

# WLB32 Industrial LED Light Bar (DC)



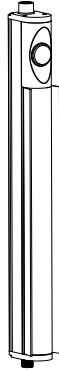
## Datasheet



Model without  
Motion Detector



Model with  
Motion Detector



Model with Eye  
Shield and  
Motion Detector

Banner's WLB32 is an ultra-bright LED fixture that features an even light output for a no glare 'glow'. Suitable for a variety of environments and applications, including work stations, machine lighting, control cabinets, and manufacturing lines, the WLB32 uses advanced LED lighting technology to provide a high-quality and maintenance free industrial lighting solution for years.

- Highly energy efficient for overall cost savings
- High/Low/Off switch
- Models with eye shield block side glare
- Daisy chain power to multiple lights
- Motion detection models available
- Metal housing, shatterproof window
- Easy installation with snap clips, or a choice of magnetic or angle brackets

WLB32 Industrial LED Light Bars are available as cascadable models that can be "daisy-chained" together for a continuous length of lighting, with a minimum of wiring. Each light bar can be turned to high, low, or off independently of the other lights, upstream or downstream, in the chain. A double-ended accessory cordset must be used between each pair of cascading lights.

| 12 to 30 V dc Models |                     |                            |        |
|----------------------|---------------------|----------------------------|--------|
| Models               | Lighted Length (mm) | Connector                  | Lumens |
| WLB32C285PBQ         | 285                 | 4-pin M12 Quick Disconnect | 650    |
| WLB32C570PBQ         | 570                 |                            | 1300   |
| WLB32C850PBQ         | 850                 |                            | 1950   |
| WLB32C1130PBQ        | 1130                |                            | 2600   |
| WLB32C285PB          | 285                 | 2 m (6.5 ft) cable         | 650    |
| WLB32C570PB          | 570                 |                            | 1300   |
| WLB32C850PB          | 850                 |                            | 1950   |
| WLB32C1130PB         | 1130                |                            | 2600   |

- To order the light without the integral switch, omit the "PB" from the model number. For example, WLB32C285Q.
- To order the light with the integral motion detector, replace the 'PB' from the model number with 'M'. For example, WLB32C285MQ.
- To order the light with the eye shield, add an 'E' after the length. For example, WLB32C285EPBQ.

## Specifications

### Supply Voltage

12 to 30 V dc

Use only with a suitable Class 2 power supply (UL) or SELV power supply (CE)

### Supply Current

| Light Length (mm) | Max Current Draw (A) | Typical Current Draw (A) |         |         |
|-------------------|----------------------|--------------------------|---------|---------|
|                   |                      | 12 V dc                  | 24 V dc | 30 V dc |
| 285               | 0.8                  | 0.66                     | 0.31    | 0.24    |
| 570               | 1.6                  | 1.36                     | 0.62    | 0.48    |
| 850               | 2.4                  | 2.19                     | 0.93    | 0.72    |
| 1130              | 3.2                  | 3.02                     | 1.24    | 0.96    |



**Supply Protection Circuitry**

Protected against reverse polarity and transient voltages

**Light Characteristics**

Color: Daylight white

Color temperature (CCT): 5000K (±300K)

Lumen output: 650 (±5%) per foot, typical at 25 °C (77 °F)

Luminous efficacy: 87 lumens/Watt typical at 24 V dc at 25 °C (77 °F)

CRI: 85, typical

Eye shield reduces lumens by about 25%

**LED Lifetime**Lumen Maintenance - L<sub>70</sub>

When operating within specifications, output will decrease less than 30% after 50,000 hours.

**Push Button**

II = 100% light intensity

I = 50% light intensity

O = Off

**Models with Motion Detection**

Light turns off after approximately 60 seconds without detecting motion.

