

TL50 Basic Tower Light



Datasheet

Multi-Color General-Purpose or Audible Indicators

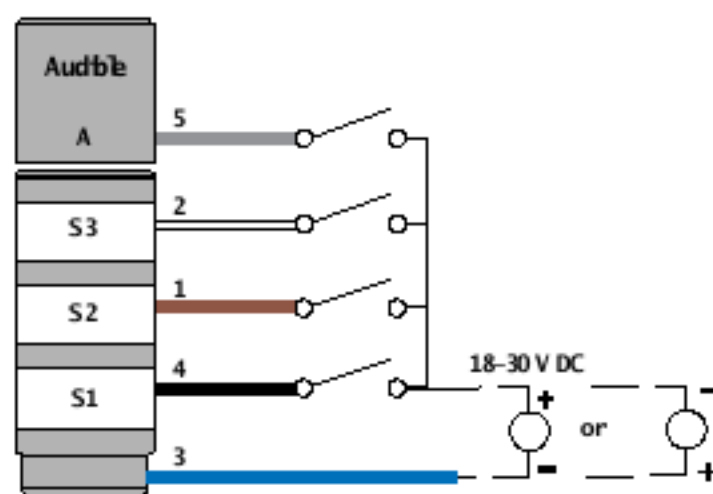


- Rugged, cost-effective, and easy-to-install multi-segment indicators
- Illuminated segments provide easy-to-see operator guidance and indication of equipment status
- Audible models available with omni-directional audible element
- Compact devices are completely self-contained, no controller needed
- 18 V DC to 30 V DC
- No assembly required

Models

Model	Audible	LED Colors ¹	Connection ²	Inputs
TL50B-GYR	No	Green, Yellow, Red	1 m (3.3 ft) integral PVC cable	Bimodal (NPN or PNP)
TL50B-GYRA	Yes			
TL50B-GYRQ	No		Integral 4-pin M12/Euro-style male quick disconnect	
TL50B-GYRAQ	Yes		Integral 5-pin M12/Euro-style male quick disconnect	

Wiring Diagram



Key:

- 1 = Brown
- 2 = White
- 3 = Blue
- 4 = Black
- 5 = Gray

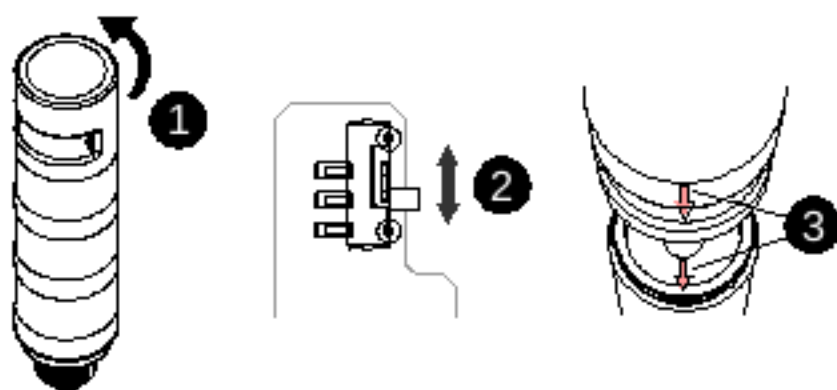
- S1 = Segment 1
- S2 = Segment 2
- S3 = Segment 3
- A = Audible (optional)

¹ The color listed is the bottom color, going up in successive order.

² Models with a quick disconnect require a mating cordset.



Audible Adjustment



1. Remove the top cover by turning counter-clockwise.
2. Toggle the switch up for high setting, and down for low setting.
3. To reassemble, align the inner arrows on audible cover and top segment. Push down gently and turn clockwise.



