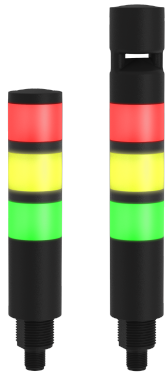
# Features

*30 mm Multi-Color General-Purpose or Audible Indicators*



Standard Audible

- Rugged, affordable, and easy-to-install multi-segment indicators
- Compact 30 mm diameter
- Illuminated segments provide easy-to-see operator guidance and indication of equipment status
- Uniform indicator segments appear gray when off to eliminate false indication from ambient light
- Models with 2, 3, 4, and 5 color segments plus audible
- 12 V DC to 30 V DC operation
- No assembly required, mounting nut and gasket supplied

# Models

| Housing | Color Position | | | | | Audible Alarm | Housing Color | Connection[1] |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | | | |
| TL30B | G | Y | R | X | X | N | X | QD |
| | G = Green<br>Y = Yellow<br>R = Red<br>B = Blue<br>W = White<br>X = No segment (applies to color positions 3, 4, and 5 only) | | | | | N = None<br>A = Audible | X = Black | C1 = Integral 1.2 m (3.9 ft) PVC-jacketed cable<br>QD = Integral 5-pin or 8-pin M12 male quick disconnect connector |

# Wiring

**NOTE:** All models are bimodal and can be wired as PNP or NPN devices.

[1] Models with a quick-disconnect connector require a mating cordset.

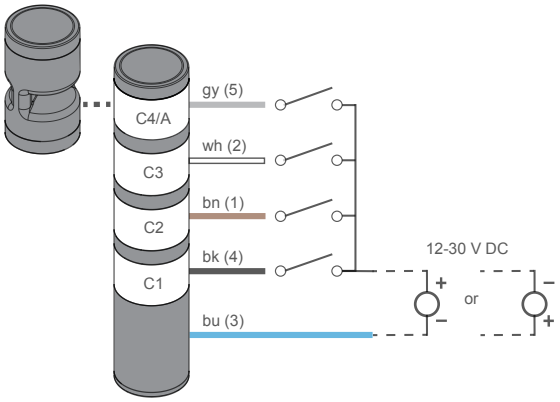
Original Instructions
21-Oct-25

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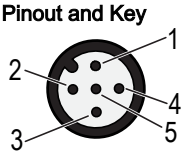
206089
p/n: 206089 Rev. D

ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com

### 5-Pin/Wire Models



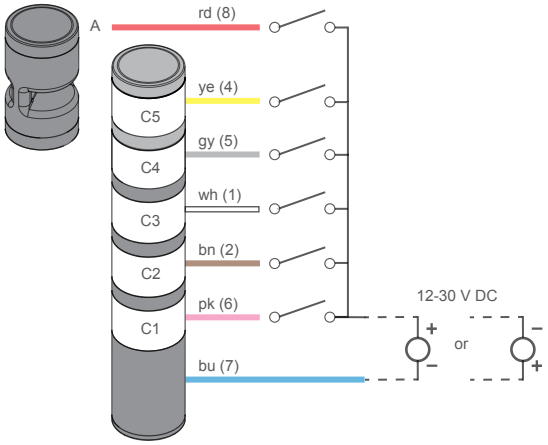

**Pinout and Key**



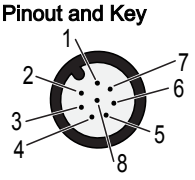

1 = Brown
2 = White
3 = Blue
4 = Black
5 = Gray
C1 = Color 1
C2 = Color 2
C3 = Color 3
C4 = Color 4
A = Audible

Pin 5 (Gray wire) activates the corresponding color or the audible function, if available.
2 and 3 segment models only require associated wires to be connected.

### 8-Pin / 7-Wire Models




**Pinout and Key**




1 = White
2 = Brown
3 = Green (Not Used)
4 = Yellow
5 = Gray
6 = Pink
7 = Blue
8 = Red
C1 = Color 1
C2 = Color 2
C3 = Color 3
C4 = Color 4
C5 = Color 5
A = Audible

Green wire not used.

# Specifications

**Supply Voltage and Current**
12 V DC to 30 V DC
Maximum current per LED segment: 40 mA
**Omni-Directional Sealed Audible Alarm:** 20 mA maximum current

**Supply Protection Circuitry**
Protected against transient voltages

**Input Leakage Current Immunity**
400 µA[(2)]

**Audible Alarm**
**Omni-Directional Sealed Audible Alarm:** 2.8 kHz ± 500 Hz oscillation frequency, maximum intensity 90 dB at 1 m (3.3 ft) (typical)

**Operating Conditions**
–40 °C to +50 °C (–40 °F to +122 °F)
90% maximum relative humidity (non-condensing)
Storage Temperature: –40 °C to +70 °C (–40 °F to +158 °F)

[(2)] Any current above this value may activate the TL30.

