# CL50 Column Light

## Features

*Multi-Color General Purpose or Audible Indicators*




- Rugged, cost-effective, and easy-to-install multicolor indicators
- Illumination provides easy-to-see operator guidance and equipment status indication
- 1-, 2-, or 3-color models available
- Available in black or light gray housing
- Audible models available with standard, sealed, or omni-directional audible element
- Continuous, pulsed, and staccato tones available
- 18 V DC to 30 V DC operation
- Compact devices are completely self-contained, no controller needed
- No assembly required

## Non-Audible Models

| Models[1] | # of LED Colors | LED Colors[2] | | | Connection[3] | Inputs |
|---|---|---|---|---|---|---|
| | | Color 1 | Color 2 | Color 3 | | |
| CL50GXXPQ | 1 | Green | - | - | Integral 4-pin M12 male quick-disconnect connector | PNP |
| CL50GXXNQ | | Green | - | - | | NPN |
| CL50XRXPQ | | - | Red | - | | PNP |
| CL50XRXNQ | | - | Red | - | | NPN |
| CL50GRXPQ | 2 | Green | Red | - | | PNP |
| CL50GRXNQ | | Green | Red | - | | NPN |
| CL50GRYPQ | 3 | Green | Red | Yellow | | PNP |
| CL50GRYNQ | | Green | Red | Yellow | | NPN |

## Audible Models

*Standard Audible*

| Models[1] | # of LED Colors | LED Colors[2] | | | Connection[3] | Inputs |
|---|---|---|---|---|---|---|
| | | Color 1 | Color 2 | Color 3 | | |
| CL50GXXAPQ | 1 | Green | – | – | Integral 5-pin M12 male quick-disconnect connector | PNP |
| CL50GXXANQ | | Green | – | – | | NPN |
| CL50XRXAPQ | | – | Red | – | | PNP |
| CL50XRXANQ | | – | Red | – | | NPN |
| CL50GRXAPQ | 2 | Green | Red | – | | PNP |
| CL50GRXANQ | | Green | Red | – | | NPN |
| CL50GRYAPQ | 3 | Green | Red | Yellow | | PNP |
| CL50GRYANQ | | Green | Red | Yellow | | NPN |

*Sealed Audible*

| Models[1] | | | # of LED Colors | LED Colors[2] | | | Connection[3] | Inputs |
|---|---|---|---|---|---|---|---|---|
| Continuous | Pulsed at 1.6 Hz | Staccato | | Color 1 | Color 2 | Color 3 | | |
| CL50GXXALSPQ | CL50GXXALS3PQ | CL50GXXALS4PQ | 1 | Green | - | - | Integral 5-pin M12 male quick-disconnect connector | PNP |
| CL50GXXALSNQ | CL50GXXALS3NQ | CL50GXXALS4NQ | | Green | - | - | | NPN |
| CL50XRXALSPQ | CL50XRXALS3PQ | CL50XRXALS4PQ | | - | Red | - | | PNP |
| CL50XRXALSNQ | CL50XRXALS3NQ | CL50XRXALS4NQ | | - | Red | - | | NPN |
| CL50GRXALSPQ | CL50GRXALS3PQ | CL50GRXALS4PQ | 2 | Green | Red | - | | PNP |

Continued on page 2

(1) Models with black housing are listed. For gray housing, add the suffix "C" at the end of the cabled model number or before the "Q" of quick-disconnect model numbers. For example, CL50GXXAPC or CL50GXXAPCQ.
(2) Available colors include: Green (G), Red (R), Yellow (Y), Blue (B), and White (W). Contact Banner Engineering for other colors and color combinations.
(3)

- To order the 150 mm (6 in) PVC cable model with an M12 quick-disconnect connector, replace the suffix "Q" with "QP" in the model number. For example, CL50GXXAPQP.
- To order the 2 m (6.5 ft) PVC cable model, omit the suffix "Q" in the model number. For example, CL50GXXAP.
- Models with a quick-disconnect connector require a mating cordset.

