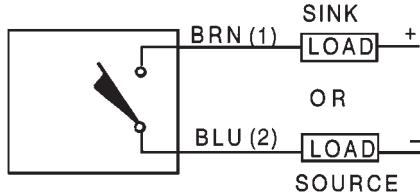
| Sensor Package Style | Sensing Range mm (in.) | Wiring    | LED Indicator | Sw. Freq. | Standard Target* | Output Type | Catalog Listing |
|----------------------|------------------------|-----------|---------------|-----------|------------------|-------------|-----------------|
| 12 mm (.47 in.)      | 3 (0.12)               | Preleaded | SET           | 25/500 Hz | 12 (.47)         | N.O.        | FL7M-3T7HD-M    |
|                      | Shielded               | Connector | SET           | 25/500 Hz | 12 (.47)         | N.O.        | FL7M-3T7HD-CMG  |
| 18 mm (.71 in.)      | 7 (0.27)               | Preleaded | SET           | 25/300 Hz | 18 (.71)         | N.O.        | FL7M-7T7HD-M    |
|                      | Shielded               | Connector | SET           | 25/300 Hz | 18 (.71)         | N.O.        | FL7M-7T7HD-CMG  |
| 30 mm (1.18 in.)     | 10 (0.39)              | Preleaded | SET           | 25/500 Hz | 30 (1.18)        | N.O.        | FL7M-10T7D-M    |
|                      | Shielded               | Connector | SET           | 25/500 Hz | 30 (1.18)        | N.O.        | FL7M-10T7D-CMG  |

\* Square of mild steel, 1 mm (.04 in.) thick.

### SPECIFICATIONS

|                       |                              |                          |
|-----------------------|------------------------------|--------------------------|
| Sensor Type           | 2-wire DC                    | 2-wire AC                |
| Supply Voltage        | 20-250 VDC                   | 40-250 VAC               |
| Load Current          | 5-150 mA<br>(10-30 VDC)      | 5-100 mA<br>(40-250 VAC) |
| Min.-Max.             | 5-20 mA<br>(30-250 VDC)      |                          |
| Leakage Current, max. | 1.1 mA @ 24 VDC              | 2 mA @ 100-200 VAC       |
| Voltage Drop, max.    | 6 V                          | 10 V                     |
| Repeatability         | + 1%                         | + 3%                     |
| Hysteresis            | 3-15%                        | 3-15%                    |
| Sealing               | IP 67                        |                          |
| Temperature Range     | -25 to +70°C (-13 to +160°F) |                          |
| Sensing Face Material | Polyamide                    |                          |
| Housing Material      | Nickel-plated brass          |                          |
| Cable Type            | Vinyl, 20 gage               |                          |

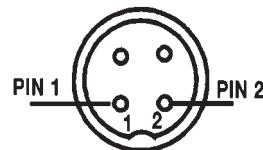
### WIRING DIAGRAM



### MATING QUICK-CONNECT CABLES

| Style       | Length | Output | Catalog Listing |
|-------------|--------|--------|-----------------|
| Straight    | 2 m    | N.O.   | B03000A11M020   |
| Straight    | 5 m    | N.O.   | B03000A11M050   |
| Right Angle | 2 m    | N.O.   | B03001A11M020   |
| Right Angle | 5 m    | N.O.   | B03001A11M050   |

### SENSOR PINOUT



### DC Wiring

Do not place leadwires of DC sensors in conduit with AC control wiring. Place in separate conduit or with wiring to other low voltage DC devices.

### AC Wiring

#### NOTICE

A load must be used when power is applied to AC sensors. Wiring without a load will cause permanent damage.

