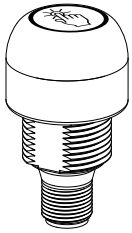


EZ-LIGHT® Touch Gen 2 K30 Series Illuminated Multipurpose Buttons



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 IP69K construction for washdown environments
- Two independent colors in one unit—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 in gloves
- 12 to 30 V dc operation

Models

Model ¹	I/O Type	Output State	Light Color 1 (Power Applied)	Light Color 2 (Input Active)	Connection
K30APT2XRF2Q	PNP	N.O.	-	Red	Integral 4-pin M12/Euro-style male quick disconnect (QD)
K30APT2XGF2Q			-	Green	
K30APT2GRF2Q			Green	Red	
K30APT2RGF2Q			Red	Green	
K30ANT2XRF2Q	NPN		-	Red	
K30ANT2XGF2Q			-	Green	
K30ANT2GRF2Q			Green	Red	
K30ANT2RGF2Q			Red	Green	

Specifications

Supply Voltage
12 to 30 V dc

Supply Current
55 mA max current (exclusive of load)

Supply Protection Circuitry
Protected against reverse polarity and transient voltages

Output Rating
Maximum Load: 150 mA
ON-state saturation voltage: < 2 V at 10 mA dc; < 2.5 V at 150 mA dc
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 M12/Euro-style male quick disconnect (QD); 2 m (6.5 ft) PVC integral cable; 150 mm (6 in) pigtail PVC cable with a 4-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)

¹ Integral QD models only are listed.

- To order the 4-pin 150 mm (5.9 in) Euro-style PVC pigtail models, replace suffix Q with QP in the model number (example, K30APT2XRF2QP).
- To order the 2 m (6.5 ft) cable models, omit suffix Q from the model number (example, K30APT2XRF2).
- A model with a QD requires a mating cable (see Cordsets).



Environmental Rating

IEC IP67, 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)
 Humidity: 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



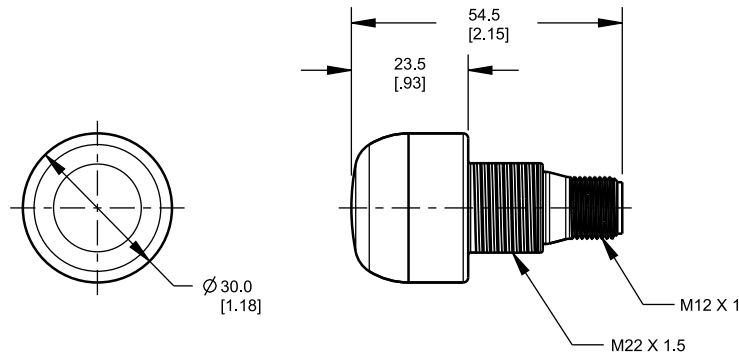
WARNING: Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

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 <http://www.bannerengineering.com>.

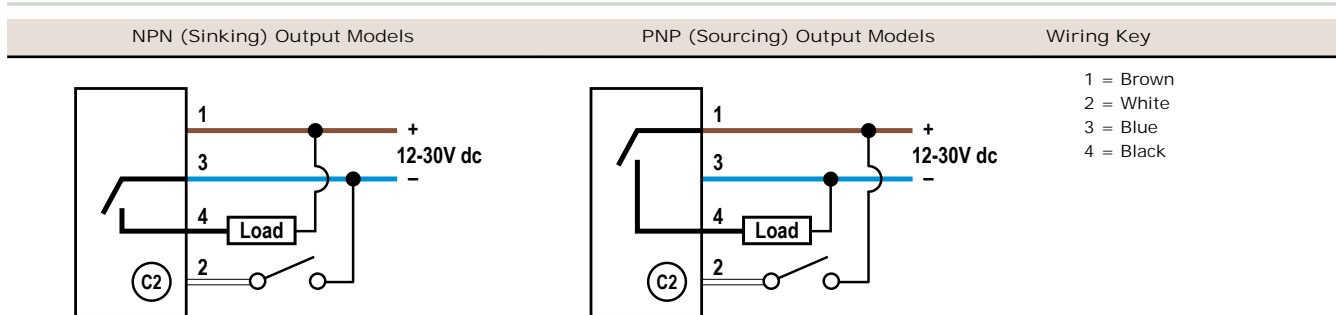
Supply Wiring (AWG)	Required Overcurrent Protection (Amps)
20	5.0
22	3.0
24	2.0
26	1.0
28	0.8
30	0.5

Dimensions

All measurements are listed in millimeters (inches), unless noted otherwise.



