# EZ-LIGHT™ 2-Color Indicators for Use with Sensors



## Datasheet

#### DC-operated LED indicators

To view or download the latest technical information about this product, including specifications, dimensions, accessories, and wiring, see <a href="http://www.bannerengineering.com">http://www.bannerengineering.com</a>.

	Inputs	
•	T8LGYX7PQP	PNP
	T8LGYX7NQP	NPN
	<ul> <li>Polycarbonate/ABS alloy housing, thermoplastic diffuser</li> <li>IP67</li> </ul>	
8	M18GYX7PQ	PNP
	M18GYX7NQ	NPN
	<ul> <li>Nickel-plated brass housing, thermoplastic diffuser</li> <li>Fully encapsulated IP67</li> </ul>	
<b>©</b>	T18GYX7PQ	PNP
	T18GYX7NQ	NPN
	<ul> <li>Thermoplastic polyester housing, thermoplastic diffuser</li> <li>Fully encapsulated IP67</li> </ul>	
	T30GYX7PQ	PNP
	T30GYX7NQ	NPN
	<ul> <li>Thermoplastic polyester housing, thermoplastic diffuser</li> <li>Fully encapsulated IP67</li> </ul>	

	Inputs			
	K30LGYX7PQ	PNP		
	K30LGYX7NQ	NPN		
	<ul> <li>22 mm threaded polycarbonate base, translucent polycarbonate dome</li> <li>Fully encapsulated IP67, IP69K</li> </ul>			
	K50LGYX7PQ	PNP		
	K50LGYX7NQ	NPN		
	30 mm threaded polycarbonate base, translucent polycarbonate dome     Fully encapsulated IP67, IP69K			
	K50FLGYX7PQ	PNP		
Q	K50FLGYX7NQ	NPN		
	<ul> <li>Polycarbonate base, translucent polycarbonate dome</li> <li>Fully encapsulated IP67, IP69K</li> </ul>			
	K80LGYX7PQ	PNP		
O	K80LGYX7NQ	NPN		
	<ul> <li>ABS and polycarbonate base, translucent polycarbonate dome</li> <li>Electronics fully encapsulated IP67</li> </ul>			

A QD model requires a mating cable; see Cordsets on page 4.

T8L Models: Standard pigtail QD models are listed. To order the integral 4-wire cable model, omit suffix QP (for example, T8LGYX7P).

K80L Models: Standard 4-pin Euro integral QD connector models are listed. To order the terminal-wired model, omit suffix Q (for example, K80LGYX7P).

Other Models: Standard 4-pin Euro integral QD connector models are listed. To order the 2 m (6.5 ft) integral 4-wire cable model, omit suffix Q (example, M18GYX7P). To order the 150 mm (5.9 in) PVC pigtail with 4-pin Euro connector, replace suffix Q with QP (for example, M18GYX7PQP).

Contact the factory for other colors/color combinations, including: blue, white, and orange.



Original Document 121900 Rev. I

# Specifications

#### Supply Voltage and Current

T8L models: 10 to 30 V dc at 20 mA maximum

T18, M18, and K30L models: 10 to 30 V dc at 25 mA maximum per LED color

T30 models: 10 to 30 V dc at 40 mA maximum per LED color K50L, K50FL, and K80L models: 18 to 30 V dc at 40 mA maximum per LED color

#### Indicators

Entire translucent diffuser or dome provides indication. Green and yellow, when connected to discrete output of 3-wire or 4-wire sensors. For other colors, contact factory for availability.

#### Input Response Time

Indicator ON/OFF: 1 ms max.

#### **Environmental Rating**

Rated IEC IP67. T8L not encapsulated; K80L has encapsulated electronics only; other models fully encapsulated. K30L, K50L, and K50FL QD models meet IP69K, per DIN 40050-9. Cabled models also meet IP69K if the cable and cable entrance are protected from high-pressure spray.

#### Operating Conditions

Temperature: -40 °C to +50 °C (-40 °F to +122 °F)

#### Certifications



K30L and K50L models only: CUL) US LIS

#### Connections

T8L models: 4-pin Euro-style 150 mm (6 in) pigtail QD (QP) or 4-wire, 2 m (6.5 ft) integral cable, depending on model

K80L models: 4-pin Euro-style integral QD (Q)standard; terminal-wired models available for use with bulk cable; compression fitting optional. Contact Factory for cable information.

Other models: 4-pin Euro-style integral QD (Q), 150 mm (6 in) pigtail QD (QP), or 4-wire, 2 m (6.5 ft) integral cable, depending on model

#### Construction

See Models lists

#### Required Overcurrent Protection



WARNI NG: 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.

