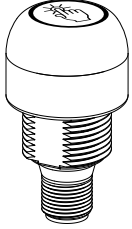


# EZ-LIGHT® Touch Gen 2 K30 Series Illuminated Multipurpose Buttons



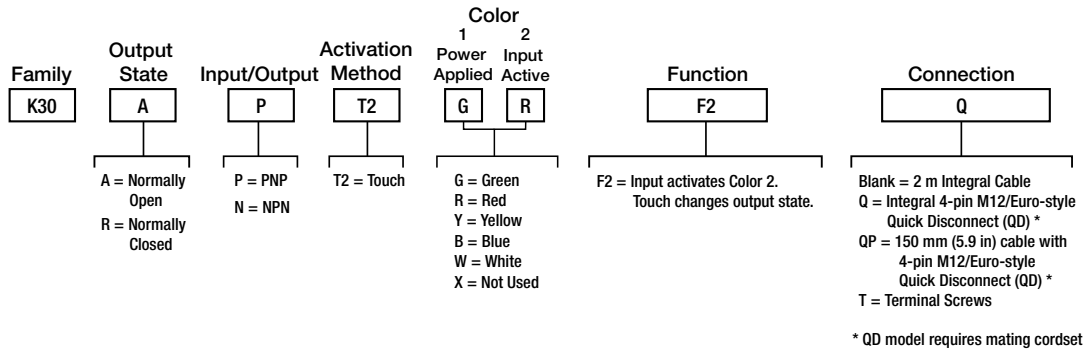
## Datasheet

General Purpose Multicolor Indicator with Independent Momentary Touch Button Output



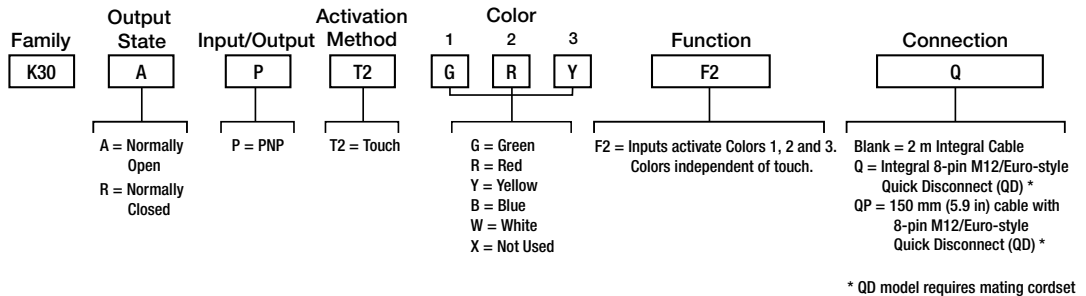
- Excellent immunity to false triggering by water spray, detergents, oils, and other foreign materials
- Rugged, cost-effective, and easy-to-install multicolor indicator with touch button
- Waterproof DIN IP69K construction for washdown environments
- Two or three independent colors in one unit: Color 3 overrides Colors 1 and 2, Color 2 overrides Color 1
- Available with PNP and NPN inputs/outputs, depending on model
- Ergonomically designed to eliminate hand, wrist, and arm stresses associated with repeated switch operation; require no physical force to operate
- Can be actuated with bare hands or gloves
- Five color options available
- 12 V dc to 30 V dc operation
- Terminal connection models available for panel wiring applications

## Models: 1 and 2 Colors



Sample Model	Description
K30APT2XRF2Q	Normally open output state, momentary output function, PNP input and output. Color 1: None, Color 2: Red input active; touch changes output state. Integral 4-pin M12/Euro-style quick disconnect.
K30ANT2GRF2T	Normally open output state, momentary output function, NPN input and output. Color 1: Green; power applied, Color 2: Red input active; touch changes output state. Terminal screws.

## Models: 3 Color

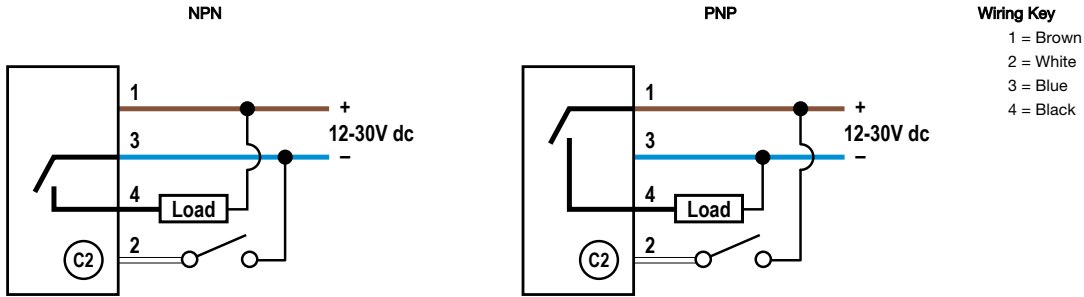


Sample Model	Description
K30APT2GRYF2Q	Normally open output state, momentary output function, PNP input and output. Color 1: Green, Color 2: Red, Color 3: Yellow. Color 3 overrides colors 1 and 2, color 2 overrides color 1. Touch changes output state. Integral 8-pin M12/Euro-style quick disconnect.