**Environmental Rating**
**All Models:**
IP65
UL Type 4X when mounted in a UL Type 4X enclosure
**Non-Audible:** UL Type 13 when mounted in a UL Type 13 enclosure

**Indicators**
LEDS are independently selected; 2 to 5 colors depending on model

**Indicator Response Time**
Indicator On/Off: 1 millisecond maximum


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### Indicator Characteristics

| Color | Dominant Wavelength (nm) or Color Temperature (CCT) | Color Coordinates[3] | | Lumen Output (Typical at 25 °C) |
|---|---|---|---|---|
| | | x | y | |
| Green | 524 nm | 0.16 | 0.708 | 7.5 |
| Red | 620 nm | 0.69 | 0.308 | 2.5 |
| Yellow | 592 nm | 0.582 | 0.413 | 6.5 |
| Blue | 468 nm | 0.136 | 0.062 | 2 |
| White | 5500K | 0.332 | 0.36 | 7.5 |

### Construction

**Base, Segments and Audible:** UV stabilized polycarbonate

**Grommet:** TPV

**Mounting Nut:** PBT

**Sealing Gasket:** PVC/NBR/CR

### Mounting

M22 × 1.5 threaded base, maximum torque 2.25 N·m (20 in·lbf)

Mounting nut and sealing gasket included

### Connections

Integral 5-pin or 8-pin M12 male quick-disconnect connector, or integral 1.2 m (3.9 ft) PVC-jacketed cable, depending on model

Models with a quick-disconnect connector require a mating cordset

### Vibration and Mechanical Shock

Meets IEC 60068-2-6 requirements (Vibration: 10 Hz to 55 Hz, 1.0 mm amplitude, 5 minutes sweep, 30 minutes dwell)

Meets IEC 60068-2-27 requirements (Shock: 30G 11 ms duration, half sine wave)

IK07 (EN 60068-2-75 with SMBAMS22RA bracket)

[3] Refer to CIE 1931 chromaticity diagram or color chart, to show equivalent color with indicated color coordinates.

### Certifications

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1831 Diegem, BELGIUM

### Required Overcurrent Protection

**WARNING:** Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

Overcurrent protection is required to be provided by end product application per the supplied table.

Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.

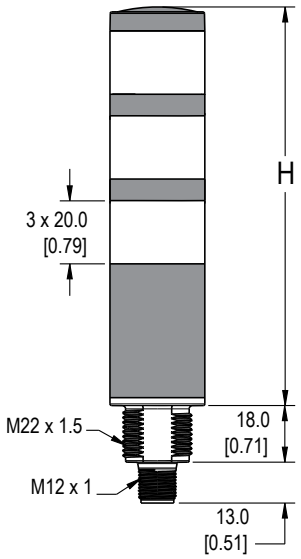
Supply wiring leads < 24 AWG shall not be spliced.

For additional product support, go to www.bannerengineering.com.

| Supply Wiring (AWG) | Required Overcurrent Protection (A) | Supply Wiring (AWG) | Required Overcurrent Protection (A) |
|---|---|---|---|
| 20 | 5.0 | 26 | 1.0 |
| 22 | 3.0 | 28 | 0.8 |
| 24 | 2.0 | 30 | 0.5 |

## Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.

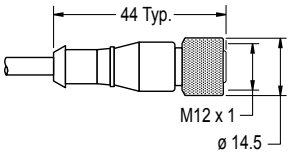
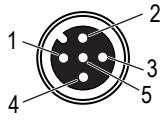
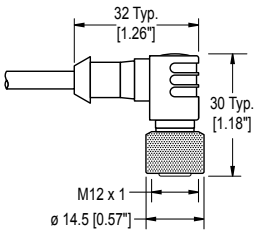


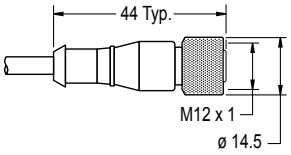
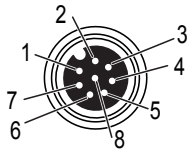
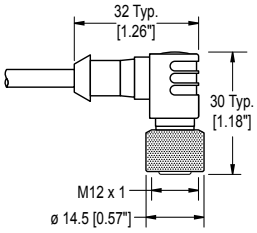

| Number of colors | Tower Height (H) | |
|---|---|---|
| | Non-Audible | Omni-Directional Sealed Audible |
| 2 | 99.7 mm (3.9 in) | 145.6 mm (5.7 in) |
| 3 | 126.7 mm (5 in) | 172.6 mm (6.8 in) |
| 4 | 153.7 mm (6 in) | 199.6 mm (7.9 in) |
| 5 | 180.7 mm (7.1 in) | 226.6 mm (8.9 in) |