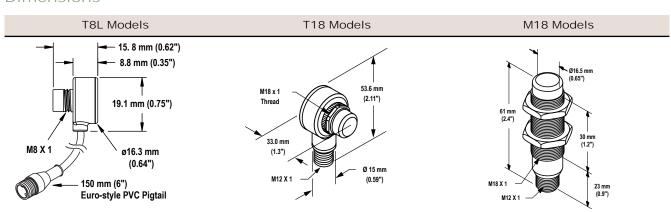
Supply wiring leads < 24 AWG shall not be spliced

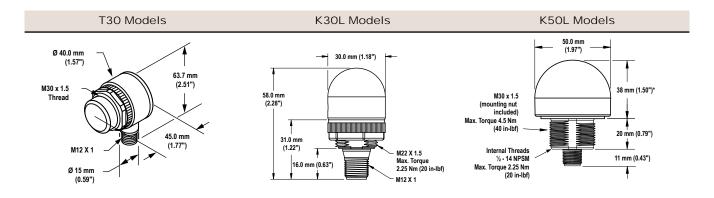
For additional product support, go to http://

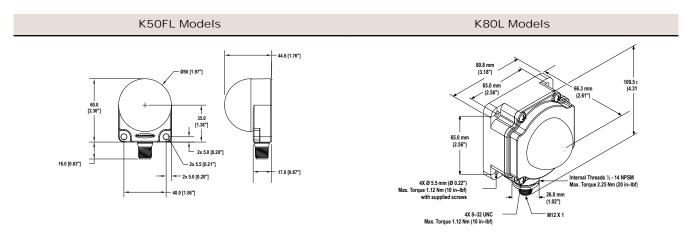
www.bannerengineering.com.

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	

#### **Dimensions**







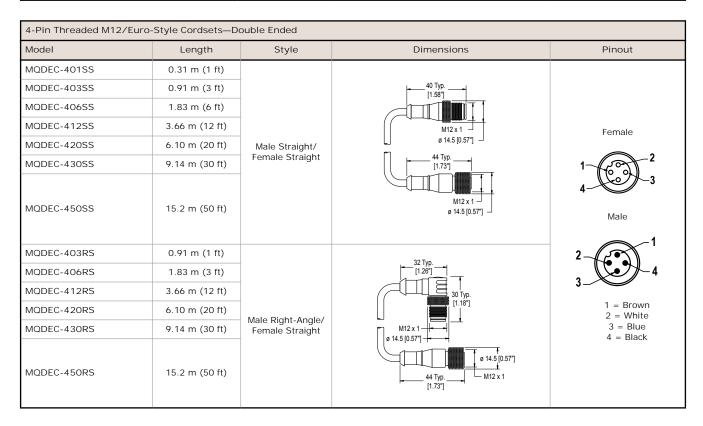
# Wiring

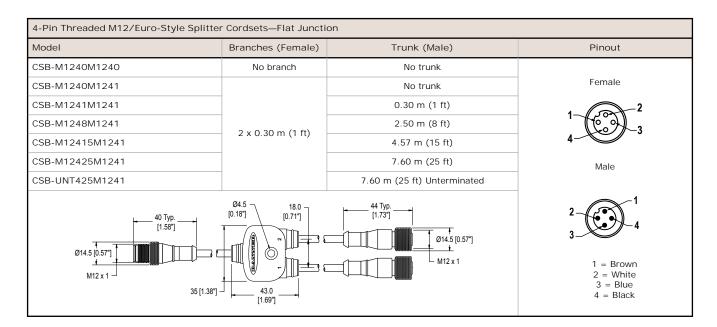
# NPN Models PNP Models 1. Brown 2. White 3. Blue 4. Black Legend T.C. = To Controller Y = Yellow G = Green X = Not Used

- \*Yellow ON = Green OFF
- \*\* This object represents the sensor

### Cordsets

4-Pin Threaded M12/Euro-Style Cordsets					
Model	Length	Style	Dimensions	Pinout (Female)	
MQDC-406	1.83 m (6 ft)	Straight	<del></del>		
MQDC-415	4.57 m (15 ft)				
MQDC-430	9.14 m (30 ft)				
MQDC-450	15.2 m (50 ft)		M12 x 1 → ø 14.5 →	1-2-2	
MQDC-406RA	1.83 m (6 ft)	Right-Angle	, 32 Тур.	43	
MQDC-415RA	4.57 m (15 ft)			[1.26"]	
MQDC-430RA	9.14 m (30 ft)		30 Typ.	1 = Brown 2 = White	
MQDC-450RA	15.2 m (50 ft)		M12 x 1	3 = Blue 4 = Black	





# 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.

# Copyright Notice

Any misuse, abuse, or improper application or installation of this product or use of the product for personal protection applications when the product is identified as not intended for such purposes will void the product warranty. Any modifications to this product without prior express approval by Banner Engineering Corp will void the product warranties. All specifications published in this document are subject to change; Banner reserves the right to modify product specifications or update documentation at any time. For the most recent version of any documentation, refer to: <a href="https://www.bannerengineering.com">www.bannerengineering.com</a>. <a href="https://www.bannerengineering.com">Banner Engineering.com</a>. <a href="https://www.bannerengineering.com">www.bannerengineering.com</a>. <a href="https://www.bannerengineering.com">Banner Engineering.com</a>. <a href="https://www.bannerengineering.com">Banner Engineering.com</a>.