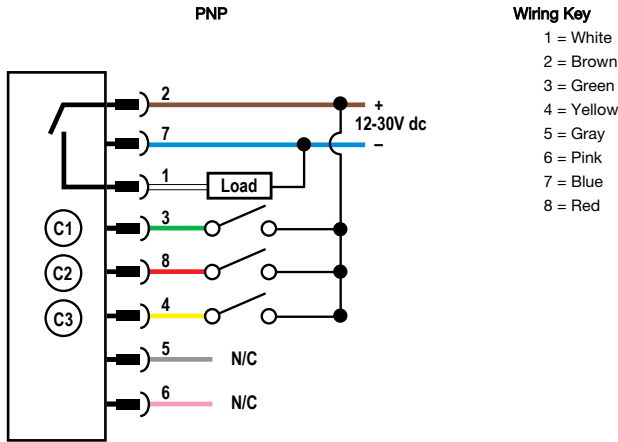
# Wiring

## 1 and 2 Color Models



- Wiring Key**
- 1 = Brown
  - 2 = White
  - 3 = Blue
  - 4 = Black

## 3 Color Model



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



**Note:** Cabled wiring diagrams are shown. Quick disconnect wiring diagrams are functionally identical.

# Specifications

**Supply Voltage**

12 V dc to 30 V dc

**Supply Current**

55 mA max current (exclusive of load)

**Supply Protection Circuitry**

Protected against reverse polarity and transient voltages

**Touch Dwell Time**

If a touch dwells for longer than 60 seconds, the output will revert back to the untouched state.

**Output Rating**

Maximum Load: 150 mA  
 ON-state saturation voltage: < 2 V dc at 10 mA; < 2.5 V dc at 150 mA  
 OFF-state leakage current: < 10 µA at 30 V dc

**Output Response Time**

150 milliseconds On and Off

**Power-Up Delay**

300 milliseconds

**Connections**

Integral 4-pin or 8-pin M12/Euro-style male quick disconnect (QD); 2 m (6.5 ft) PVC integral cable; 150 mm (6 in) PVC cable with a 4-pin or 8-pin M12/Euro-style male quick disconnect (QD)

**Construction**

Housing: polycarbonate  
 Translucent dome: polycarbonate  
 Mounting nut: PBT

**Mounting**

M22 × 1.5 Threaded base, max torque 2.25 N-m (20 in-lbf)

**Indicator Characteristics**

Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Lumen Output (Typical at 25 °C)
Green	520 - 535nm	4.4
Red	620 - 630nm	1.7
Yellow	585 - 595nm	4.4
Blue	465 - 475nm	1.0
White	5665 - 9000K	5.0

**Environmental Rating**

Rated IEC IP67, DIN IP69K  
 Cabled models also meet DIN IP69K if the cable and cable entrance are protected from high-pressure spray. Indicator side of terminal models meet IEC IP67, and DIN IP69K when installed in an enclosure.  
 Screw connection points meet IEC IP00.  
 Meets UL type 4X and 13, when used in a suitable enclosure.

**Operating Conditions**

-40 °C to +50 °C (-40 °F to +122 °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**

Vibration 10 Hz to 55 Hz 1.0 mm p-p amplitude per IEC 60068-2-6  
 Shock 30G 11 ms duration, half sine wave per IEC 60068-2-27

**Certifications**



**Required Overcurrent Protection**



**WARNING:** Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

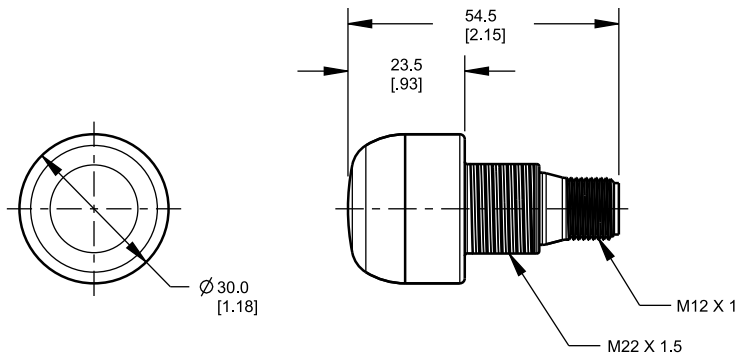
Overcurrent protection is required to be provided by end product application per the supplied table.  
 Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.  
 Supply wiring leads < 24 AWG shall not be spliced.  
 For additional product support, go 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