Note: Do not pinch the wires when reassembling.

ptions

Supply Voltage and Current

18 V DC to 30 V DC

Segments—maximum current per LED segment: 26 mA at 18 V DC to 30 V DC

Omni-Directional Audible Alarm: 20 mA maximum current

Supply Protection Circuitry

Protected against transient voltages

Input Response Time

Indicator On/Off: 1 milliseconds maximum

Operating Frequency

3.1 kHz $\pm$ 500 Hz oscillation frequency

Intensity:

- High Setting: 93 dB at 1 m (typical)
- Low Setting: 10 dB typical reduction in sound intensity with audible adjustment (maximum to minimum)

Connections

Integral 4-pin or 5-pin M12/Euro-style quick disconnect, or 1 m (3.3 ft) integral PVC cable depending on model

Models with a quick disconnect require a mating cordset

Construction

Bases and Covers: Polycarbonate

Light Segment: Polycarbonate

Vibration and Mechanical Shock

Meets IEC 60068-2-6 requirements (Vibration: 10 Hz to 55 Hz, 0.5 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 $+50^{\circ}\text{C}$ (-40°F to $+122^{\circ}\text{F}$)

Standard and Sealed Audible: -20°C to $+50^{\circ}\text{C}$ (-4°F to $+122^{\circ}\text{F}$)

95% at $+50^{\circ}\text{C}$ maximum relative humidity (non-condensing)

Input Leakage Current Immunity

400 μA ³

certifications



Environmental Rating

IEC IP65, UL Type 4X

Included Accessories

M30 knurl nut and gasket

Indicators

LEDs are independently selected

Indicator Characteristics

Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Lumen Output (Typical at 25 °C)
Green	525 nm	17
Red	625 nm	8
Yellow	590 nm	16

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.

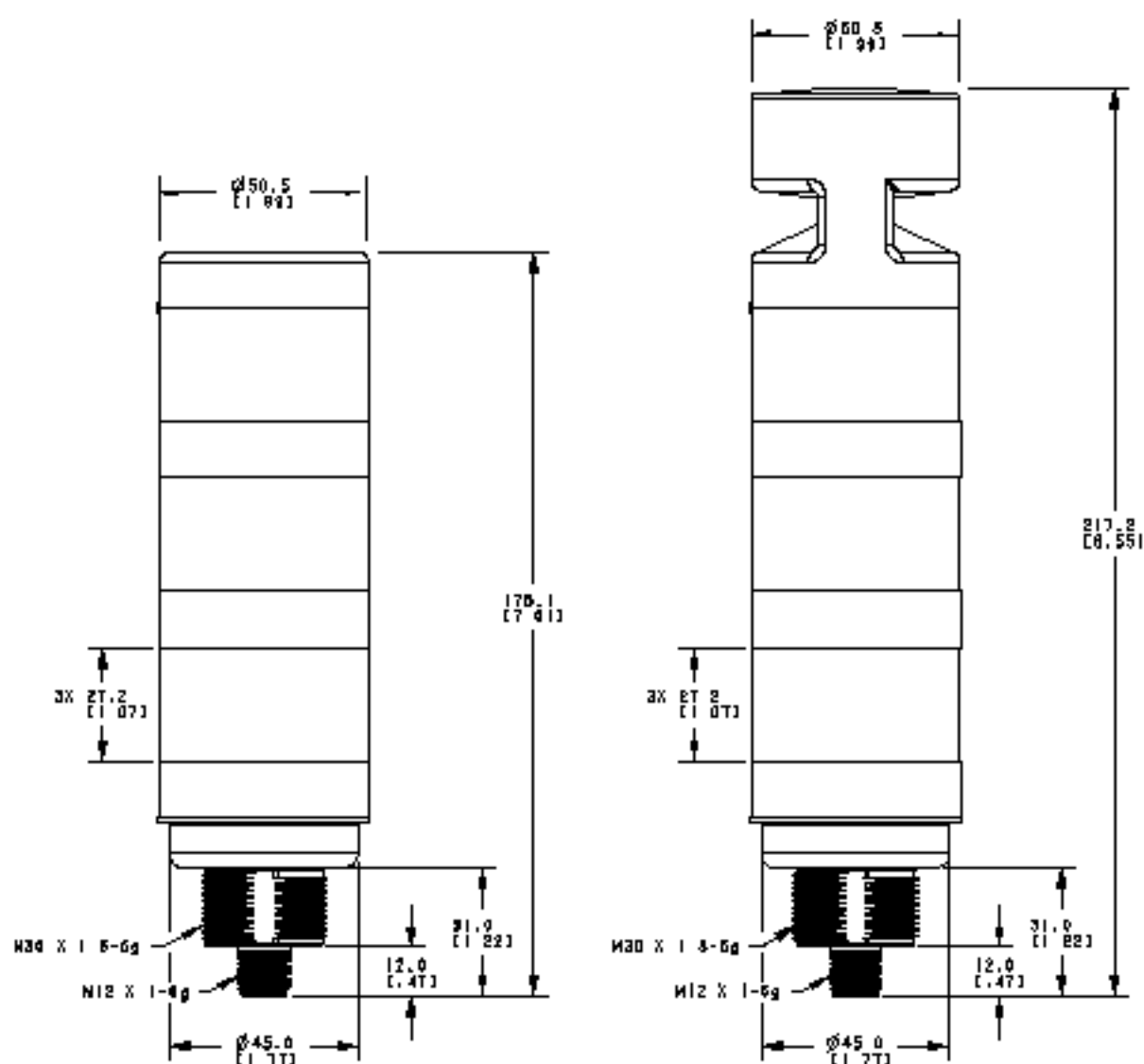
For additional product support, go to www.bannerengineering.com.

