

Features

High Daylight Visibility, Single Color Beacon with Optional Audible Alarm for Indoor and Outdoor Use



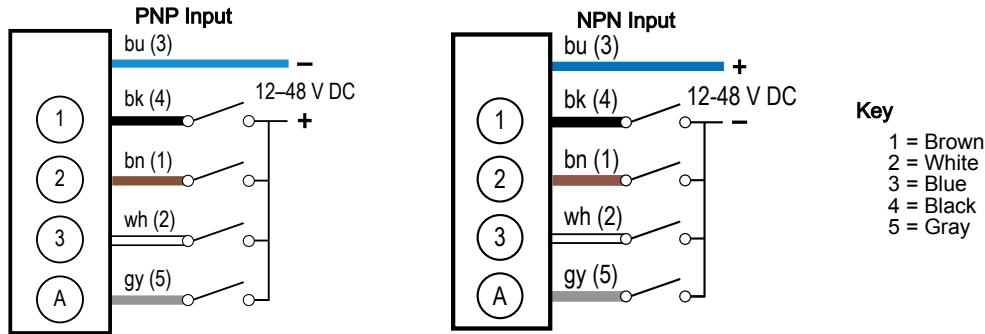
- Highly visible indicator provides bright, even light in direct sunlight
- Five color choices available
- 36 mm threaded polycarbonate base
- Rugged IP66, UL Type 4X housing
- PNP or NPN operation depending on wiring
- Rugged UV-stabilized polycarbonate base and window
- 12 V DC to 48 V DC operating voltage

Models

Standard models shown. Contact factory for other options.

Family	Style	—	Type	Color	Audible	Connector
K100	B	—	BL	G	A	Q
	B = Basic		BL = Beacon	G = Green Y = Yellow R = Red B = Blue W = White	Blank = None A = Audible	Q = Integral 5-pin M12 male quick-disconnect connector

Wiring Diagrams



An "X" denotes an active input.

For example: When Input 1 and Input 3 are both active, the indicator will be Flashing at 5 Hz.

Default Configuration

Wiring				Operating Mode/Function	
Black (Input 1)	Brown (Input 2)	White (Input 3)	Gray (Input 4)	Non-Audible	Audible
X				Flashing at 1 Hz	Flashing at 1 Hz
	X			Steady	Steady
		X		Intensity Sweep	Intensity Sweep
X		X		Flashing at 5 Hz	Flashing at 5 Hz
X	X			Flashing at 0.5 Hz	Flashing at 0.5 Hz
	X	X		Strobe	Strobe

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Wiring				Operating Mode/Function	
Black (Input 1)	Brown (Input 2)	White (Input 3)	Gray (Input 4)	Non-Audible	Audible
X	X	X		3-pulse Strobe	3-pulse Strobe
			X	Off	Audible Continuous
X			X	Flashing at 1 Hz	Flashing at 1 Hz, Audible Continuous
	X		X	Steady	Steady, Audible Continuous
		X	X	Intensity Sweep	Intensity Sweep, Audible Continuous
X		X	X	Flashing at 5 Hz	Flashing at 5 Hz, Audible Continuous
X	X		X	Flashing at 0.5 Hz	Flashing at 0.5 Hz, Audible Continuous
	X	X	X	Strobe	Strobe, Audible Continuous
X	X	X	X	3-pulse Strobe	3-pulse Strobe, Audible Continuous

Specifications

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Leakage Current Immunity

600 μ A

Indicator Response Time

On response: 600 ms (max)

Off response: 50 ms (max)

Connections

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

Models with a quick disconnect require a mating cordset

Mounting

M36 by 2.0 threaded base, maximum torque 5.0 N·m (44 inch-lbf)

Interior 3/4-14 NPT Thread

Mounting nut included

Adjacent Unit Mounting Separation Distance

Minimum: 0 in (mounted with unit flanges touching)

Audible Characteristics

Sound Intensity: 101 dB, 2.5 KHz, at 1 m (typical)

Construction

Base, Dome, and Nut: Polycarbonate

Operating Conditions

–40 °C to +60 °C (–40 °F to +140 °F)

90% at +60 °C maximum relative humidity (non-condensing)

Storage Temperature: –40 °C to +70 °C (–40 °F to +158 °F)

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)

Impact: IK10 (60068-2-75)