Range: 12 meters; ±45° field of view

Standby current: 170 µA

**Construction**

Anodized aluminum housing; polycarbonate window and end caps; stainless steel mounting brackets

**Spacing Criterion**

Vertical: 1.22

Horizontal: 1.32

**Mounting**

Snap clips; optional magnetic mount or swivel bracket accessories available

**Connections**

Integral 4-pin Euro-style QD (4-pin connecting cordset required for QD models); or 2 m (6.5 ft) integral cable

**Environmental Rating**

IEC IP50

**Vibration and Mechanical Shock**

Vibration 10-55 Hz 1.0 mm p-p amplitude per IEC60068-2-6

Shock 15G 11 ms duration, half sine wave per IEC60068-2-27

**Operating Temperature**

-40 °C to +70 °C (-40 °F to +158 °F)

Light output begins to decrease above 50 °C (122 °F) and will be approximately 65% of max intensity at 60 °C (140 °F) and 30% of max intensity at 70 °C (158 °F)

Models with motion detection: -20 °C to +60 °C (-4 °F to +140 °F)

**Storage Temperature**

-40 °C to +70 °C (-40 °F to +158 °F)

**Test Data**

LM-79, LM-80, TM-21

**Certifications**

UL Recognized for easy installation in control cabinets.

**Application Note**

When connecting cascable lights in series it is important not to exceed the maximum current limitation of 4 Amps

Maximum length of light at 12 V dc: 1.4 m (4.6 ft)

Maximum length of light at 24 V dc: 3.0 m (9.8 ft)

Maximum length of light at 30 V dc: 3.1 m (10.2 ft)

## Spacing Criteria (SC)

The spacing criteria is the fixture-spacing-to-mounting-height ratio and aids in laying out a pattern of fixtures. Multiply the spacing criteria by the mounting height to get the maximum fixture spacing that still provides even illumination (no shadowing between fixtures).

Luminaire Spacing = SC × Height to Illuminated Plane

The mounting height is the distance from the fixture to the surface you are lighting.