Original Instructions
21-Oct-25

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145315
p/n: 145315 Rev. P

ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com

Continued from page 1

| Models[1] | | | # of LED Colors | LED Colors[2] | | | Connection[3] | Inputs |
|---|---|---|---|---|---|---|---|---|
| Continuous | Pulsed at 1.6 Hz | Staccato | | Color 1 | Color 2 | Color 3 | | |
| CL50GRXALSNQ | CL50GRXALS3NQ | CL50GRXALS4NQ | | Green | Red | - | | NPN |
| CL50GRYALSPQ | CL50GRYALS3PQ | CL50GRYALS4PQ | 3 | Green | Red | Yellow | | PNP |
| CL50GRYALSNQ | CL50GRYALS3NQ | CL50GRYALS4NQ | | Green | Red | Yellow | | NPN |

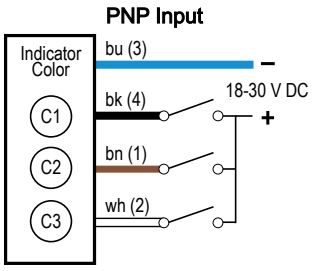
*Omni-Directional Sealed Audible*

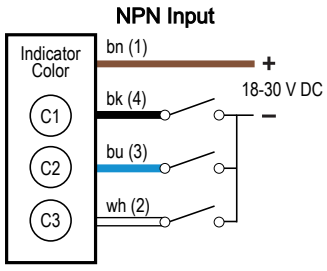
| Models[1] | | | # of LED Colors | LED Colors [2] | | | Connection[3] | Inputs |
|---|---|---|---|---|---|---|---|---|
| Continuous | Pulsed at 1.6 Hz | Staccato | | Color 1 | Color 2 | Color 3 | | |
| CL50GXXAOSPQ | CL50GXXAOS3PQ | CL50GXXAOS4PQ | 1 | Green | - | - | Integral 5-pin M12 male quick-disconnect connector | PNP |
| CL50GXXAOSNQ | CL50GXXAOS3NQ | CL50GXXAOS4NQ | | Green | - | - | | NPN |
| CL50XRXAOSPQ | CL50XRXAOS3PQ | CL50XRXAOS4PQ | | - | Red | - | | PNP |
| CL50XRXAOSNQ | CL50XRXAOS3NQ | CL50XRXAOS4NQ | | - | Red | - | | NPN |
| CL50GRXAOSPQ | CL50GRXAOS3PQ | CL50GRXAOS4PQ | 2 | Green | Red | - | | PNP |
| CL50GRXAOSNQ | CL50GRXAOS3NQ | CL50GRXAOS4NQ | | Green | Red | - | | NPN |
| CL50GRYAOSPQ | CL50GRYAOS3PQ | CL50GRYAOS4PQ | 3 | Green | Red | Yellow | | PNP |
| CL50GRYAOSNQ | CL50GRYAOS3NQ | CL50GRYAOS4NQ | | Green | Red | Yellow | | NPN |

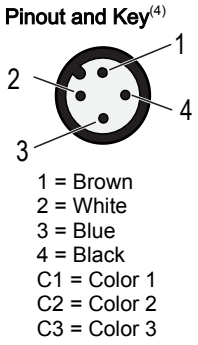
*Omni-Directional Sealed Audible with Intensity Adjustment*