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

³ Any current above this value may activate the TL50.

Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise.

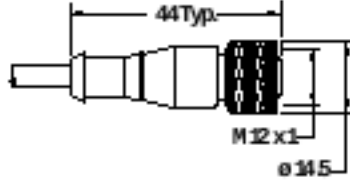


Standard Models

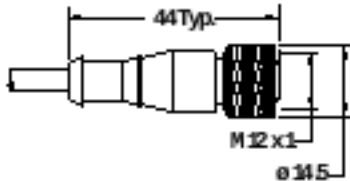
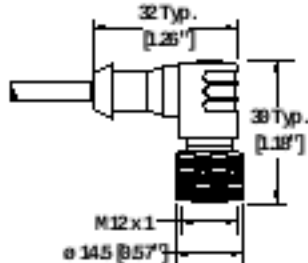
Audible Models

Accessories

Cordsets

4-Pin Threaded M12/Euro-Style Cordsets—Single Ended				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	1.83 m (6 ft)	Straight		
MQDC-415	4.57 m (15 ft)			
MQDC-430	9.14 m (30 ft)			
MQDC-450	15.2 m (50 ft)			

1 = Brown
2 = White
3 = Blue
4 = Black

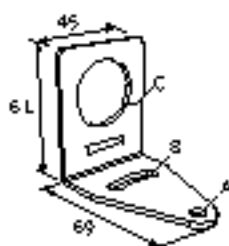
5-Pin Threaded M12/Euro-Style Cordsets—Single Ended				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC1-501.5	0.5 m (1.5 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
MQDC1-506	2 m (6.5 ft)			
MQDC1-515	5 m (16.4 ft)			
MQDC1-530	9 m (29.5 ft)			
MQDC1-506RA	2 m (6.5 ft)	Right-Angle		
MQDC1-515RA	5 m (16.4 ft)			
MQDC1-530RA	9 m (29.5 ft)			

Mounting Brackets

All measurements are listed in millimeters [inches], unless noted otherwise.

SMB30A

- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (1/4 in) hardware
- Mounting hole for 30 mm sensor
- 12-ga. stainless steel

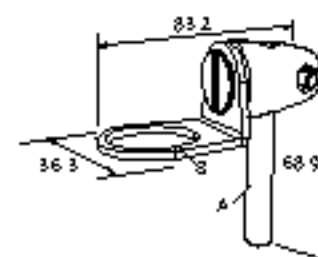


Hole center spacing: A to B=40

Hole size: A=ø 6.3, B= 27.1 x 6.3, C=ø 30.5

SMB30FA

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

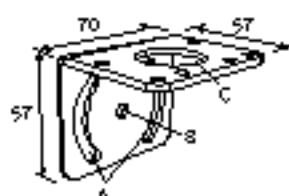


Bolt thread: SMB30FA, A= 3/8 - 16 x 2 in; SMB30FAM10, A= M10 - 1.5 x 50

Hole size: B= ø 30.1

SMB30MM

- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (1/4 in) hardware
- Mounting hole for 30 mm sensor