## Light Characteristics

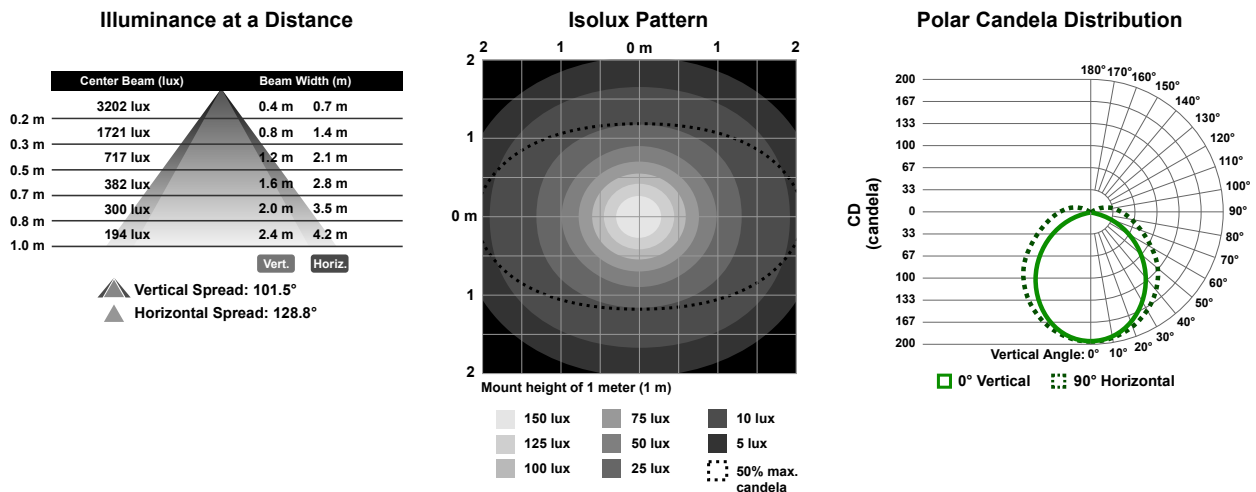


Figure 1. 285 mm Models

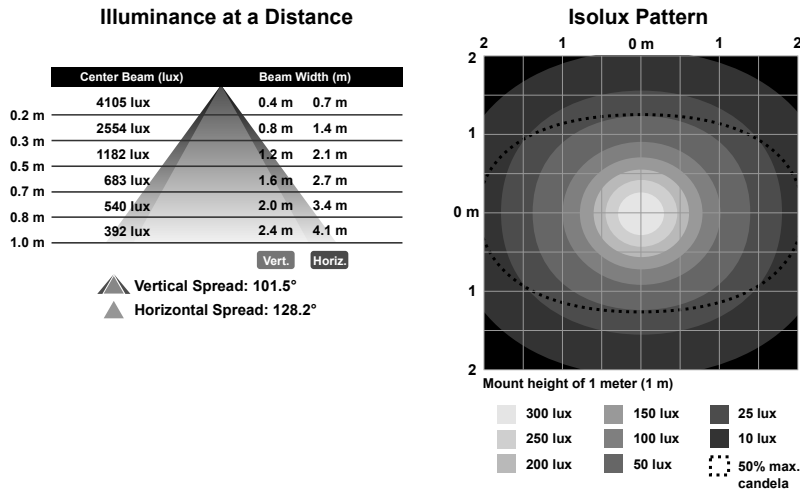


Figure 2. 570 mm Models

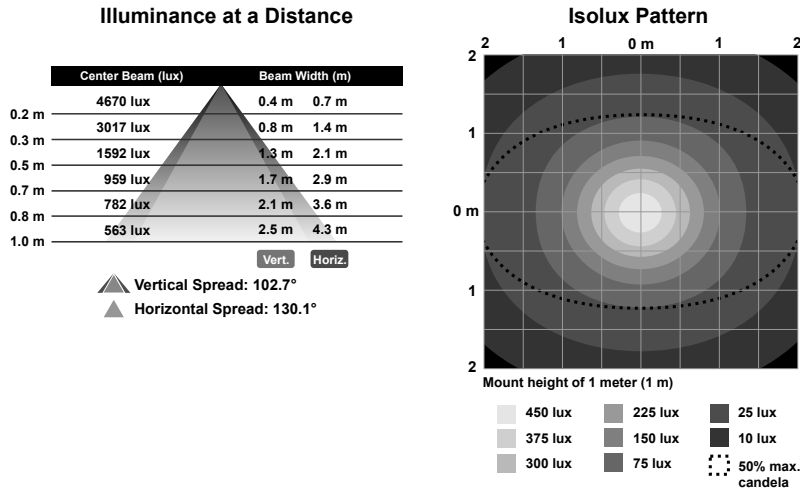


Figure 3. 850 mm Models

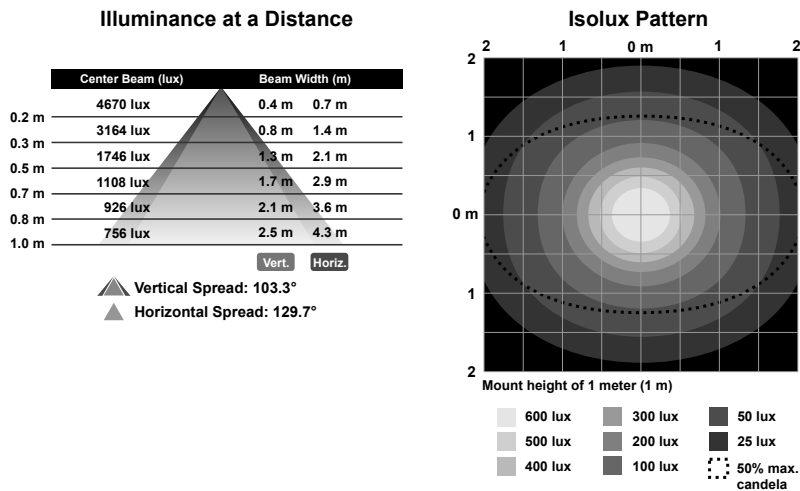
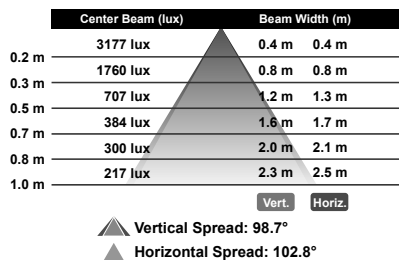
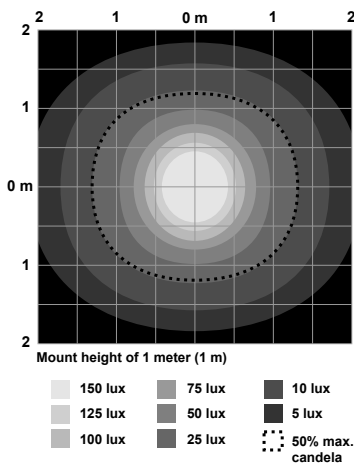