Environmental Rating

IP66, UL Type 4X

LED Lifetime

Lumen maintenance L_{70}

When operating within specifications, output decreases less than 30% after 42,000 hours

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

Certifications



Banner Engineering BV
Park Lane, Culliganlaan 2F bus 3
1831 Diegem, BELGIUM



Turck Banner LTD Blenheim House
Blenheim Court
Wickford, Essex SS11 8YT
GREAT BRITAIN



Supply Voltage and Current

12 V DC to 48 V DC

Product approved with usage of Class 1 or Class 3 Power Supply to achieve Class 2 Power Supply status

Use only with a suitable Class 2 power supply (North America)

Current:

Voltage (V DC)	Steady On, Flash, or Strobe	
	Light Only (mA)	Light & Audible (mA)
12	230	270
18	160	200
24	130	170
30	110	150
36	100	140
42	90	130
48	85	125

Default Indicator Characteristics

At 12 V DC

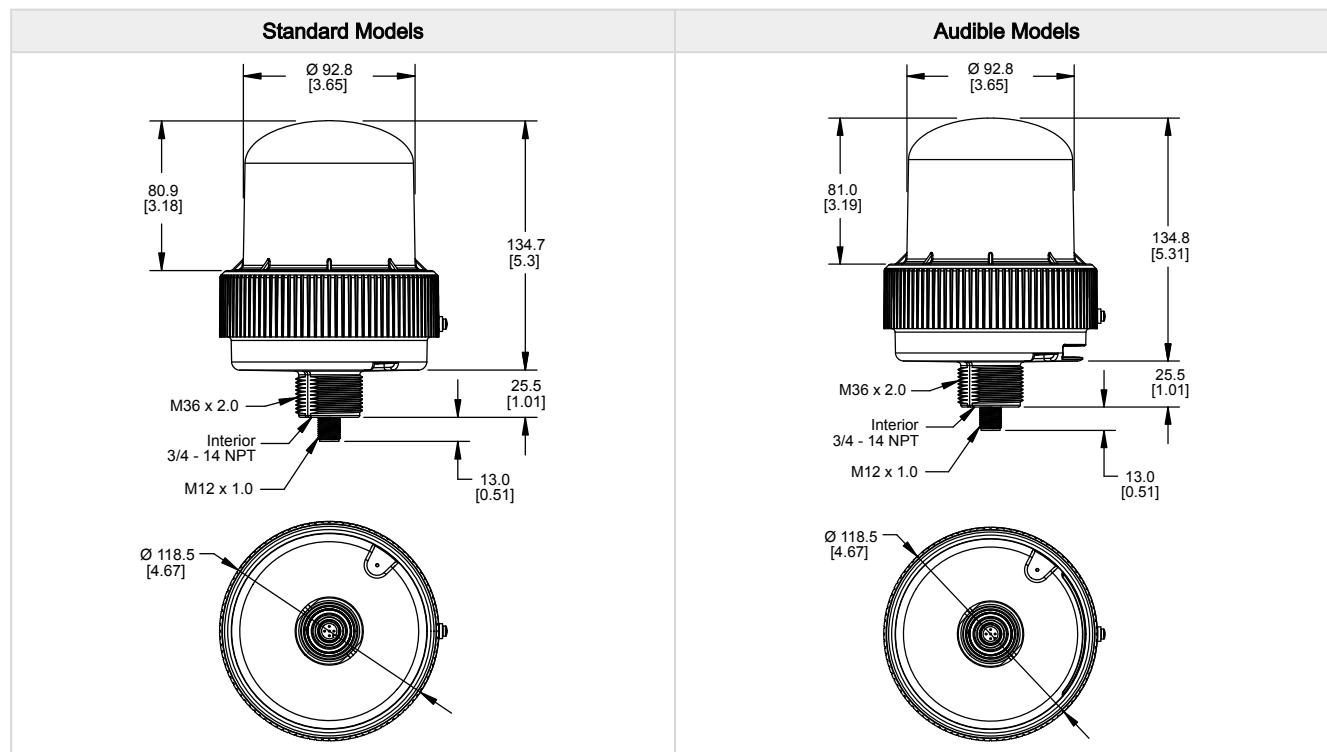
Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Color Coordinates ⁽¹⁾		Lumen Output (Typical at 25 °C)
		x	y	
Green	528 nm	0.1603	0.6973	200
Yellow	589 nm	0.5557	0.4276	200
Red	625 nm	0.6999	0.2982	93
Blue	475 nm	0.1167	0.1121	60
White	5500K ± 250	0.3320	0.3433	240

Internal temperature compensation circuitry: Reduces the Lumen Output to decrease the unit internal operating temperature. The amount of reduction is dependent on the ambient operating temperature, supply voltage, color, and/or audible functions being utilized.

