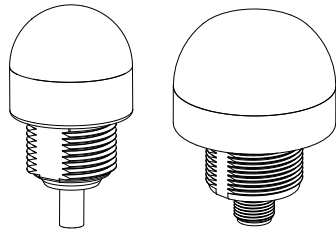


EZ-LIGHT® K30L and K50L Hazardous Area (Ex nA) Indicators

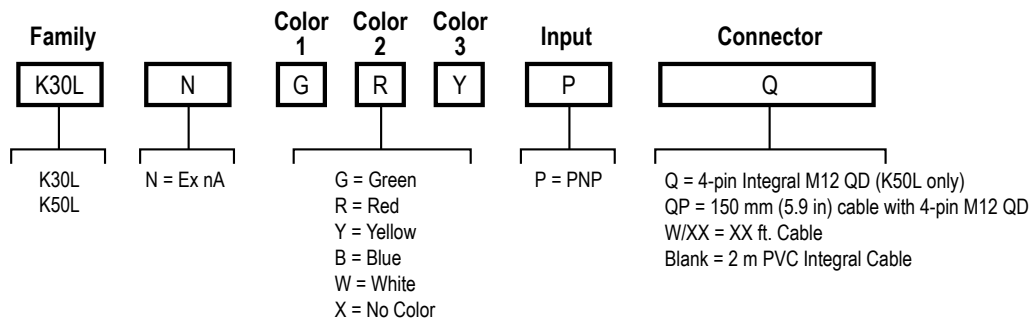


Datasheet



- For use in hazardous areas
- ATEX, CSA c/us, UKCA and IECEx certifications
- Fully sealed and rated to IP67/IP69K per DIN 40050-9
- 1-, 2-, or 3-color models available; 5 available colors

Models



K30L Models

Model	Connection	LED Function	Input
K30LNGXXP	2 m (6.5 ft) PVC integral cable	1 Color: Green	PNP
K30LNYXXP		1 Color: Yellow	
K30LNRXXP		1 Color: Red	
K30LNBXXP		1 Color: Blue	
K30LNWXXP		1 Color: White	
K30LNGRXP		2 Color: Green, Red	
K30LNGYXP		2 Color: Green, Yellow	
K30LNGYXP		2 Color: Red, Yellow	
K30LNGRYP		3 Color: Green, Red, Yellow	



K50L Models

Model	Connection ¹	LED Function	Input
K50LNGXXPQ	4-pin M12 integral quick disconnect connector	1 Color: Green	PNP
K50LNYXXPQ		1 Color: Yellow	
K50LNRXXPQ		1 Color: Red	
K50LNBXXPQ		1 Color: Blue	
K50LNWXXPQ		1 Color: White	
K50LNGRXPQ		2 Color: Green, Red	
K50LNGYXPQ		2 Color: Green, Yellow	
K50LNGYXPQ		2 Color: Red, Yellow	
K50LNGRYPQ		3 Color: Green, Red, Yellow	

Installation Instructions

Ex/HazLoc Applications

**WARNING:**

- **Explosive Atmospheres/Hazardous Locations**
- It is the user's responsibility to ensure that all local, state, and national laws, rules, codes, or regulations relating to the installation and use of this device in any particular application are satisfied. This device must be installed by a Qualified Person ², in accordance with this document and applicable regulations.

**WARNING:**

- **Explosion Hazard**
- Do not disconnect equipment unless the power has been switched off or the area is known to be non-hazardous.

**CAUTION:**

- **Electrostatic Discharge (ESD) Special Conditions for Safe Use**
- Parts of the enclosure are non-conducting and can generate an ignition-capable level of ESD.
- Clean the equipment with only a damp cloth.