Figure 4. 1130 mm Models

## Illuminance at a Distance



## Isolux Pattern



## Polar Candela Distribution

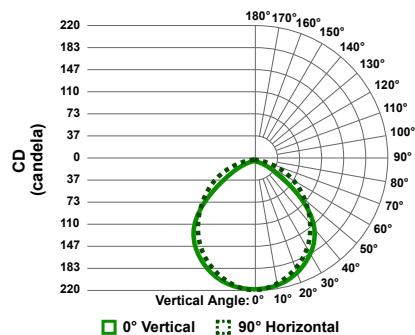
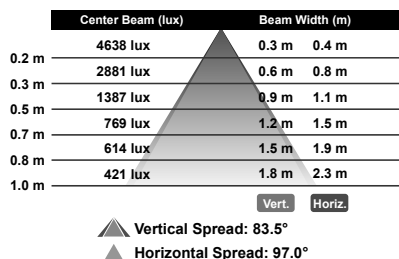
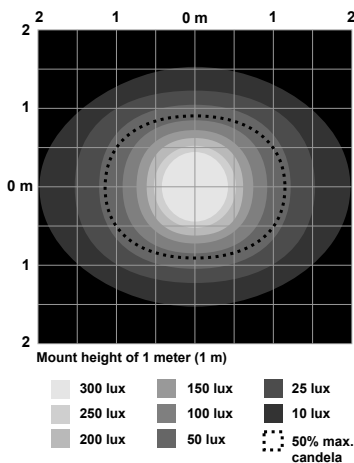


Figure 5. 285 mm Models with Eye Shields

## Illuminance at a Distance



## Isolux Pattern



## Polar Candela Distribution

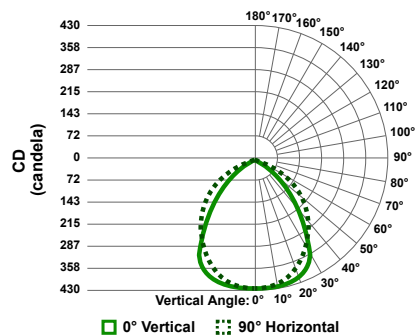
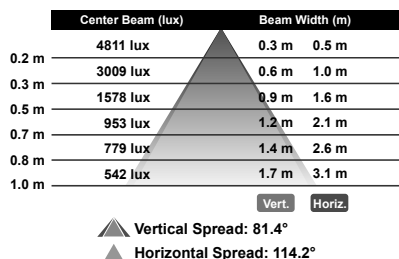
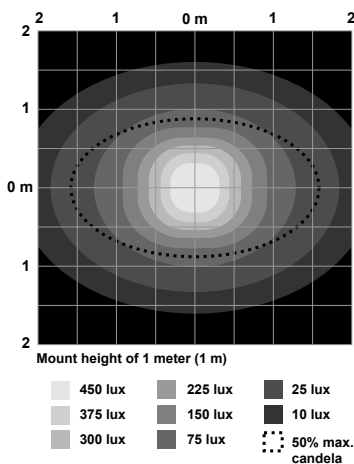