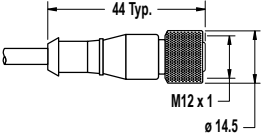
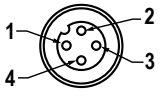
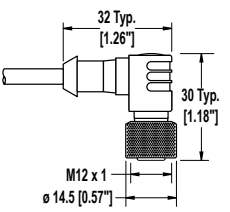
Wiring



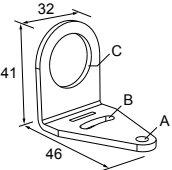
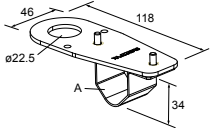
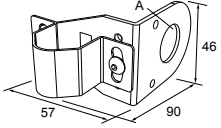
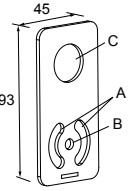
Cabled wiring diagrams are shown. Quick disconnect (QD) wiring diagrams are functionally identical.

Accessories

Cordsets

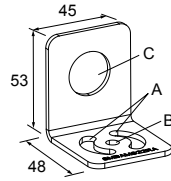
4-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	1.83 m (6 ft)	Straight		 <p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
MQDC-415	4.57 m (15 ft)			
MQDC-430	9.14 m (30 ft)			
MQDC-450	15.2 m (50 ft)			
MQDC-406RA	1.83 m (6 ft)	Right-Angle		
MQDC-415RA	4.57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

Brackets

<p>SMB22A</p> <ul style="list-style-type: none"> Right-angle bracket with curved slot for versatile orientation 12-ga. stainless steel Mounting hole for 22 mm sensor  <p>Hole center spacing: A to B = 26.0 Hole size: A = ø 4.6, B = 4.6 x 16.9, C = 22.2</p>	<p>SMB22FVK</p> <ul style="list-style-type: none"> 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  <p>Hole size: A = ø 22.5</p>
<p>SMB22RAVK</p> <ul style="list-style-type: none"> 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  <p>Hole size: A = ø 22.5</p>	<p>SMBAMS22P</p> <ul style="list-style-type: none"> Flat SMBAMS series bracket with 22 mm hole for mounting sensors Articulation slots for 90+° rotation 12-ga. (2.6 mm) cold-rolled steel  <p>Hole center spacing: A = 26.0, A to B = 13.0 Hole size: A = 26.8 x 7.0, B = ø 6.5, C = ø 22.5</p>

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

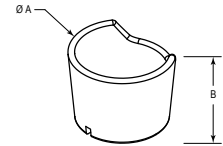


Hole center spacing: A = 26.0, A to B = 13.0

Hole size: A = 26.8 x 7.0, B = \varnothing 6.5, C = \varnothing 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

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.

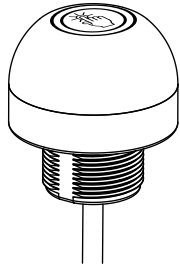
EZ-LIGHT® Touch Gen 2 K50 FDA-Grade Illuminated Multipurpose Buttons



Datasheet

General purpose multicolor indicator with independent momentary touch button output

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



- FDA-grade materials; rated to IEC IP67, IP68, and IP69K
- Laser marked information withstands aggressive cleaning procedures
- 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
- 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 in gloves
- 12 to 30 V dc operation

Models

Model ¹	I/O Type	Output State	Color 1	Color 2	Color 3	Connection
K50APT2FGRYF2QP	PNP	N.O.	Green	Red	Yellow	150 mm (6 in) pigtail PVC cable with a 8-pin M12/Euro-style male, stainless steel, quick disconnect (QD)
K50RPT2FGRYF2QP		N.C.				
K50ANT2FGRYF2QP	NPN	N.O.				
K50RNT2FGRYF2QP		N.C.				

