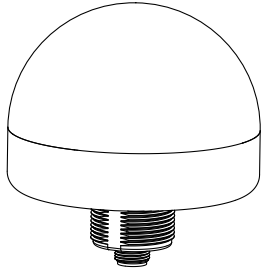


## Datasheet

Large Multicolor Indicator that Alternates Between Active Inputs

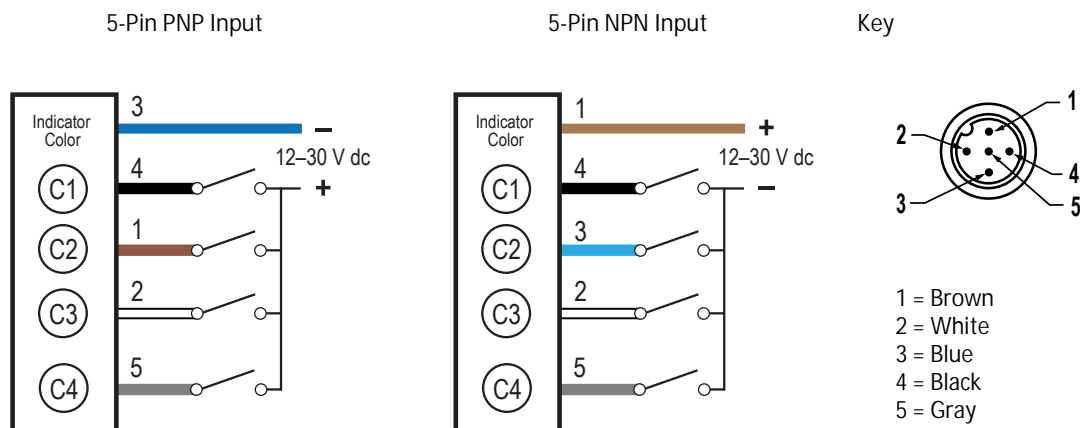


- Bright, uniform indicator light
- Alternates between colors when multiple inputs are active
- Models are available with up to five colors in one device
- Rugged IP67 rated design
- 12 V dc to 30 V dc operation

Model	# of Colors	Colors	Input	Connection <sup>1</sup>
K90TLGRPQ	2	Green, Red	PNP	5-pin M12/Euro-style Quick Disconnect
K90TLGYRPQ	3	Green, Red, Yellow		
K90TLBGRPQ	4	Blue, Green, Yellow, Red		
K90TLWBGYRPQ	5	White, Blue, Green, Yellow, Red		8-pin M12/Euro-style Quick Disconnect
K90TLGRNQ	2	Green, Red	NPN	5-pin M12/Euro-style Quick Disconnect
K90TLGYRNQ	3	Green, Red, Yellow		
K90TLBGRNQ	4	Blue, Green, Yellow, Red		
K90TLWBGYRNQ	5	White, Blue, Green, Yellow, Red		8-pin M12/Euro-style Quick Disconnect

## Wiring

When multiple inputs are on at the same time, the indicator cycles between colors at a rate of 1 Hz.

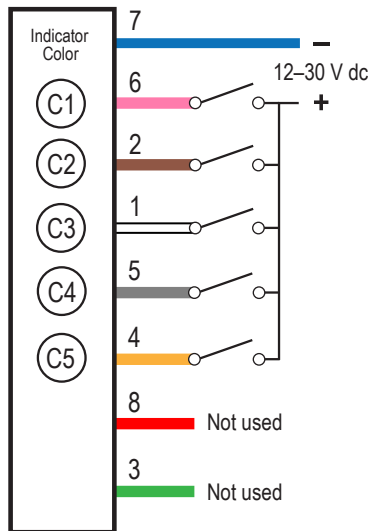


<sup>1</sup> Integral quick disconnect models are listed.

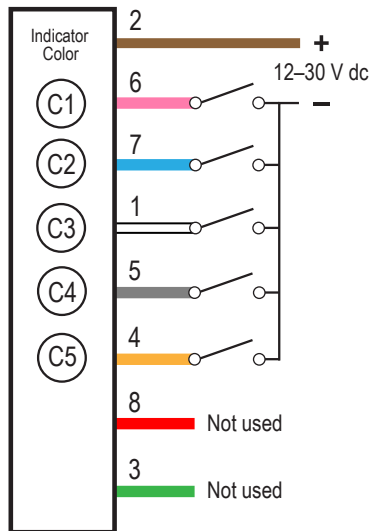
- To order the 150 mm (6 in) PVC cable model with a M12/Euro-style quick disconnect, replace the suffix "Q" with "QP" in the model number. For example, K90TLGRQP.
- To order the 2 m (6.5 ft) PVC cable model, omit the suffix "Q" in the model number. For example, K90TLGR.