Figure 6. 570 mm Models with Eye Shields

## Illuminance at a Distance



## Isolux Pattern



## Polar Candela Distribution

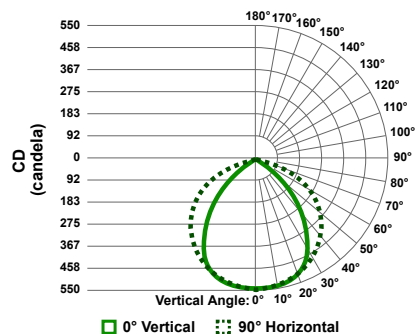


Figure 7. 850 mm Models with Eye Shields

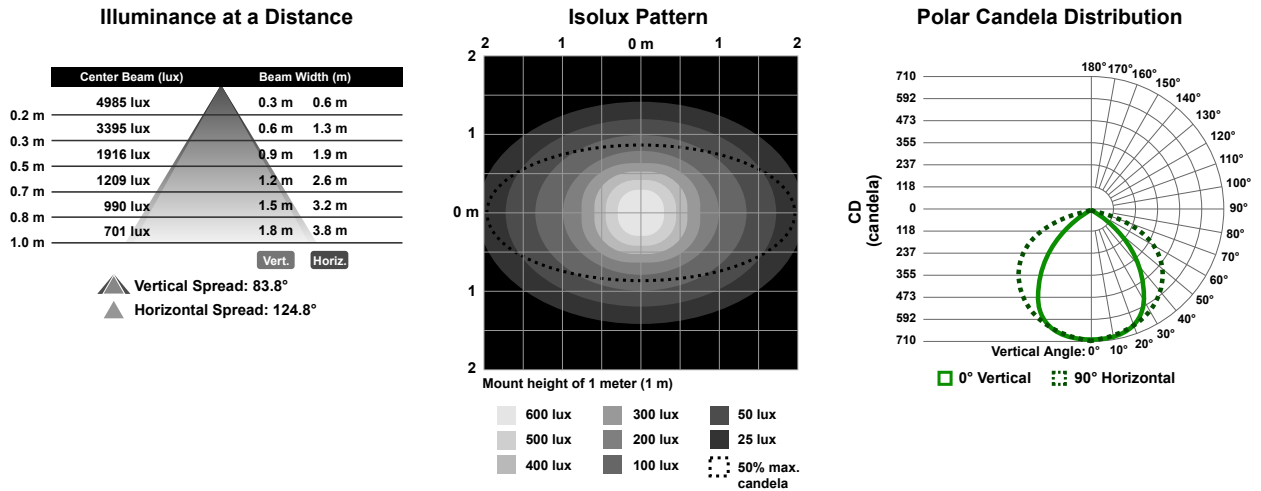
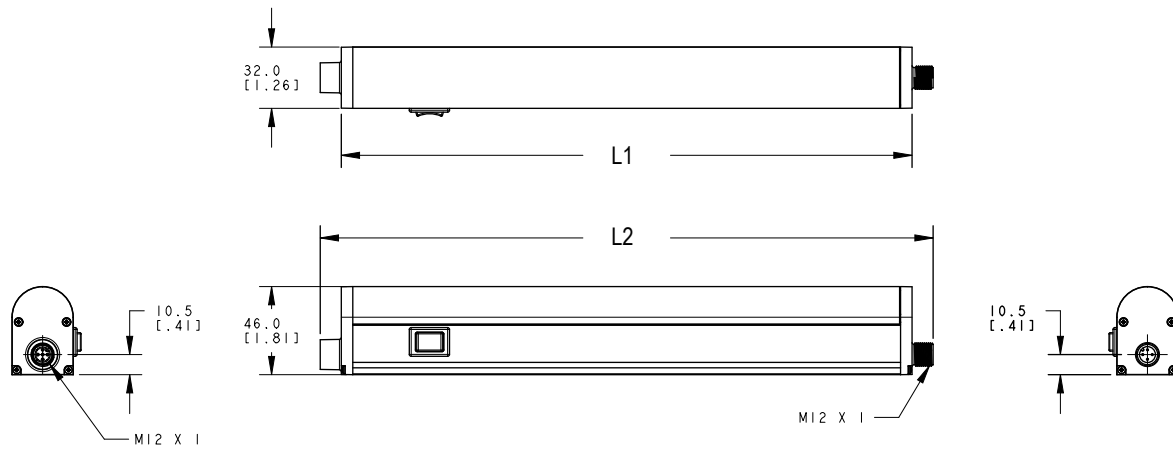