Indicator and Output Behavior

Table 1: PNP Models

Input Actions				Touch Button Actions		
Input #1: Pin 3 Green Wire	Input #2: Pin 8 Red Wire	Input #3: Pin 4 Yellow Wire	LED Color	Output Type	Touch	Output: Pin 1 White Wire
Open or -Vdc	Open or -Vdc	Open or -Vdc	Light Off	N.O.	Not touched	PNP Output Off
+V dc	Open or -Vdc	Open or -Vdc	Color #1 On		Touched	PNP Output On
+V dc	+V dc	Open or -Vdc	Color #2 On	N.C.	Not touched	PNP Output On
+V dc	+V dc	+V dc	Color #3 On		Touched	PNP Output Off
Open or -Vdc	+V dc	Open or -Vdc	Color #2 On			
Open or -Vdc	+V dc	+V dc	Color #3 On			
Open or -Vdc	Open or -Vdc	+V dc	Color #3 On			
+V dc	Open or -Vdc	+V dc	Color #3 On			

Table 2: NPN Models

Input Actions				Touch Button Actions		
Input #1: Pin 3 Green Wire	Input #2: Pin 8 Red Wire	Input #3: Pin 4 Yellow Wire	LED Color	Output Type	Touch	Output: Pin 1 White Wire
Open or +V dc	Open or +V dc	Open or +V dc	Light Off	N.O.	Not touched	NPN Output Off

¹ To order the 2 m (6.5 ft) cable models, omit suffix QP from model number (example, K50APT2FGRYF2).



Input Actions				Touch Button Actions		
Input #1: Pin 3 Green Wire	Input #2: Pin 8 Red Wire	Input #3: Pin 4 Yellow Wire	LED Color	Output Type	Touch	Output: Pin 1 White Wire
-Vdc	Open or +V dc	Open or +V dc	Color #1 On	N.C.	Touched	NPN Output On
-Vdc	-Vdc	Open or +V dc	Color #2 On		Not touched	NPN Output On
-Vdc	-Vdc	-Vdc	Color #3 On		Touched	NPN Output Off
Open or +V dc	-Vdc	Open or +V dc	Color #2 On			
Open or +V dc	-Vdc	-Vdc	Color #3 On			
Open or +V dc	Open or +V dc	-Vdc	Color #3 On			
-Vdc	Open or +V dc	-Vdc	Color #3 On			

Specifications

Supply Voltage
12 to 30 V dc

Supply Current

- < 75 mA max current at 12 V dc (exclusive of load)
- < 50 mA max current at 30 V dc (exclusive of load)

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Output Rating

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

Output Response Time

50 milliseconds On and Off

Environmental Rating

IEC IP67, IP69K per DIN 40050-9.

Operating Conditions

- 40 °C to +50 °C (-40 °F to +122 °F)
- 90% at 50 °C maximum relative humidity (non-condensing)

Storage

-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



Power-Up Delay
300 milliseconds

Indicators

- Color 1: Green
- Color 2: Red
- Color 3: Yellow

Connections

150 mm (6 in) pigtail PVC cable with a 8-pin M12/Euro-style male, stainless steel, quick disconnect (QD), or 2 m (6.5 ft) PVC integral cable

Construction

Base, dome, and nut: FDA-grade polycarbonate

Mounting

M30 × 1.5 Threaded base Max torque 4.5 N·m (40 in-lbf)

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.

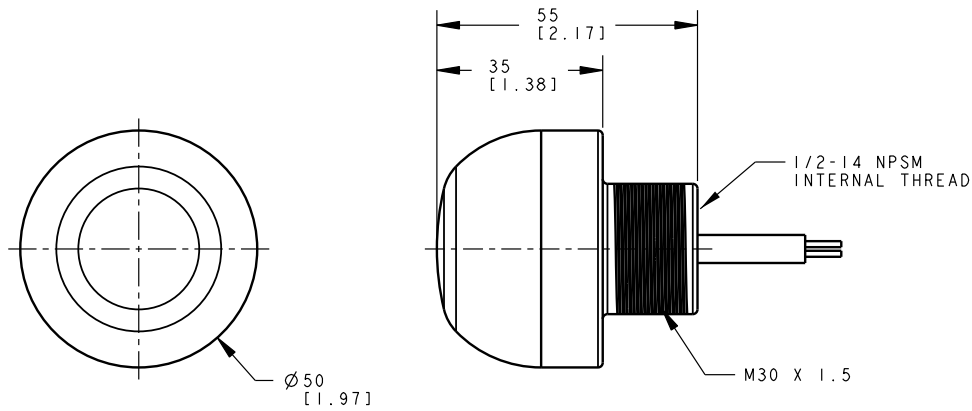
Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.