⁽¹⁾ Refer to CIE 1931 chromaticity diagram or color chart, to show equivalent color with indicated color coordinates.

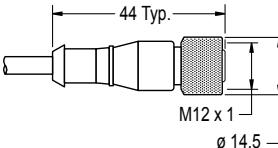
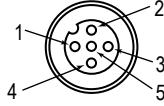
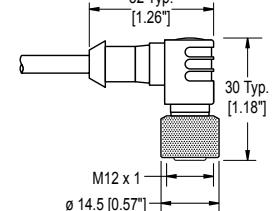
Dimensions

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



Accessories

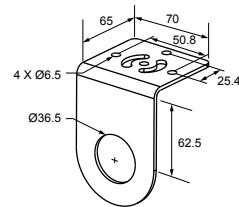
Cordsets

5-Pin Single-Ended M12 Female Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC1-501.5	0.5 m (1.5 ft)	Straight	 M12 x 1 \varnothing 14.5	 1 = Brown 2 = White 3 = Blue 4 = Black 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)			
MQDC1-515RA	5 m (16.4 ft)			
MQDC1-530RA	9 m (29.5 ft)			
MQDC1-560RA	19 m (62.3 ft)	Right-Angle	 M12 x 1 \varnothing 14.5 [0.57"]	

Brackets

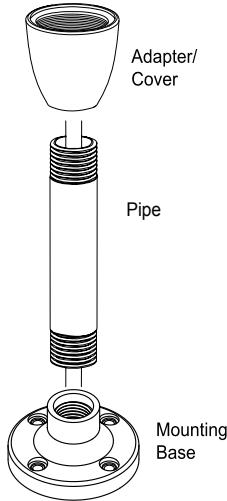
LMB36RA

- Indicator light right-angle mounting
- 36 mm mounting hole
- Stainless steel



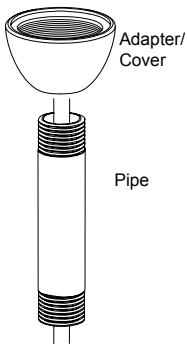
Elevated Mount System

Elevated Mount System (1/2" Pipes)



Adapter/Cover Model	Description		
SA-M36E12	<ul style="list-style-type: none"> • Adapter from M36 thread to 1/2-14 NPSM thread • Streamlined black plastic mounting base adapter/cover • Drilled hole 		
Black Anodized Aluminum, 1/2 in. NPT Pipe Models	Clear Anodized Aluminum, 1/2 in. NPT Pipe Models	<ul style="list-style-type: none"> • Elevated-use stand-off pipe • Threaded at both ends • Compatible with most industrial environments 	
	SOP-E12-150A, 150 mm (6 in) long		
	SOP-E12-300A, 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		
Mounting Base Model	Description		
SA-F12	<ul style="list-style-type: none"> • Elevated-use stand-off pipes (1/2 in, NPSM/DN15) • M5 mounting hardware and nitrile gasket included • Die-cast zinc base with black paint 		

Elevated Mount System (3/4" Pipes)



Adapter/Cover Model	Description	
SA-M36SOP	<ul style="list-style-type: none"> • M36 thread adapter with clearance for 3/4" pipe mount • Streamlined black plastic mounting base adapter/cover • Drilled hole 	
Black Anodized Aluminum, 3/4 in. NPT Pipe Models	Black Anodized Aluminum, 3/4 in. NPT Pipe Models	<ul style="list-style-type: none"> • Elevated-use stand-off pipe • Threaded at both ends • Compatible with most industrial environments
	SOP-E34-150A, 150 mm (6 in) long	
	SOP-E34-300A, 300 mm (12 in) long	
	SOP-E34-600A, 600 mm (24 in) long	
SOP-E34-900A, 900 mm (36 in) long	-	
	SOP-E34-900AC, 900 mm (36 in) long	

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K100 Basic Daylight Visible Beacon (DC)

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