Figure 8. 1130 mm Models with Eye Shields

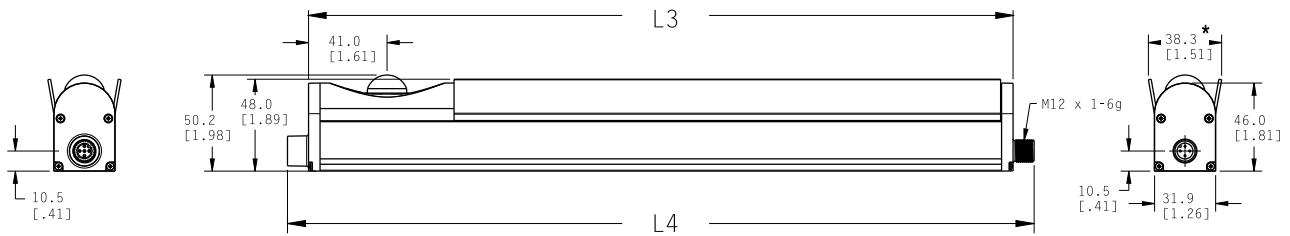
## Wiring

|                                       | Wiring | Pinouts (Female and Male) | Wiring Key                                                                                                                                                                                                                                                                                       |
|---------------------------------------|--------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switch Models                         |        | <p>Female</p>             | 1 = Brown<br>3 = Blue                                                                                                                                                                                                                                                                            |
| Non-Switch and Motion Detector Models |        | <p>Male</p>               | 1 = Brown, connect for 100% intensity<br>3 = Blue<br>4 = Black*<br><br>* For models without motion detection, connect the black wire to 12 to 30 V dc for 50% maximum intensity. For models with motion detection, connect the black wire to 12 to 30 V dc to bypass the motion detector switch. |

## Dimensions



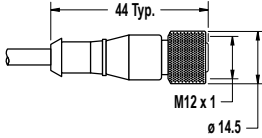
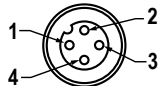
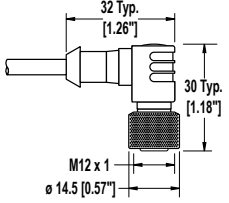
### Motion Detector and/or Eye Shield Models

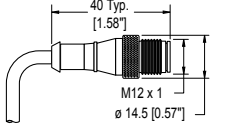
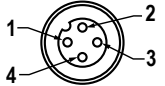
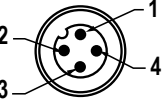
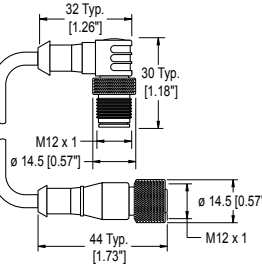
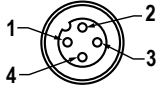
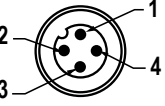


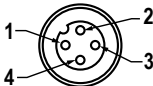
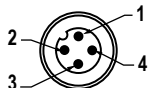
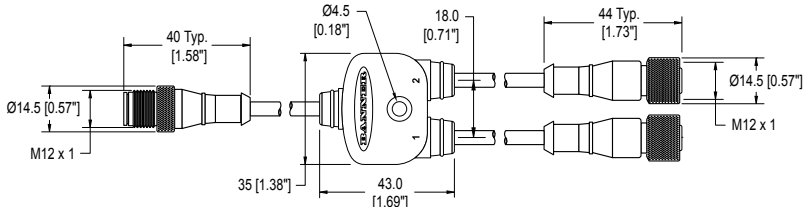
\* Specific to models with shield

| Models        | Models without Motion Detector |                   | Models with Motion Detector and/or Eye Shields |                   |
|---------------|--------------------------------|-------------------|------------------------------------------------|-------------------|
|               | L1                             | L2                | L3                                             | L4                |
| WLB32C285..Q  | 298 mm (11.7 in)               | 320 mm (12.6 in)  | 368 mm (14.5 in)                               | 390 mm (15.4 in)  |
| WLB32C570..Q  | 580 mm (22.8 in)               | 602 mm (23.7 in)  | 650 mm (25.6 in)                               | 672 mm (26.5 in)  |
| WLB32C850..Q  | 862 mm (33.9 in)               | 884 mm (34.8 in)  | 932 mm (36.7 in)                               | 954 mm (37.6 in)  |
| WLB32C1130..Q | 1144 mm (45.0 in)              | 1166 mm (45.9 in) | 1214 mm (47.8 in)                              | 1236 mm (48.7 in) |
| WLB32C285..   | 298 mm (11.7 in)               | 313 mm (12.3 in)  | 368 mm (14.5 in)                               | 383 mm (15.1 in)  |
| WLB32C570..   | 580 mm (22.8 in)               | 595 mm (23.4 in)  | 650 mm (25.6 in)                               | 665 mm (26.2 in)  |
| WLB32C850..   | 862 mm (33.9 in)               | 877 mm (34.5 in)  | 932 mm (36.7 in)                               | 947 mm (37.3 in)  |
| WLB32C1130..  | 1144 mm (45.0 in)              | 1159 mm (45.6 in) | 1214 mm (47.8 in)                              | 1229 mm (48.4 in) |