Supply wiring leads < 24 AWG shall not be spliced.

For additional product support, go to <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.

Wiring Diagram

NPN (Sinking) Output Models	PNP (Sourcing) Output Models	Wiring Key	Pinout
		<p>1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red</p>	

Accessories

Cordsets

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)			

8-Pin Threaded M12/Euro-Style Cordsets with Open-Shield				
Model	Length	Style	Dimensions	Pinout (Female)
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)			

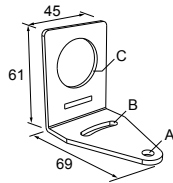
8-Pin Threaded M12/Euro-Style Cordsets with Open-Shield—Washdown, Stainless Steel				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-WDSS-0806	1.83 m (6 ft)	Straight		
MQDC-WDSS-0815	4.57 m (15 ft)			
MQDC-WDSS-0830	9.14 m (30 ft)			

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

Brackets

SMB30A

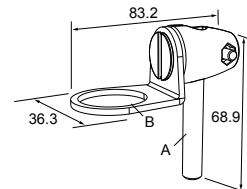
- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- 12-ga. stainless steel



Hole center spacing: A to B=40
 Hole size: A=ø 6.3, B= 27.1 x 6.3, C=ø 30.5

SMB30FA

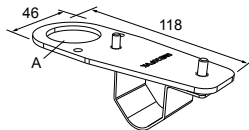
- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-ga. 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric and inch size bolt available



Bolt thread: SMB30FA, A= 3/8 - 16 x 2 in; SMB30FAM10, A= M10 - 1.5 x 50
 Hole size: B= ø 30.1

SMB30FVK

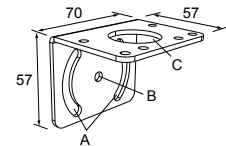
- V-clamp, flat bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions
- 30 mm hole for mounting sensors



Hole size: A= ø 31

SMB30MM

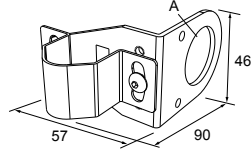
- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor



Hole center spacing: A = 51, A to B = 25.4
 Hole size: A = 42.6 x 7, B = ø 6.4, C = ø 30.1

SMB30RAVK

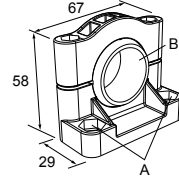
- V-clamp, right-angle bracket and fasteners for mounting sensors to pipe or extrusion
- Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions
- 30 mm hole for mounting sensors



Hole size: A = \varnothing 30.5

SMB30SC

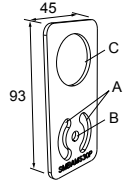
- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included



Hole center spacing: A= \varnothing 50.8
Hole size: A= \varnothing 7.0, B= \varnothing 30.0

SMBAMS30P

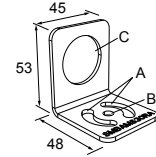
- Flat SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90° + rotation
- 12-ga. 300 series stainless steel



Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 x 7.0, B= \varnothing 6.5, C= \varnothing 31.0

SMBAMS30RA

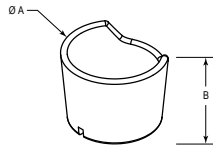
- Right-angle SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90° + rotation
- 12-ga. (2.6 mm) cold-rolled steel



Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 x 7.0, B= \varnothing 6.5, C= \varnothing 31.0

TC-K50-CL

- Touch cover



Diameter: A =
Height: B =

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.