| Models[1] | | | # of LED Colors | LED Colors[2] | | | Connection[3] | Inputs |
|---|---|---|---|---|---|---|---|---|
| Continuous | Pulsed at 1.6 Hz | Staccato | | Color 1 | Color 2 | Color 3 | | |
| CL50GXXAOSIPQ | CL50GXXAOS3IPQ | CL50GXXAOS4IPQ | 1 | Green | - | - | Integral 5-pin M12 male quick-disconnect connector | PNP |
| CL50GXXAOSINQ | CL50GXXAOS3INQ | CL50GXXAOS4INQ | | Green | - | - | | NPN |
| CL50XRXAOSIPQ | CL50XRXAOS3IPQ | CL50XRXAOS4IPQ | | - | Red | - | | PNP |
| CL50XRXAOSINQ | CL50XRXAOS3INQ | CL50XRXAOS4INQ | | - | Red | - | | NPN |
| CL50GRXAOSIPQ | CL50GRXAOS3IPQ | CL50GRXAOS4IPQ | 2 | Green | Red | - | | PNP |
| CL50GRXAOSINQ | CL50GRXAOS3INQ | CL50GRXAOS4INQ | | Green | Red | - | | NPN |
| CL50GRYAOSIPQ | CL50GRYAOS3IPQ | CL50GRYAOS4IPQ | 3 | Green | Red | Yellow | | PNP |
| CL50GRYAOSINQ | CL50GRYAOS3INQ | CL50GRYAOS4INQ | | Green | Red | Yellow | | NPN |

# Wiring — Non-Audible Models




[4] If there is an "X" in the model number, the corresponding wire will not be used.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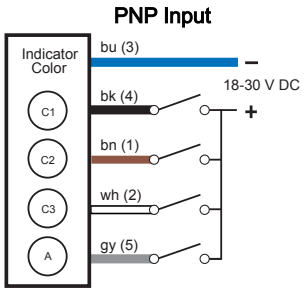
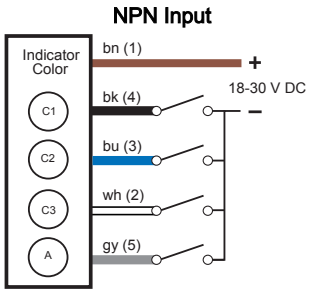
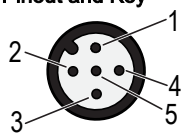
# Wiring — Audible Models




**Pinout and Key**[4]




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

## Functional Truth Table: PNP Models

| LED Function | Pin 4 (Black Wire) | Pin 1 (Brown Wire) | Pin 2 (White Wire) | |
|---|---|---|---|---|
| Color 1 On | +V DC | | | Pin 3 (blue wire) connected to ground (–) .<br>**Alarm models:** Alarm function is independent of light functions. |
| Color 2 On | | +V DC | | |
| Color 3 On | | | +V DC | |
| Color 3 On (color 3 inhibits color 1) | +V DC | | +V DC | |
| Color 2 On (color 2 inhibits color 1) | +V DC | +V DC | | |
| Color 3 On (color 3 inhibits color 2) | | +V DC | +V DC | |
| Color 3 On (color 3 inhibits colors 1 & 2) | +V DC | +V DC | +V DC | |

## Functional Truth Table: NPN Models

| LED Function | Pin 4 (Black Wire) | Pin 3 (Blue Wire) | Pin 2 (White Wire) | |
|---|---|---|---|---|
| Color 1 On | –V DC | | | Pin 1 (brown wire) connected to +V DC.<br>**Alarm models:** Alarm function is independent of light functions. |
| Color 2 On | | –V DC | | |
| Color 3 On | | | –V DC | |
| Color 3 On (color 3 inhibits color 1) | –V DC | | –V DC | |
| Color 2 On (color 2 inhibits color 1) | –V DC | –V DC | | |
| Color 3 On (color 3 inhibits color 2) | | –V DC | –V DC | |
| Color 3 On (color 3 inhibits colors 1 & 2) | –V DC | –V DC | –V DC | |

# Specifications

**Supply Voltage and Current**

18 V DC to 30 V DC

Indicators–maximum current per LED color:

- 100 mA at 18 V DC
- 70 mA at 30 V DC

**Standard Audible Alarm:** 25 mA maximum current

**Sealed Audible Alarm:** 35 mA maximum current

**Omni-Directional Sealed Audible Alarm:** 45 mA maximum current

**Supply Protection Circuitry**

Protected against reverse polarity and transient voltages

**Indicator Response Time**

Indicator On/Off: 10 milliseconds maximum

**Construction**

**Bases and Covers:** ABS

**Light Segment:** Polycarbonate

**Connections**

Integral 4-pin or 5-pin M12 male quick-disconnect connector, 150 mm (6 in) PVC-jacketed cable with a 4-pin or 5-pin M12 male quick-disconnect connector, or 2 m (6.5 ft) integral 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)