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# Accessories

## Cordsets

| 5-Pin Single-Ended M12 Female Cordsets | | | | |
|---|---|---|---|---|
| **Model** | **Length** | **Style** | **Dimensions** | **Pinout (Female)** |
| **MQDC1-501.5** | 0.5 m (1.5 ft) | Straight |  | <br>1 = Brown<br>2 = White<br>3 = Blue<br>4 = Black<br>5 = Gray<br>c UL us |
| **MQDC1-503** | 0.9 m (2.9 ft) | | | |
| **MQDC1-506** | 2 m (6.5 ft) | | | |
| **MQDC1-515** | 5 m (16.4 ft) | | | |
| **MQDC1-530** | 9 m (29.5 ft) | | | |
| **MQDC1-560** | 18 m (59 ft) | | | |
| **MQDC1-5100** | 31 m (101.7 ft) | | | |
| **MQDC1-506RA** | 2 m (6.5 ft) | Right-Angle |  | |
| **MQDC1-515RA** | 5 m (16.4 ft) | | | |
| **MQDC1-530RA** | 9 m (29.5 ft) | | | |
| **MQDC1-560RA** | 19 m (62.3 ft) | | | |

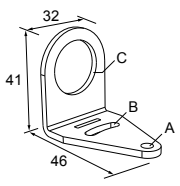
| 8-Pin Single-Ended M12 Female Open-Shielded Cordsets | | | | |
|---|---|---|---|---|
| **Model** | **Length** | **Style** | **Dimensions** | **Pinout (Female)** |
| **MQDC2S-806** | 2.04 m (6.7 ft) | Straight |  | <br>1 = White<br>2 = Brown<br>3 = Green<br>4 = Yellow<br>5 = Gray<br>6 = Pink<br>7 = Blue<br>8 = Red |
| **MQDC2S-815** | 5.04 m (16.54 ft) | | | |
| **MQDC2S-830** | 10.04 m (32.95 ft) | | | |
| **MQDC2S-850** | 16 m (52.49 ft) | | | |
| **MQDC2S-806RA** | 2 m (6.56 ft) | Right-Angle |  | |
| **MQDC2S-815RA** | 5 m (16.4 ft) | | | |
| **MQDC2S-830RA** | 10 m (32.81 ft) | | | |
| **MQDC2S-850RA** | 16 m (52.49 ft) | | | |

## Brackets

**SMB22A**

- Right-angle bracket with curved slot for versatile orientation
- 12-ga. stainless steel
- Mounting hole for 22 mm sensor

**Hole center spacing:** A to B = 26.0
**Hole size:** A = ø 4.6, B = 4.6 x 16.9, C = 22.2



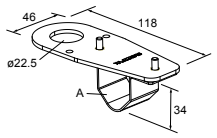


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**SMB22FVK**

- V-clamp, flat bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor

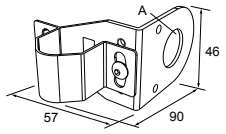
**Hole size:** A = ø 22.5




**SMB22RAVK**

- V-clamp, right-angle bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor

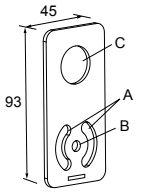
**Hole size:** A = ø 22.5




**SMBAMS22P**

- Flat SMBAMS series bracket with 22 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel

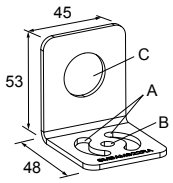
**Hole center spacing:** A = 26.0, A to B = 13.0
**Hole size:** A = 26.8 x 7.0, B = ø 6.5, C = ø 22.5




**SMBAMS22RA**

- Right-angle SMBAMS series bracket with 22 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel

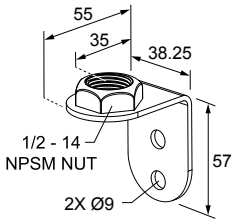
**Hole center spacing:** A = 26.0, A to B = 13.0
**Hole size:** A = 26.8 x 7.0, B = ø 6.5, C = ø 22.5




**LMBE12RA35**

- Direct mounting of stand-off pipe, with common bracket type
- Zinc-plated steel
- 1/2-14 NPSM nut
- Mounting distance from the wall to the center of the 1/2-14 NPSM nut is 35 mm