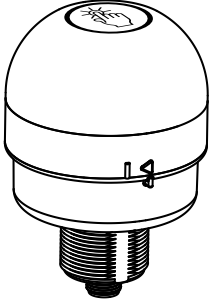
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EZ-LIGHT® Touch K70 Series Illuminated Multipurpose Buttons



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
- 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 in gloves
- 12 to 30 V dc operation

Models

Model ¹	I/O Type	Output State	Color 1	Color 2	Color 3	Connection
K70APT2GRYF2Q	PNP	N.O.	Green	Red	Yellow	Integral 8-pin M12/Euro-style male quick disconnect (QD)
K70RPT2GRYF2Q		N.C.				
K70ANT2GRYF2Q	NPN	N.O.				
K70RNT2GRYF2Q		N.C.				

Indicator and Output Behavior

Table 1: PNP Models

Input Actions				Touch Button Actions		
Input #1: Pin 3 Green Wire	Input #2: Pin 8 Red Wire	Input #3: Pin 4 Yellow Wire	LED Color	Output Type	Touch	Output: Pin 1 White Wire
Open or -Vdc	Open or -Vdc	Open or -Vdc	Light Off	N.O.	Not touched	PNP Output Off
+V dc	Open or -Vdc	Open or -Vdc	Color #1 On		Touched	PNP Output On
+V dc	+V dc	Open or -Vdc	Color #2 On	N.C.	Not touched	PNP Output On
+V dc	+V dc	+V dc	Color #3 On		Touched	PNP Output Off
Open or -Vdc	+V dc	Open or -Vdc	Color #2 On			
Open or -Vdc	+V dc	+V dc	Color #3 On			
Open or -Vdc	Open or -Vdc	+V dc	Color #3 On			
+V dc	Open or -Vdc	+V dc	Color #3 On			

¹ Integral QD models only are listed. A model with a QD requires a mating cable (see [Cordsets](#) on page 4)

- To order the 8-pin 150 mm (5.9 in) Euro-style PVC pigtail models, replace suffix Q with QP in model number (example, K70APT2GRYF2QP).
- To order the 2 m (6.5 ft) cable models, omit suffix Q from model number (example, K70APT2GRYF2).



Table 2: NPN Models

Input Actions				Touch Button Actions		
Input #1: Pin 3 Green Wire	Input #2: Pin 8 Red Wire	Input #3: Pin 4 Yellow Wire	LED Color	Output Type	Touch	Output: Pin 1 White Wire
Open or +V dc	Open or +V dc	Open or +V dc	Light Off	N.O.	Not touched	NPN Output Off
-Vdc	Open or +V dc	Open or +V dc	Color #1 On		Touched	NPN Output On
-Vdc	-Vdc	Open or +V dc	Color #2 On	N.C.	Not touched	NPN Output On
-Vdc	-Vdc	-Vdc	Color #3 On		Touched	NPN Output Off
Open or +V dc	-Vdc	Open or +V dc	Color #2 On			
Open or +V dc	-Vdc	-Vdc	Color #3 On			
Open or +V dc	Open or +V dc	-Vdc	Color #3 On			
-Vdc	Open or +V dc	-Vdc	Color #3 On			

Specifications

Supply Voltage
12 to 30 V dc

Supply Current
< 220 mA maximum current at 12 V dc (exclusive of load)
< 110 mA maximum current at 30 V dc (exclusive of load)

Supply Protection Circuitry
Protected against reverse polarity and transient voltages

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:
50 ms ON and OFF

Environmental Rating
IEC IP65

Storage
-40 °C to +70 °C (-40 °F to +158 °F)

Operating Conditions
-40 °C to +50 °C (-40 °F to +122 °F)
90% at +50 °C maximum relative humidity (non-condensing)

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



Power-Up Delay
300 ms

Indicators
Color 1: Green
Color 2: Red
Color 3: Yellow

Construction
Housing and dome: Polycarbonate
Mounting nut: PBT

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

Mounting
M30 × 1.5 threaded base; maximum torque 4.5 N·m (40 in·lbf)