**Operating Conditions**

**Non-Audible:** –40 °C to +50 °C (–40 °F to +122 °F)

**Standard and Sealed Audible:** –20 °C to +50 °C (–4 °F to +122 °F)

95% at +50 °C maximum relative humidity (non-condensing)

**Environmental Rating**

UL Type 4X Indoor and UL Type 13

**Non-Audible and Sealed Audible:** IP67

**Standard Audible:** IP50

**Audible Alarm**

**Standard Audible Alarm:** 2.7 KHz ± 500 Hz oscillation frequency; maximum intensity 92 db at 1 meter (3.3 ft) (typical)

**Sealed Audible Alarm:** 2.9 KHz ± 250 Hz oscillation frequency; maximum intensity 94 db at 1 meter (3.3 ft) (typical)

**Omni-Directional Sealed Audible Alarm:** 2.1 KHz ± 250 Hz oscillation frequency; maximum intensity 99 db at 1m (3.3 ft) (typical)

**Omni-Directional Sealed Audible Alarm with Intensity Adjustment:** 2.1 KHz ± 250 Hz oscillation frequency; maximum intensity 95 dB at 1m (3.3 ft) (typical)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**Certifications**

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**Audible Adjustment**

**Standard Audible Alarm:** Unscrew the cover (up to 1.5 turns maximum) to adjust the audible intensity. Do not exceed 1.5 turns or the cover may detach during operation. For maximum intensity, rotate the center plug 180° counterclockwise to remove it.

**Sealed Audible Alarm and Omni-Directional Sealed Audible Alarm with Intensity Adjustment:** Rotate the front cover until the desired intensity is reached

**Typical Reduction in Sound Intensity with Audible Adjustment (maximum to minimum):**

- **Standard Audible:** 30 dB
- **Sealed Audible:** 20 dB
- **Omni-Directional Sealed Audible:** 12 dB

**Indicators**

LEDs or audible are independently selected

**Indicator Characteristics**

| Color | Dominant Wavelength (nm) or Color Temperature (CCT) | Lumen Output (Typical at 25 °C) |
|---|---|---|
| Green | 525 nm | 72 |
| Red | 625 nm | 38 |
| Yellow | 590 nm | 30 |
| Blue | 475 nm | 28 |
| White | 5000 K | 85 |

**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.

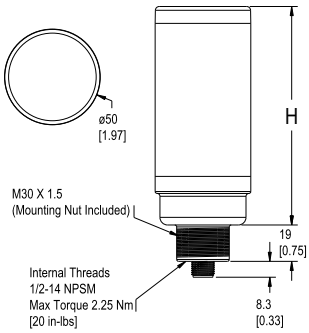
Supply wiring leads < 24 AWG shall not be spliced.

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.



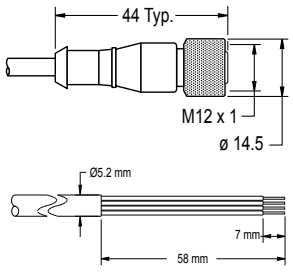
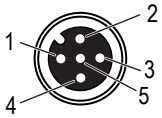

*Column Light Height (H)*

| | |
|---|---|
| **Non-Audible** | 114.2 mm (4.5 in) |
| **Standard Audible**[5] | 145.3 mm (5.7 in) |
| **Sealed Audible** | 168.2 mm (6.6 in) |
| **Omni-Directional Sealed Audible** | 182.2 mm (7.2 in) |