General Notes and Conditions for Use

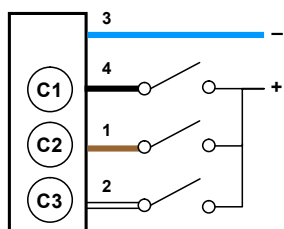
- See Specifications and Wiring Diagrams for important information concerning entity parameters, permissible locations, electrical connections and certifications.
- In addition to the warning above concerning user responsibility, the installation must comply with the following:
 - All installations must comply with all manufacturer's instructions.
 - U.S. Installations: The relevant requirements of the National Electric Code® (ANSI/NFPA-70 NEC®).
 - Canadian Installations: The relevant requirements of the Canadian Electrical Code (CSA C22.1).
 - ATEX and IECEx Installations: The relevant requirements of EN IEC 60079-14 and applicable National regulations.
 - For quick disconnect (QD) models only: Use Banner **MQDC-4##** cordsets (see [Cordsets](#) on page 4), or suitable M12 quick disconnect cordsets with threaded retaining nut (see [Specifications](#) on page 3). The cordset must be securely fastened using the M12×1 quick disconnect retaining nut to prevent disconnection. Maximum connector torque: 6 ft·lbs.
- Do not attempt any repairs to this device; it contains no field-replaceable parts or components. Tampering and/or replacement with non-factory components may adversely affect the safe use of the system.
- The dust rating of enclosures/panels may be invalidated by the installation of the EZ-LIGHT(s). The installation of the EZ-LIGHT(s) in a particular enclosure/panel is subject to the evaluation/acceptance of the applicable approval agency.
- For K50L installations in Dust Atmospheres, use the female NPT conduit entry with applicable wiring methods in accordance with Canadian Electrical Code (Canada) and National Electrical Code (United States).
- The nonconducting materials of this device may be susceptible to ignition-capable level of electrostatic charging and precautions must be taken to avoid this. The user/installer shall ensure that the equipment is not installed in a location where it may be subjected to external conditions (such as high-pressure steam) which are conducive to creating a build-up of electrostatic charges.

¹ To order the 150 mm (6 in) PVC cable model with a 4-pin M12 quick disconnect, replace the suffix "Q" with "QP" in the model number. For example, K50LIGXXPQP. Models with a quick disconnect require a mating cordset.

² A Qualified Person is a person who, by possession of a recognized degree or certificate of professional training, or who, by extensive knowledge, training and experience, has successfully demonstrated the ability to solve problems relating to the subject matter and work.

- If the equipment is likely to come into contact with aggressive substances³, then it is the responsibility of the user to take suitable precautions⁴ that prevent it from being adversely affected, thus ensuring that the type of protection is not compromised.
- Clean with a damp cloth only.
- For indicators with multiple colors, only one color is intended to be on at a time.
- The 30 V rated supply shall be protected such that transients are limited to a maximum of 42 V.
- For installation of models with a "Q" or "QP" suffix, the quick disconnect connector must be protected when installed, to maintain IP67 or IP69K ingress protection.

Wiring Diagram



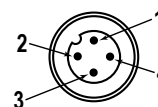
Wiring Key

1 = Brown
2 = White
3 = Blue
4 = Black

Color Key

C1 = Color 1
C2 = Color 2
C3 = Color 3

Pinout



Specifications

Supply Voltage and Current

10 V DC to 30 V DC (25 mA maximum)

Indicators

Entire translucent diffuser or dome provides indication. LEDs are independently selected: Green, Red, Amber, Blue, or White; 1, 2, or 3 colors, depending on model. For other colors/ combinations, contact Banner Engineering for availability.

Construction

Base: polycarbonate
Translucent dome: polycarbonate

Environmental Rating

IP67/IP69K per DIN 40050-9

Approvals

CSA-c/us

Gas & Vapors: Class I Zone 2 AEx/Ex nA IIC T4 Gc / Class I Div 2 Groups ABCD
Dust: Class II Zone 22 AEx/Ex tc IIIC T135°C Dc / Class II Div 2 Groups EFG, Class III Div 2 (K50L only)
CSA 14.2679646

ATEX/IECEx/UKCA

Gas & Vapours: II 3 G Ex nA IIC T4 Gc (Group IIC Zone 2)
Dust: II 3 D Ex tc IIIC T135°C Dc (Group IIIC Zone 22)
Sira 13ATEX4271X
IECEx SIR 13.0099X
CSAE 21UKEX4683X
ATEX/UKCA: EN IEC 60079-0:2018 & EN 60079-15:2010
IECEx: IEC 60079-0:2017 Ed.7 & IEC 60079-15:2010 Ed.4

Connections

K30: 2 m (6.5 ft) PVC integral cable, or 150 mm (5.9 in) PVC cable with 4-pin M12 quick disconnect connector

K50: 4-pin M12 integral quick disconnect connector, 2 m (6.5 ft) PVC integral cable, or 150 mm (5.9 in) PVC cable with 4-pin M12 quick disconnect connector

