

K100 Pro Indicator Beacon – AC Datasheet

Features

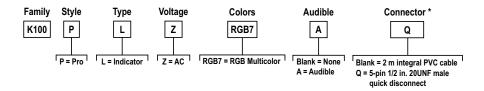
Multicolor Indicator with Optional Audible Alarm for Indoor or Outdoor Use



- Industrial beacon providing bright indication for OEMs and users that need visible status information
- · Rugged construction provides years of uninterrupted operation
- Unique water-shed beacon design helps protect the indicator
- Fourteen colors in one device
- 36 mm threaded polycarbonate base
- Rugged IP69K per DIN 40050-9, UL Type 4X housing
- Variety of connector options
- Rugged UV-stabilized polycarbonate base and window
- 100 V AC to 240 V AC operating voltage

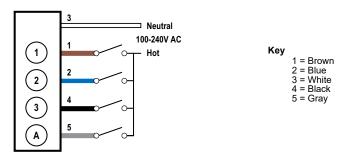
Models

Standard models shown. Contact factory for other options.



^{*} Models with a quick disconnect require a mating cordset

Wiring Diagrams



An "X" denotes an active input.

For example: When the black wire and the white wire are both active, the indicator will be Magenta Steady.

Table 1: Default Configuration (Sheet 1 of 2)

Wiring				Operating Mode/Function		
Brown	Blue	Black	Gray	Non-Audible	Audible	
X				Red Steady	Red Steady	
	X			Green Steady	Green Steady	
		X		Blue Steady	Blue Steady	
X	X			Yellow Steady	Yellow Steady	
X		X		Magenta Steady	Magenta Steady	
	X	X		Cyan Steady	Cyan Steady	
X	X	X		White Steady	hite Steady White Steady	
			Χ	Off	Audible Steady, Frequency 2.5 KHz, Volume High	
X			Χ	Red Steady	Red Steady, Audible Steady, Frequency 2.5 KHz, Volume High	
	Х		Х	Green Steady, Audible Steady, Frequency 2.5 KHz, Volume High		

Table 1: Default Configuration (Continued) (Sheet 2 of 2)

Wiring				Operating Mode/Function		
Brown	Blue	Black	Gray	Non-Audible Audible		
		Х	Х	Blue Steady	Blue Steady, Audible Steady, Frequency 2.5 KHz, Volume High	
X	Х		Х	Yellow Steady, Audible Steady, Frequency 2.5 KHz, Volume High		
X		X	X	Magenta Steady, Audible Steady, Frequency 2.5 KHz, Volume Hig		
	Х	X	X	Cyan Steady, Audible Steady, Frequency 2.5 KHz, Volume High		
X	Х	X	Х	White Steady, Audible Steady, Frequency 2.5 KHz, Volume High		

Specifications

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Leakage Current Immunity

400 µA

Application Note: The use of relay output PLC is recommended since there is no leakage current. Solid state output PLCs often have leakage current above 1 mA and, therefore, turn the light on in the off state. To counteract the leakage current, a shunt resistor must be used. A resistor must be applied from the neutral wire of the device to the hot wire of each channel of the device.

Indicator Response Time

On Response: 350 ms (maximum) Off Response: 20 ms (maximum)

Connections

Integral 5-pin 1/2 in. 20UNF male quick-disconnect connector 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)

Supply Voltage and Current

100 V AC to 240 V AC, 50 Hz to 60 Hz Maximum current (mA AC at 60 HZ):

Construction

Base, Dome, and Nut: Polycarbonate

Operating Conditions

-40 °C to +60 °C (-40 °F to +140 °F)

90% at +50 °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

Impact: IK08 (IEC 60068-2-75)

Environmental Rating IP69K per DIN 40050-9, UL Type 4X

LED Lifetime

Lumen maintenance L₇₀

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

Audible Characteristics

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

Low volume setting: 93 dB Medium volume setting: 96 dB High volume setting: 101 dB

Voltage	Light Only	Light & Audible
100	102	112
230	68	70

Indicator Characteristics

Color	Dominant Wavelength (nm) or Color Temperature	Color Coordinates ^a		Lumen Output (Typical at 25 °C)
Color	(CCT)	х	у	Lumen Output (Typical at 25°C)
Red	620 nm	0.6900	0.3081	36
Green	525 nm	0.1620	0.7112	73
Blue	468 nm	0.1400	0.0539	14
Yellow	575 nm	0.4780	0.4700	91
Magenta	-	0.3877	0.1817	47
Cyan	492 nm	0.1666	0.3406	83
White	6000K	0.3379	0.3380	112
Amber	590 nm	0.5566	0.4098	63
Rose	-	0.5234	0.2310	39
Lime Green	562 nm	0.3987	0.5306	99
Orange	600 nm	0.6135	0.3665	50
Sky Blue	485 nm	0.1483	0.2476	87
Violet	-	0.2148	0.0938	28
Spring Green	507 nm	0.1780	0.5375	77

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

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

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



Dimensions

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

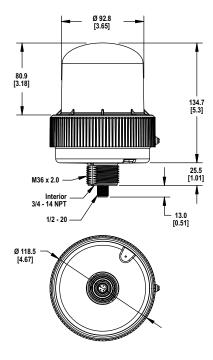


Figure 1: Standard Models

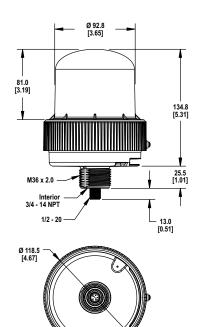


Figure 2: Audible Models

Accessories

Cordsets

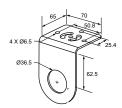
All measurements are listed in millimeters, unless noted otherwise.

5-Pin 1/2-in Dual Key Cordsets—Single Ended					
Model	Length	Style	Dimensions	Pinout	
MQAC2-506	2 m (6.56 ft)				
MQAC2-515	5 m (16.4 ft)			3	
MQAC2-530	9.14 m (30 ft)	Straight	1/2-20 UNF-2B o 14.5	2 5 1 = Brown 2 = Blue 3 = White 4 = Black 5 = Gray	

Brackets

LMB36RA

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



Elevated Mount System

	Model		
Black Anodized Aluminum ¾ in. NPT	Black Anodized Aluminum ½ in. NPT	Clear Anodized Aluminum ½ in. NPT	Features Components
SOP-E34-150A 150 mm (6 in) long			Elevated-use stand-off pipe Black anodized aluminum or clear anod-
SOP-E34-300A 300 mm (12 in) long	SOP-E12-300A 300 mm (12 in) long	SOP-E12-300AC 300 mm (12 in) long	ized aluminum surface Threaded at both ends Compatible with most industrial environ-
SOP-E34-600A 600 mm (24 in) long	SOP-E12-600A 600 mm (24 in) long	_	ments
SOP-E34-900A 900 mm (36 in) long	SOP-E12-900A 900 mm (36 in) long	SOP-E12-900AC 900 mm (36 in) long	
	SA-M36E12		Adapter from M36 thread to 12-14 NPSM thread Streamlined black plastic mounting base adapter/cover Drilled hole
	SA-M36SOP		M36 thread adapter with clearance for 4 pipe mount Streamlined black plastic mounting base adapter/cover Drilled hole

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	1/2-14 NPSM 028 070

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