# Accessories

## Cordsets

**4-Pin Single-Ended M12 Female Cordsets**

| Model | Length | Style | Dimensions | Pinout (Female) |
|---|---|---|---|---|
| **MQDC-406** | 2 m (6.56 ft) | Straight |  |  |
| **MQDC-415** | 5 m (16.4 ft) | | | |
| **MQDC-430** | 9 m (29.5 ft) | | | |
| **MQDC-450** | 15 m (49.2 ft) | | | |





1 = Brown
2 = White
3 = Blue
4 = Black
5 = Not used

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[5] Column Light (H) with top unscrewed approximately 3.5 mm to allow sound to escape


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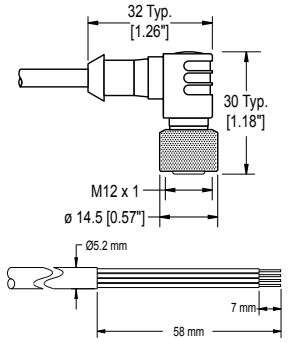
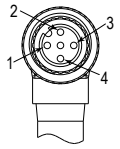
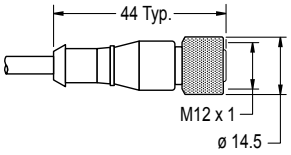
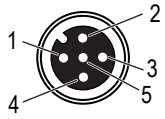
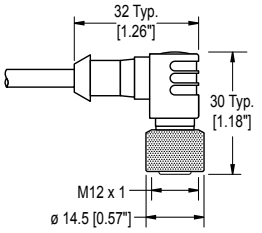
Continued from page 4

| 4-Pin Single-Ended M12 Female Cordsets | | | | |
|---|---|---|---|---|
| **Model** | **Length** | **Style** | **Dimensions** | **Pinout (Female)** |
| **MQDC-406RA** | 2 m (6.56 ft) | Right-Angle |  |  |
| **MQDC-415RA** | 5 m (16.4 ft) | | | |
| **MQDC-430RA** | 9 m (29.5 ft) | | | |
| **MQDC-450RA** | 15 m (49.2 ft) | | | |

| 5-Pin Single-Ended M12 Female Cordsets | | | | |
|---|---|---|---|---|
| **Model** | **Length** | **Style** | **Dimensions** | **Pinout (Female)** |
| **MQDC1-501.5** | 0.5 m (1.5 ft) | Straight |  |  1 = Brown<br>2 = White<br>3 = Blue<br>4 = Black<br>5 = Gray |
| **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) | | | |

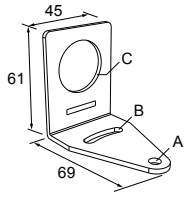
## Mounting Brackets

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

**SMB30A**

- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- 12-gauge stainless steel

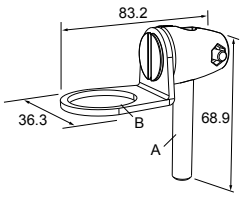
**Hole center spacing:** A to B=40
**Hole size:** A=ø 6.3, B= 27.1 × 6.3, C=ø 30.5




**SMB30FA**

- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-gauge 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric- and inch-size bolt available

**Bolt thread:** SMB30FA, A= 3/8 - 16 × 2 in; SMB30FAM10, A= M10 - 1.5 × 50
**Hole size:** B= ø 30.1





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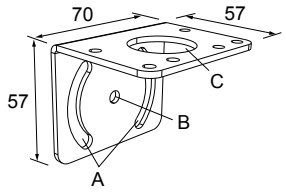
**SMB30MM**

- 12-gauge stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor

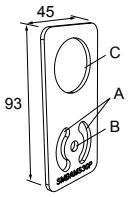
**Hole center spacing:** A = 51, A to B = 25.4
**Hole size:** A = 42.6 × 7, B = ø 6.4, C = ø 30.1




**SMBAMS30P**

- Flat SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90°+ rotation
- 12-gauge 300 series stainless steel