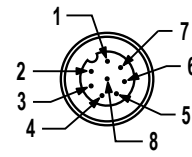
8-Pin PNP Input



8-Pin NPN Input



Key



- 1 = White
- 2 = Brown
- 3 = Green
- 4 = Yellow
- 5 = Gray
- 6 = Pink
- 7 = Blue
- 8 = Red

The red and green wires are not used.

## Specifications

### Supply Voltage and Current

- 12 V dc to 30 V dc
- 475 mA maximum at 12 V dc
- 175 mA maximum at 30 V dc

### Supply Protection Circuitry

Protected against reverse polarity and transient voltages

### Input Response Time

150 ms maximum

### Indicators

2 to 5 colors, depending on model

### Indicator Characteristics

Color	Typical Wavelength or Color Temperature	Typical Intensity
Red	625 nm	65 lumens
Yellow	590 nm	35 lumens
Green	525 nm	150 lumens
Blue	470 nm	55 lumens
White	6000–7100 K	200 lumens

### Construction

Base and dome: Polycarbonate

### Connections

Integral 5-pin M12/Euro-style male quick disconnect; Integral 8-pin M12/Euro-style male quick disconnect; 150 mm (6 in) PVC cable with 5-pin M12/Euro-style male quick disconnect; 150 mm (6 in) PVC cable with 8-pin M12/Euro-style male quick disconnect; or 2 m (6.5 ft) unterminated PVC jacketed cable, depending on model

### Environmental Rating

IEC IP67, Enclosure UL Type 4X, 13

### Vibration and Mechanical Shock

All models meet Mil Std. 202F requirements. Method 201A (vibration: 10 Hz to 60 Hz max., double amplitude 0.06 inch, maximum acceleration 10G). Also meets IEC 947-5-2 requirements: 30G 11 ms duration, half sine wave.

### Operating Conditions

-40 °C to +50 °C (-40 °F to +122 °F)

### 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.

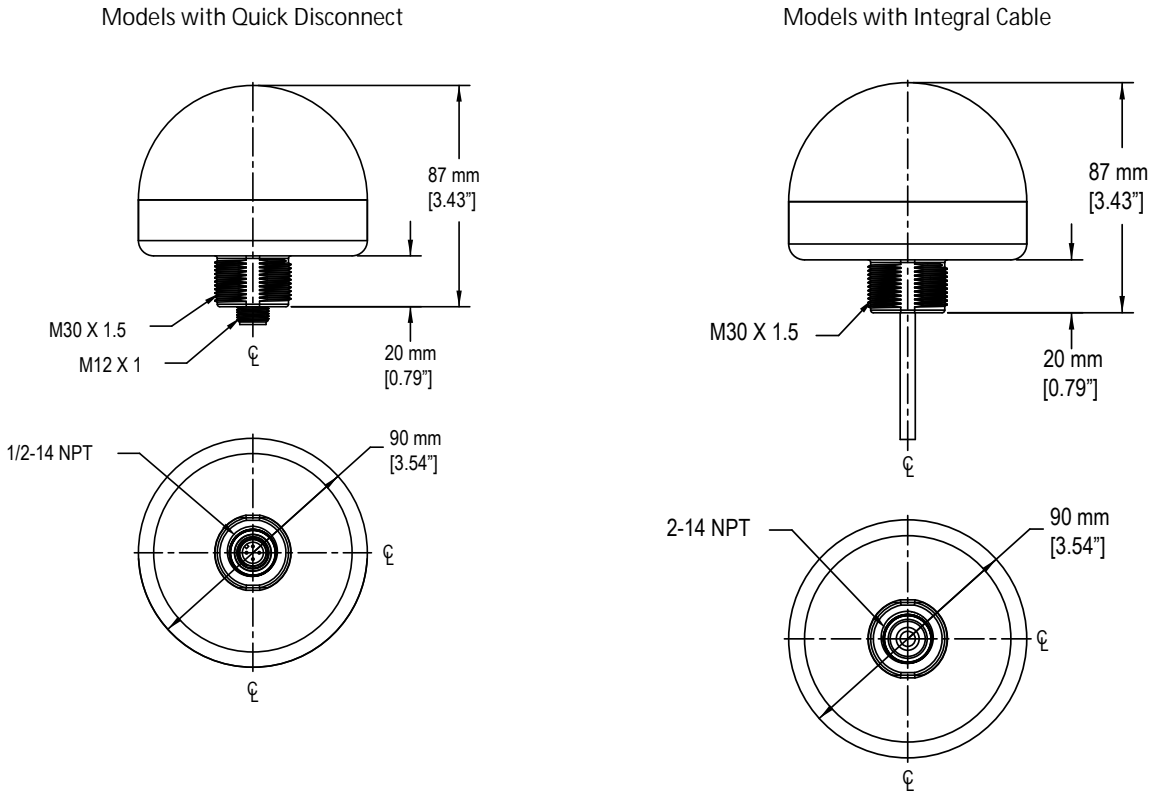
For additional product support, go to [www.bannerengineering.com](http://www.bannerengineering.com).