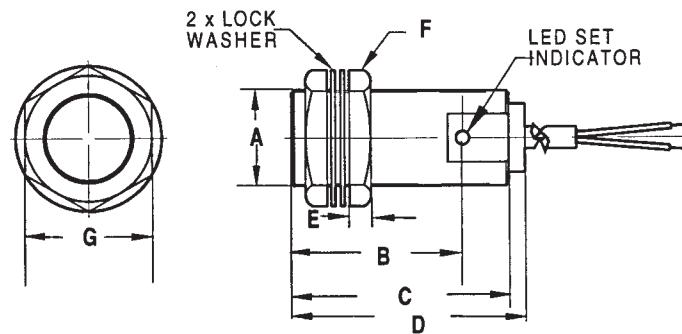
# Proximity Sensors

FL7M Series

12 to 30 mm Diameter Cylindrical Universal Voltage Sensors  
2-Wire AC/DC Type

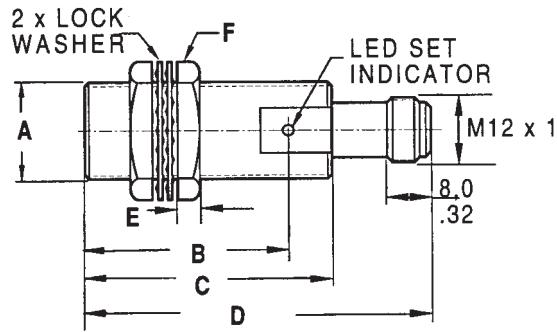
MOUNTING DIMENSIONS (For reference only)

Preleaded



| Catalog Listing | A   | B           | C           | D           | E          | F    | G           |
|-----------------|-----|-------------|-------------|-------------|------------|------|-------------|
| FL7M-3T7HD-M    | M12 | 40,5 (1.59) | 47,5 (1.87) | 55,0 (2.16) | 4,0 (0.16) | SW17 | 17,0 (0.57) |
| FL7M-7T7HD-M    | M18 | 37,0 (1.45) | 40,0 (1.57) | 48,0 (1.89) | 4,0 (0.16) | SW24 | 24,0 (0.94) |
| FL7M-10T7D-M    | M30 | 39,0 (1.54) | 42,0 (1.65) | 50,0 (1.97) | 5,0 (.20)  | SW36 | 35,0 (1.52) |

With Micro Connector



Proximity

| Catalog Listing | A   | B           | C           | D           | E          | F    | G           |
|-----------------|-----|-------------|-------------|-------------|------------|------|-------------|
| FL7M-3T7HD-CMG  | M12 | 40,5 (1.59) | 50,5 (1.99) | 69,0 (2.72) | 4,0 (0.16) | SW17 | 17,0 (0.57) |
| FL7M-7T7HD-CMG  | M18 | 37,0 (1.46) | 45,0 (1.77) | 63,0 (2.48) | 4,0 (0.16) | SW24 | 24,0 (0.94) |
| FL7M-10T7D-CMG  | M30 | 39,0 (1.54) | 47,0 (1.85) | 65,0 (2.56) | 5,0 (.20)  | SW36 | 35,0 (1.52) |

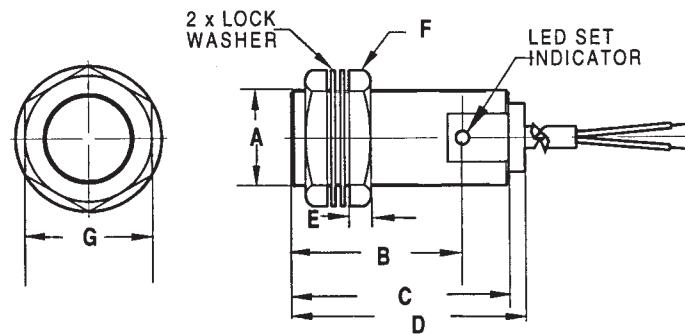
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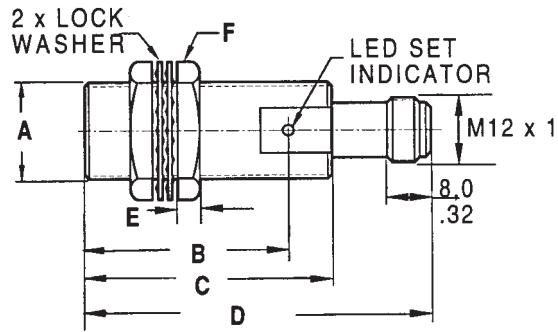
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