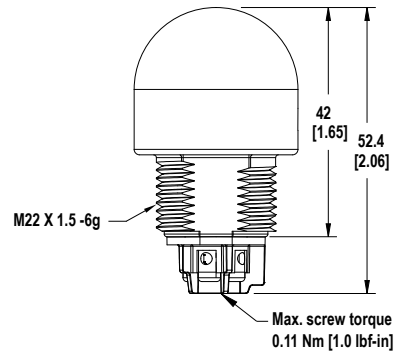
**Dimensions**

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

**Quick-Disconnect Models**

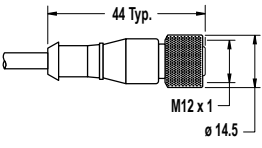
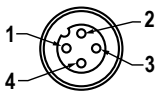
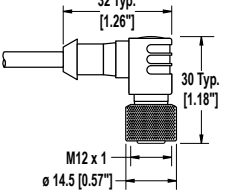


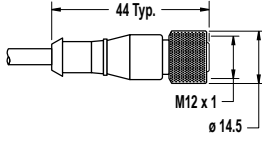
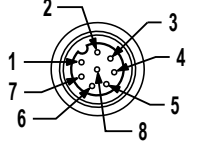
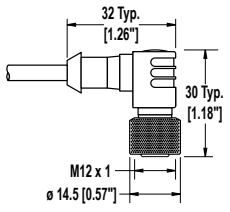
**Terminal Models**



## Accessories

### Cordsets

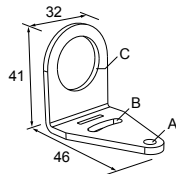
4-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	1.83 m (6 ft)	Straight		 <p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
MQDC-415	4.57 m (15 ft)			
MQDC-430	9.14 m (30 ft)			
MQDC-450	15.2 m (50 ft)			
MQDC-406RA	1.83 m (6 ft)	Right-Angle		
MQDC-415RA	4.57 m (15 ft)			
MQDC-430RA	9.14 m (30 ft)			
MQDC-450RA	15.2 m (50 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)			

### Brackets

#### SMB22A

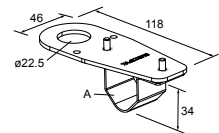
- Right-angle bracket with curved slot for versatile orientation
- 12-ga. stainless steel
- Mounting hole for 22 mm sensor



Hole center spacing: A to B = 26.0  
Hole size: A = ø 4.6, B = 4.6 x 16.9, C = 22.2

#### SMB22FVK

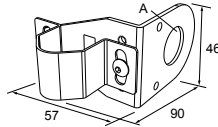
- V-clamp, flat bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor



Hole size: A = ø 22.5

**SMB22RAVK**

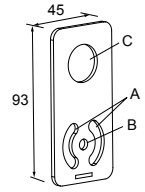
- V-clamp, right-angle bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor



**Hole size:** A =  $\phi$  22.5

**SMBAMS22P**

- Flat SMBAMS series bracket with 22 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel

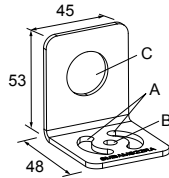


**Hole center spacing:** A = 26.0, A to B = 13.0

**Hole size:** A = 26.8 x 7.0, B =  $\phi$  6.5, C =  $\phi$  22.5

**SMBAMS22RA**

- Right-angle SMBAMS series bracket with 22 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel

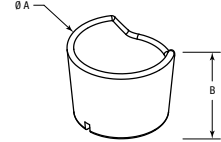


**Hole center spacing:** A = 26.0, A to B = 13.0

**Hole size:** A = 26.8 x 7.0, B =  $\phi$  6.5, C =  $\phi$  22.5

**TC-K30-CL**

- Touch cover



**Diameter:** A = 40.7

**Height:** B = 31

All measurements are listed in millimeters, unless noted otherwise.

## Banner Engineering Corp. Limited Warranty

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## FCC Part 15 and CAN ICES-3 (B)/NMB-3(B)

This device complies with part 15 of the FCC Rules and CAN ICES-3 (B)/NMB-3(B). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules and CAN ICES-3 (B)/NMB-3(B). These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the manufacturer.