## Accessories

| 4-Pin Threaded M12/Euro-Style Cordsets |                |             |                                                                                                                                                                                                                                    |                                                                                                                                            |
|----------------------------------------|----------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Model                                  | Length         | Style       | Dimensions                                                                                                                                                                                                                         | Pinout (Female)                                                                                                                            |
| MQDC-406                               | 1.83 m (6 ft)  | Straight    |                                                                                                                                                  | <br><br>1 = Brown<br>2 = White<br>3 = Blue<br>4 = Black |
| MQDC-415                               | 4.57 m (15 ft) |             |                                                                                                                                                                                                                                    |                                                                                                                                            |
| MQDC-430                               | 9.14 m (30 ft) |             |                                                                                                                                                                                                                                    |                                                                                                                                            |
| MQDC-450                               | 15.2 m (50 ft) |             |                                                                                                                                                                                                                                    |                                                                                                                                            |
| MQDC-406RA                             | 1.83 m (6 ft)  | Right-Angle |  |                                                                                                                                            |
| MQDC-415RA                             | 4.57 m (15 ft) |             |                                                                                                                                                                                                                                    |                                                                                                                                            |
| MQDC-430RA                             | 9.14 m (30 ft) |             |                                                                                                                                                                                                                                    |                                                                                                                                            |
| MQDC-450RA                             | 15.2 m (50 ft) |             |                                                                                                                                                                                                                                    |                                                                                                                                            |

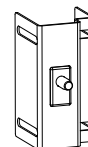
| 4-Pin Threaded M12/Euro-Style Cordsets—Double Ended |                |                                      |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------|----------------|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model                                               | Length         | Style                                | Dimensions                                                                                                                                                                                                                                          | Pinout                                                                                                                                                                                                                                                          |
| MQDEC-401SS                                         | 0.31 m (1 ft)  | Male Straight/<br>Female Straight    |                                                      | <p>Female</p>  <p>Male</p>  <p>1 = Brown<br/>2 = White<br/>3 = Blue<br/>4 = Black</p> |
| MQDEC-403SS                                         | 0.91 m (3 ft)  |                                      |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                 |
| MQDEC-406SS                                         | 1.83 m (6 ft)  |                                      |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                 |
| MQDEC-412SS                                         | 3.66 m (12 ft) |                                      |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                 |
| MQDEC-420SS                                         | 6.10 m (20 ft) |                                      |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                 |
| MQDEC-430SS                                         | 9.14 m (30 ft) |                                      |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                 |
| MQDEC-450SS                                         | 15.2 m (50 ft) |                                      |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                 |
| MQDEC-403RS                                         | 0.91 m (1 ft)  | Male Right-Angle/<br>Female Straight |  | <p>Female</p>  <p>Male</p>  <p>1 = Brown<br/>2 = White<br/>3 = Blue<br/>4 = Black</p> |
| MQDEC-406RS                                         | 1.83 m (3 ft)  |                                      |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                 |
| MQDEC-412RS                                         | 3.66 m (12 ft) |                                      |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                 |
| MQDEC-420RS                                         | 6.10 m (20 ft) |                                      |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                 |
| MQDEC-430RS                                         | 9.14 m (30 ft) |                                      |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                 |
| MQDEC-450RS                                         | 15.2 m (50 ft) |                                      |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                 |