Connecting 4-pin M12 quick disconnect cordsets (see [Cordsets](#) on page 4): Female single-ended Multiconductor cable (at minimum): UL Style 2517, 24 AWG wire, rated ≥ 80 °C; M12 quick disconnect connector: per IEC 61076-2-101, must have threaded M12 \times 1 retaining nut

Operating Conditions

TA = -40 °C to +50 °C (-40 °F to +122 °F)

Certifications



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

Turck Banner LTD
Blenheim House, Blenheim
Court, Wickford, Essex
SS11 8YT, Great Britain

IEC IECEx SIR 13.0099X
ATEX Sira 13ATEX4271X
CSAE 21UKEX4683X
CSA CoC 2679646

Figure 1. K30L Product Label

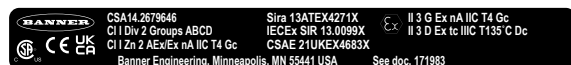


Figure 2. K50L Product Label



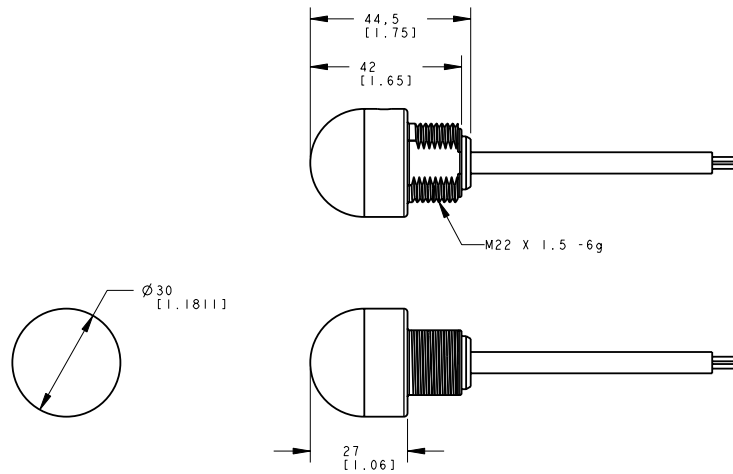
³ Aggressive substances—for example, acidic liquids or gases that may attack metals, or solvents that may affect polymeric materials.

⁴ Suitable precaution—for example, regular checks as part of routine inspections or establishing from the materials data sheet that it is resistant to specific chemicals.

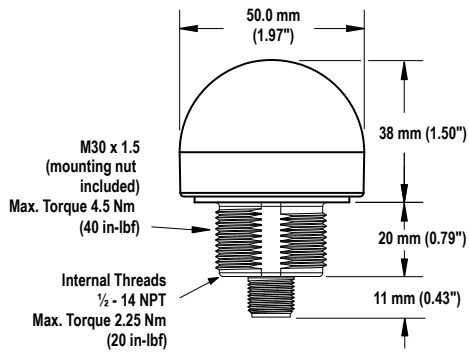
Dimensions

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

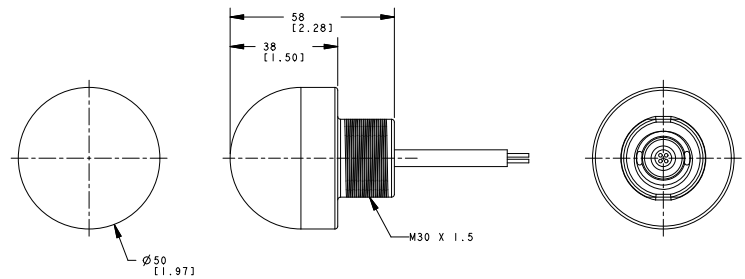
K30L Cabled Models



K50L Quick Disconnect Models



K50L Cabled Models



Cordsets

4-Pin Threaded M12 Cordsets—Single Ended				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	2 m (6.56 ft)	Straight		
MQDC-415	5 m (16.4 ft)			
MQDC-430	9 m (29.5 ft)			
MQDC-450	15 m (49.2 ft)			
MQDC-406RA	2 m (6.56 ft)	Right-Angle		
MQDC-415RA	5 m (16.4 ft)			
MQDC-430RA	9 m (29.5 ft)			
MQDC-450RA	15 m (49.2 ft)			

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.

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more sensors, more solutions