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

### Certifications



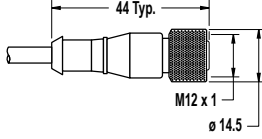
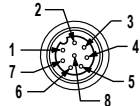
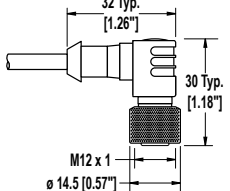
## Dimensions






## Accessories

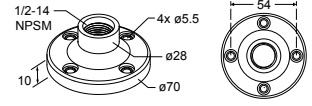
### Cordsets

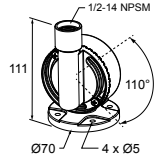
5-Pin Threaded M12/Euro-Style Cordsets—Single Ended				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC1-501.5	0.50 m (1.5 ft)	Straight		<p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>
MQDC1-506	1.83 m (6 ft)			
MQDC1-515	4.57 m (15 ft)			
MQDC1-530	9.14 m (30 ft)			
MQDC1-506RA	1.83 m (6 ft)	Right-Angle		
MQDC1-515RA	4.57 m (15 ft)			
MQDC1-530RA	9.14 m (30 ft)			

8-Pin Threaded M12/Euro-Style Cordsets with Open-Shield				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC2S-806	1.83 m (6 ft)	Straight		 <p>1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red</p>
MQDC2S-815	4.57 m (15 ft)			
MQDC2S-830	9.14 m (30 ft)			
MQDC2S-850	15.2 m (50 ft)			
MQDC2S-806RA	1.83 m (6 ft)	Right-Angle		
MQDC2S-815RA	4.57 m (15 ft)			
MQDC2S-830RA	9.14 m (30 ft)			
MQDC2S-850RA	15.2 m (50 ft)			



Elevated Mount System

Model	Features		Components
SA-M30 - Black Polycarbonate	<ul style="list-style-type: none"> <li>Streamlined black PC or Gray PC thread cover</li> <li>Covers M30 thread on the light base</li> <li>Mounting hardware included</li> </ul>		
SA-M30C - Gray Polycarbonate			
Polished 304 Stainless Steel	Black Anodized Aluminum	Clear Anodized Aluminum	<ul style="list-style-type: none"> <li>Elevated-use stand-off pipe (½ in. NPSM/DN15)</li> <li>Polished 304 stainless steel, black anodized aluminum, or clear anodized aluminum surface</li> <li>½ in. NPT thread at both ends</li> <li>Compatible with most industrial environments</li> </ul> 
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	<ul style="list-style-type: none"> <li>Streamlined black acetal or white UHMW mounting base adapter/cover</li> <li>Connects between ½ in. NPSM/DN15 pipe and 30 mm (1-3/16 in) drilled hole</li> <li>Mounting hardware included</li> </ul>		
SA-E12M30C - White UHMW			


Pipe <b>Mounting</b> Flange			
Model	Features	Construction	
SA-F12	<ul style="list-style-type: none"> <li>For use elevated stand-off pipes (½ in, NPSM/DN15)</li> <li>M5 mounting hardware and nitrile gasket included</li> </ul>	Die-cast zinc base with black paint	

Foldable <b>Mounting</b> Brackets			
Model	Features	Construction	
SA-FFB12	<ul style="list-style-type: none"> <li>For use with 1/2 inch stand-off pipes</li> <li>Stainless steel hardware</li> </ul>	Black polycarbonate	
SA-FFB12C		Gray polycarbonate	

## LMB Sealed Right-Angle Brackets

Model	Description	Construction	
LMB30RA	Direct-Mount Models: Bracket kit with base, 30 mm adapter, set screw, fasteners, o-rings, and gaskets	Black polycarbonate	
LMB30RAC		Gray 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	
LMBE12RAC		Gray polycarbonate	

## Sun Shield

K90DS <ul style="list-style-type: none"> <li>• Use for enhanced visibility in direct sunlight conditions</li> <li>• Polycarbonate</li> </ul>	
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