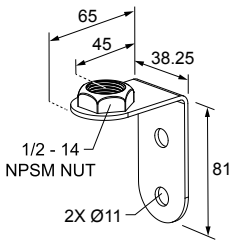
**Hole center spacing:** 20.0




**LMBE12RA45**

- Direct mounting of stand-off pipe, with common bracket type
- Zinc-plated steel
- 1/2-14 NPSM nut
- Mounting distance from the wall to the center of the 1/2-14 NPSM nut is 45 mm

**Hole center spacing:** 35.0





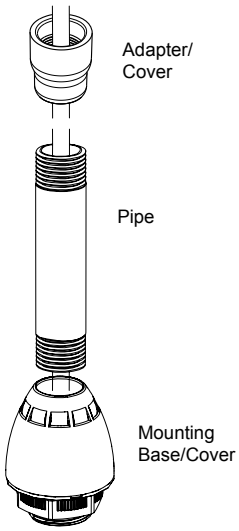
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## LMB Sealed Right-Angle Bracket

| Model | Description | Construction | |
|---|---|---|---|
| **LMBE12RA** | **Pipe-Mount Models:** Bracket kit with base, ½-14 pipe adapter, set screw, fasteners, O-rings, and gaskets. For use with stand-off pipe (listed and sold separately). | Black polycarbonate |  |

## Elevated Mount System

*Example Assembly*




This example uses:

1. Adapter/Cover
2. Pipe
3. Mounting Base (SA-E12M30 shown)

Other compatible parts are listed in the following tables.

### Adapters/Covers



| Adapter/Cover Model | Description |
|---|---|
| **SA-M22E12** | • Streamlined black polycarbonate stand-off pipe adapter/cover<br>• Adapter from 22 mm light base to ½ in. NPSM/DN15 pipe |

### Pipes

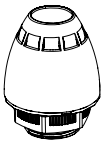


| Black Anodized Aluminum, ½ in. NPT Pipe Models | Clear Anodized Aluminum, ½ in. NPT Pipe Models | Description |
|---|---|---|
| **SOP-E12-150A**, 150 mm (6 in) long | **SOP-E12-150AC**, 150 mm (6 in) long | • Elevated-use stand-off pipe<br>• Threaded at both ends<br>• Compatible with most industrial environments |
| **SOP-E12-300A**, 300 mm (12 in) long | **SOP-E12-300AC**, 300 mm (12 in) long | |
| **SOP-E12-600A**, 600 mm (24 in) long | - | |
| **SOP-E12-900A**, 900 mm (36 in) long | **SOP-E12-900AC**, 900 mm (36 in) long | |

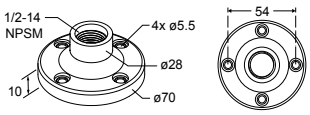
| 304 Stainless Steel, ½ in. NPT Pipe Models | Description |
|---|---|
| **SOP-E12-150SS**, 150 mm (6 in) long | • Elevated-use stand-off pipe<br>• Threaded at both ends<br>• Compatible with most industrial environments |
| **SOP-E12-300SS**, 300 mm (12 in) long | |
| **SOP-E12-600SS**, 600 mm (24 in) long | |
| **SOP-E12-900SS**, 900 mm (36 in) long | |

### Bottom Covers and Mounting Bases

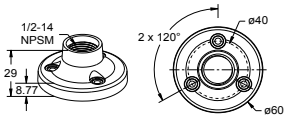

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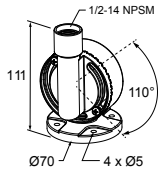
| Base Adapter/Cover Model | Description |
|---|---|
| **SA-E12M30** - Black acetal | • Streamlined black acetal or white UHMW mounting base adapter/cover<br>• Adapter from ½ in. NPSM/DN15 pipe to 30 mm (1-3/16 in) drilled hole<br>• Mounting hardware included |
| **SA-E12M30C** - White UHMW | |




| Mounting Base Model | Description |
|---|---|
| **SA-F12** | • Die-cast zinc base with black paint<br>• Elevated-use stand-off pipes (½ in, NPSM/DN15)<br>• M5 mounting hardware and nitrile gasket included |




| Mounting Base Model | Description |
|---|---|
| **SA-F12-3** | • Black polycarbonate<br>• Elevated-use stand-off pipes (½ in, NPSM/DN15)<br>• M4 mounting hardware and nitrile blend gasket included |




| Foldable Mounting Base Model | Description |
|---|---|
| **SA-FFB12** - Black polycarbonate | • For use with ½ in. stand-off pipes<br>• Stainless steel hardware |
| **SA-FFB12C** - Gray polycarbonate | |

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