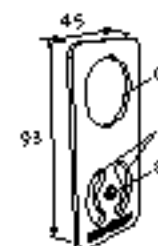


Hole center spacing: A = 51, A to B = 25.4

Hole size: A = 42.6 x 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-ga. 300 series stainless steel

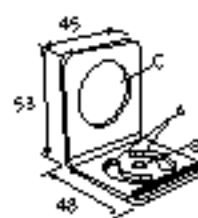


Hole center spacing: A=26.0, A to B=13.0

Hole size: A=26.8 x 7.0, B=ø 6.5, C=ø 31.0

SMBAMS30RA

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

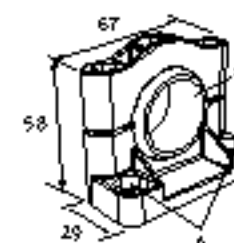


Hole center spacing: A=26.0, A to B=13.0

Hole size: A=26.8 x 7.0, B=ø 6.5, C=ø 31.0

SMB30SC

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



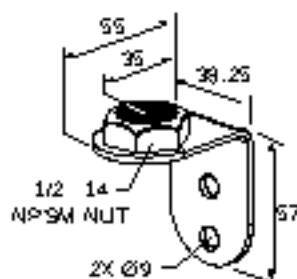
Hole center spacing: A=ø 50.8

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

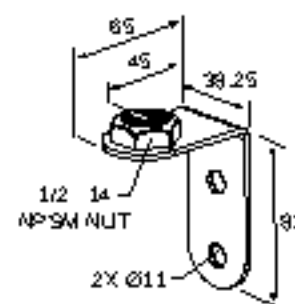
Hole center spacing: 20.0



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



LMB Sealed Right Angle Bracket

Model	Description	Construction	
LMB30RA	Direct-Mount Models: Bracket kit with base, 30 mm adapter, set screw, fasteners, O-rings, and gaskets.	Black polycarbonate	
LMBE12RA	Pipe-Mount Models: Bracket kit with base, 1/2-14 pipe adapter, set screw, fasteners, O-rings, and gaskets. For use with stand-off pipe (listed and sold separately).	Black polycarbonate	

Elevated Mount System

Model			Features	Components
SA-M30TE12 - Black Acetal			- Streamlined black acetal stand-off pipe adapter/cover - Connects between 30 mm light base and 1/2 in. NPSM/DN15 pipe - Mounting hardware included	
Polished 304 Stainless Steel	Black Anodized Aluminum	Clear Anodized Aluminum	- Elevated-use stand-off pipe (1/2 in. NPSM/DN15) - Polished 304 stainless steel, black anodized aluminum, or clear anodized aluminum surface 1/2 in. NPT thread at both ends - Compatible with most industrial environments	
SOP-E12-150SS 150 mm (6 in) long	SOP-E12-150A 150 mm (6 in) long	SOP-E12-150AC 150 mm (6 in) long		
SOP-E12-300SS 300 mm (12 in) long	SOP-E12-300A 300 mm (12 in) long	SOP-E12-300AC 300 mm (12 in) long		
SOP-E12-900SS 900 mm (36 in) long	SOP-E12-900A 900 mm (36 in) long	SOP-E12-900AC 900 mm (36 in) long		
SA-E12M30 - Black Acetal			- Streamlined black acetal mounting base adapter/cover - Connects between 1/2 in. NPSM/DN15 pipe and 30 mm (1-3/16 in) drilled hole - Mounting hardware included	
SOK-TL50-150A SOK-TL50-300A			Includes: - SA-M30TE12 - SA-E12M30 - SOP-E12-150/300A	

Pipe Mounting Flange

Pipe Mounting Flange			
Model	Features	Construction	
SA-F12	- Elevated-use stand-off pipes (½ in, NPSM/DN15) - 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) - M4 mounting hardware and nitrile blend gasket included	Black Polycarbonate	

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