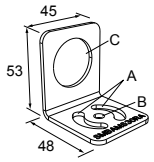
**Hole center spacing:** A=26.0, A to B=13.0
**Hole size:** A=26.8 × 7.0, B=ø 6.5, C=ø 31.0




**SMBAMS30RA**

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

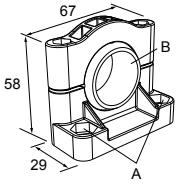
**Hole center spacing:** A=26.0, A to B=13.0
**Hole size:** A=26.8 × 7.0, B=ø 6.5, C=ø 31.0




**SMB30SC**

- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included

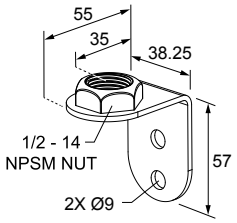
**Hole center spacing:** A=ø 50.8
**Hole size:** A=ø 7.0, B=ø 30.0




**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

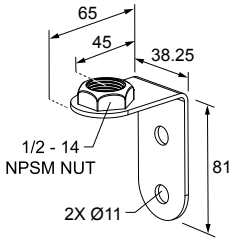
**Hole center spacing:** 20.0




**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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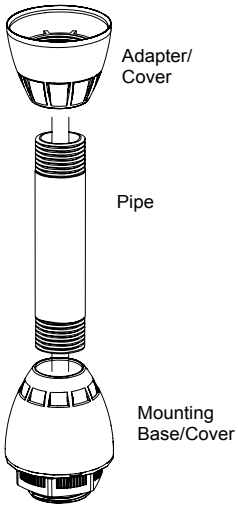
## LMB Sealed Right-Angle Bracket

| Model | Description | |
|---|---|---|
| **LMB30RA** - Black polycarbonate<br>**LMB30RAC** - Gray polycarbonate | • **Direct-Mount Models**<br>• Bracket kit with base, 30 mm adapter, set screw, fasteners, O-rings, and gaskets. |  |
| **LMBE12RA** - Black polycarbonate<br>**LMBE12RAC** - Gray polycarbonate | • **Pipe-Mount Models**<br>• Bracket kit with base, ½-14 pipe adapter, set screw, fasteners, O-rings, and gaskets<br>• For use with stand-off pipe (listed and sold separately) |  |

## Elevated Mount System

*Example Assembly*




This example uses:

1. Adapter/Cover
2. Pipe
3. Mounting Base

Other compatible parts are listed in the following tables.

### Adapters/Covers



| Adapter/Cover Model | Description |
|---|---|
| **SA-M30TE12** - Black acetal | • Streamlined black acetal or white UHMW stand-off pipe adapter/cover<br>• Adapter from 30 mm light base to ½ in. NPSM/DN15 pipe<br>• Mounting hardware included |
| **SA-M30TE12C** - White UHMW | |

### 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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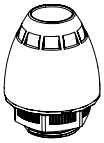
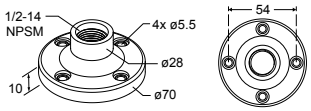
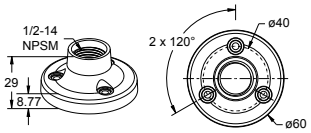


| Base Adapter/Cover Model | Description |
|---|---|
| **SA-E12M30** - Black acetal | • Streamlined black acetal or white UHMW mounting base adapter/cover<br>• Adapter from ½ in. NPSM/DN15 pipe to 30 mm (1-3/16 in) drilled hole<br>• Mounting hardware included |
| **SA-E12M30C** - White UHMW | |

## Pipe Mounting Flange

| Pipe Mounting Flange | | | |
|---|---|---|---|
| **Model** | **Description** | **Construction** | |
| **SA-F12** | • Elevated-use stand-off pipes (½ in, NPSM/DN15)<br>• M5 mounting hardware and nitrile gasket included | Die-cast zinc base with black paint |  |
| **SA-F12-3** | • Elevated-use stand-off pipes (½ in, NPSM/DN15)<br>• M4 mounting hardware and nitrile blend gasket included | Black Polycarbonate |  |

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