| 4-Pin Threaded M12/Euro-Style Splitter Cordsets—Flat Junction                                 |                   |                             |                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------|-------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model                                                                                         | Branches (Female) | Trunk (Male)                | Pinout                                                                                                                                                                                                                                                                                        |
| CSB-M1240M1240                                                                                | No branch         | No trunk                    | <div>Female</div> <div></div> <div>Male</div> <div></div> <div>1 = Brown<br/>2 = White<br/>3 = Blue<br/>4 = Black</div> |
| CSB-M1240M1241                                                                                | 2 x 0.30 m (1 ft) | No trunk                    |                                                                                                                                                                                                                                                                                               |
| CSB-M1241M1241                                                                                |                   | 0.30 m (1 ft)               |                                                                                                                                                                                                                                                                                               |
| CSB-M1248M1241                                                                                |                   | 2.50 m (8 ft)               |                                                                                                                                                                                                                                                                                               |
| CSB-M12415M1241                                                                               |                   | 4.57 m (15 ft)              |                                                                                                                                                                                                                                                                                               |
| CSB-M12425M1241                                                                               |                   | 7.60 m (25 ft)              |                                                                                                                                                                                                                                                                                               |
| CSB-UNT425M1241                                                                               |                   | 7.60 m (25 ft) Unterminated |                                                                                                                                                                                                                                                                                               |
| <div></div> |                   |                             |                                                                                                                                                                                                                                                                                               |

## Enclosure Accessories

### LMBEDS Switch

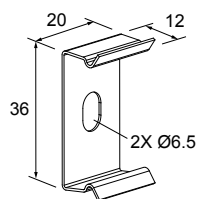
- Bracket with plunger switch to power lights when the enclosure is opened
- Refer to datasheet [160672](#) for more information



## Mounting Brackets

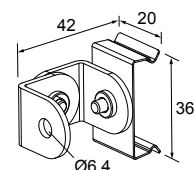
### LMBWLB32

- Replaces the bracket that ships with the WLB32 light
- Stainless steel
- Includes 4 snap clips, 4 screws, and 2 insulator caps



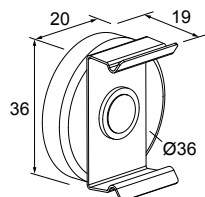
### LMBWLB32-180S

- Swivel bracket kit allows 180° of movement



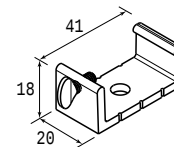
### LMBWLB32MAG

- Magnetic mounting bracket for easy attachment to steel and iron surfaces



### LMBWLB32U

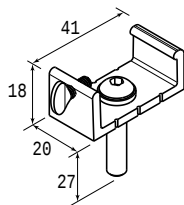
- Die cast bracket for rugged applications
- Secured to light with included thumb screw
- Clearance hole for 6 mm (1/4 in) button head screw



## Mounting Brackets

### LMBWLB32UT

- Die cast bracket for rugged applications
- Secured to light with included thumb screw
- Integral 1/4-20 stud for mounting



## Banner Engineering Corp. Limited Warranty

Banner Engineering Corp. warrants its products to be free from defects in material and workmanship for one year following the date of shipment. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture which, at the time it is returned to the factory, is found to have been defective during the warranty period. This warranty does not cover damage or liability for misuse, abuse, or the improper application or installation of the Banner product.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESS OR IMPLIED (INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), AND WHETHER ARISING UNDER COURSE OF PERFORMANCE, COURSE OF DEALING OR TRADE USAGE.

This Warranty is exclusive and limited to repair or, at the discretion of Banner Engineering Corp., replacement. IN NO EVENT SHALL BANNER ENGINEERING CORP. BE LIABLE TO BUYER OR ANY OTHER PERSON OR ENTITY FOR ANY EXTRA COSTS, EXPENSES, LOSSES, LOSS OF PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM ANY PRODUCT DEFECT OR FROM THE USE OR INABILITY TO USE THE PRODUCT, WHETHER ARISING IN CONTRACT OR WARRANTY, STATUTE, TORT, STRICT LIABILITY, NEGLIGENCE, OR OTHERWISE.

Banner Engineering Corp. reserves the right to change, modify or improve the design of the product without assuming any obligations or liabilities relating to any product previously manufactured by Banner Engineering Corp.

## Copyright Notice

Any misuse, abuse, or improper application or installation of this product or use of the product for personal protection applications when the product is identified as not intended for such purposes will void the product warranty. Any modifications to this product without prior express approval by Banner Engineering Corp will void the product warranties. All specifications published in this document are subject to change; Banner reserves the right to modify product specifications or update documentation at any time. For the most recent version of any documentation, refer to: [www.bannerengineering.com](http://www.bannerengineering.com). © Banner Engineering Corp. All rights reserved.