# **EZ-LIGHT® K50L Series**



# with Independent Push Button Contact

Compact Indicator with One, Two, or Three Colors and a Momentary Push Button Output

For the latest technical information about this product, including specifications, dimensions, and wiring, see www.bannerengineering.com.



- · Rugged, cost-effective and easy-to-install multicolor indicator light with pushbutton
- · Waterproof IP65 construction for washdown environments
- Excellent for panel mounting or as a stand-alone device
- Immune to EMI and RFI interference
- 12 to 30V dc operation
- · Cabled and Quick Disconnect models available
- Up to 3 independent colors in one unit

# Models

Family	Color 1	Color 2	Color 3	Input	Output	Connector <sup>1</sup>
K50L	G	R	Υ	Р	PB2	Q
MODEL KEY	G = Green R = Red Y = Yellow B = Blue W = White O = Orange T = Turquoise V = Violet M = Magenta X = No color ir			P = PNP	PB2 = Momentary Push Button	Q = Euro QD Blank = 2 meter cable QP = Euro Pigtail QD

Example Model	# of LED Colors	LED Indicators	Connection	
K50LGXXPPB2Q	1	Green	4-pin Euro integral QD Connector	
K50LRXXPPB2Q	1	Red	4-pin Euro integral QD Connector	
K50LGRXPPB2Q	2	Green, Red	E nin Furn integral OD Connector	
K50LGYXPPB2Q	2	Green, Yellow	5-pin Euro integral QD Connector	
K50LGRYPPB2Q	3	Green, Red, Yellow	8-pin Euro integral QD Connector	



### WARNING: Not To Be Used for Personnel Protection

Never use this device as a sensing device for personnel protection. Doing so could lead to serious injury or death. This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition.

P/N 168310 Rev. C 6/18/2013

<sup>1</sup> Integral QD models only are listed.

<sup>•</sup> For integral 2 m (6.5 ft) PVC cable, omit suffix Q from model number (example, K50LGXXPPB2).

<sup>•</sup> For 150 mm (6 in) PVC pigtail with QD, replace **Q** with QP in model number (example, **K50LGXXPPB2QP**).

<sup>•</sup> A model with a QD requires a mating cordset (see Quick-Disconnect (QD) Cordsets on page 4).

# Installation

Install the K50 sensor at such a height and in a location that will be easy for the user and/or supervisor to see the indicator and comfortable for the user to press the push-button.

# **Specifications**

# Supply Voltage and Current

Operating Voltage: 12 to 30V dc

Current: 65 mA at 12 Vdc; 35 mA at 30 Vdc max. current per LED color

# **Supply Protection Circuitry**

Protected against transient voltages and reverse polarity

# **Switch Contact Rating**

150 mA at 30V dc

#### **Contact Bounce**

10 ms max.

### **Environmental Rating**

IEC IP65

### Construction

Base: polycarbonate

Translucent dome: polycarbonate Push button: thermoplastic

# **Dimensions**

All measurements are in mm (in).

# **Mounting Torque**

2.25 Nm (20 in-lbf) max.

# Connections

Integral Euro-style QD fitting, PVC-jacketed 2 m (6.5 ft) cable or 150 mm (6 in) PVC pigtail with QD, depending on model

# Operating Temperature

-40° to +50° C (-40° to +122° F)

# Max. Relative Humidity

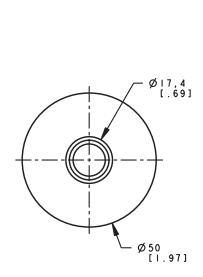
90% at +50° C max. relative humidity (non-condensing)

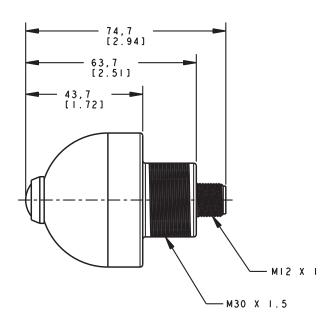
#### Storage Temperature

-40° to +70° C (-40° to +158° F)

# Certifications



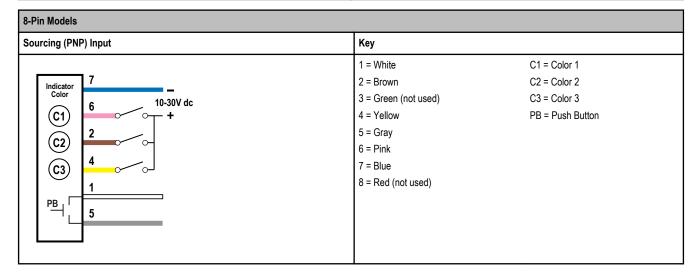




# Hookups

4-Pin Models			
Sourcing (PNP) Input	Кеу		
	1 = Brown		
3	2 = White		
Indicator Color 10-30V dc	3 = Blue		
(C1) 4 (10-30V UC) +	4 = Black		
	C1 = Color 1		
PB	PB = Push Button		

5-Pin Models				
Sourcing (PNP) Input	Key			
10-30V dc   1   1   2   2   2   1   2   2   1   2   2	1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray C1 = Color 1 C2 = Color 2			
PB 5	PB = Push Button			



# Accessories

# Quick-Disconnect (QD) Cordsets

4-Pin Threaded M12/Euro-Style Cordsets					
Model	Length	Style	Dimensions	Pinout	
MQDC-406	1.83 m (6 ft)				
MQDC-415	4.57 m (15 ft)	Straight	<del></del>	1-20-2	
MQDC-430	9.14 m (30 ft)			4-0-3	
MQDC-450	15.2 m (50 ft)		M12 x 1 — 6 14.5 —	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	0.50 m (1.5 ft)		<del> </del>	2	
MQDC1-506	1.83 m (6 ft)	Straight	M12 x 1 — 6 14.5 —	1 = Brown 2 = White	
MQDC1-515	4.57 m (15 ft)				
MQDC1-530	9.14 m (30 ft)				
MQDC1-506RA	1.83 m (6 ft)		22 Tun	3 = Blue	
MQDC1-515RA	4.57 m (15 ft)			4 = Black 5 = Gray	
MQDC1-530RA	9.14 m (30 ft)	Right-Angle			

8-Pin Threaded M12/Euro-Style Cordsets with Shield				
Model	Length	Style	Dimensions	Pinout
MQDC-806	1.83 m (6 ft)	Straight	U 14.0 —	1 7 6 8 3 4 7 6
MQDC-815	4.57 m (15 ft)			1 = White 5 = Gray 2 = Brown 6 = Pink
MQDC-830	9.14 m (30 ft)			3 = Green 7 = Blue 4 = Yellow 8 = Shield

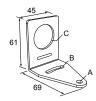
#### **Brackets**

All measurements are in mm

#### 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

36.3 B 68.9

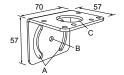
83.2

Bolt thread: SMB30FA, A= 3/8 -  $16 \times 2$  in; SMB30FAM10, A= M10 -  $1.5 \times 50$  Hole size: B=  $\emptyset$  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 =  $42.6 \times 7$ , B =  $\emptyset 6.4$ , C =  $\emptyset 30.1$ 



### 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



# **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.