Required Overcurrent Protection

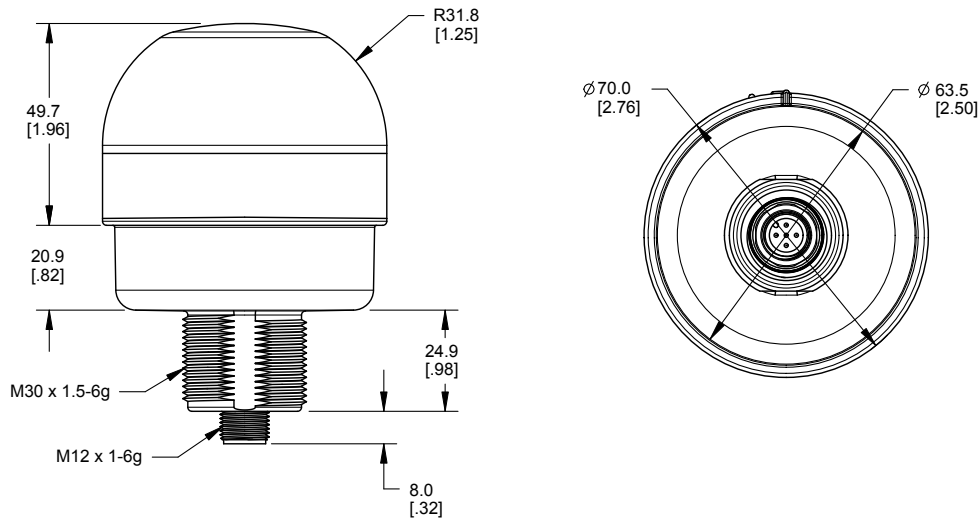


WARNING: Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

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 <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



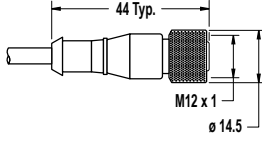
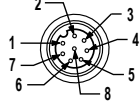
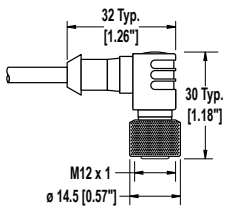
All measurements are listed in millimeters (inches), unless noted otherwise.

Wiring Diagram

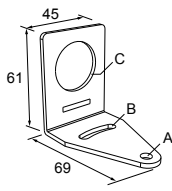
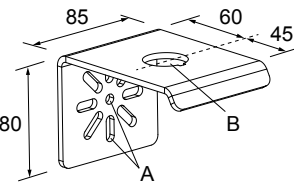
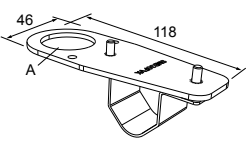
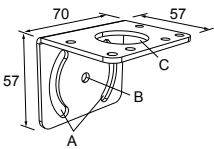
NPN (Sinking) Output Models	PNP (Sourcing) Output Models	Wiring Key	Pinout
		<p>1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red</p>	

Accessories

Cordsets

8-Pin Threaded M12/Euro-Style Cordsets with Open-Shield				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC2S-806	1.83 m (6 ft)	Straight		 1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red
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)			

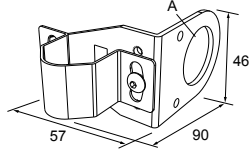
Brackets

<p>SMB30A</p> <ul style="list-style-type: none"> Right-angle bracket with curved slot for versatile orientation Clearance for M6 (¼ in) hardware Mounting hole for 30 mm sensor 12-ga. stainless steel  <p>Hole center spacing: A to B=40 Hole size: A=ø 6.3, B= 27.1 x 6.3, C=ø 30.5</p>	<p>SSA-MBK-EEC1</p> <ul style="list-style-type: none"> Single 30 mm hole 8 gauge steel, black finish (zinc-plated) Front surface for customer applied labels  <p>Hole size: A = ø 7 , B = ø 30</p>
<p>SMB30FVK</p> <ul style="list-style-type: none"> V-clamp, flat bracket and fasteners for mounting to pipe or extensions Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions 30 mm hole for mounting sensors  <p>Hole size: A = ø 31</p>	<p>SMB30MM</p> <ul style="list-style-type: none"> 12-ga. stainless steel bracket with curved mounting slots for versatile orientation Clearance for M6 (¼ in) hardware Mounting hole for 30 mm sensor  <p>Hole center spacing: A = 51, A to B = 25.4 Hole size: A = 42.6 x 7, B = ø 6.4, C = ø 30.1</p>

SMB30RAVK

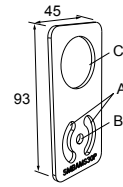
- V-clamp, right-angle bracket and fasteners for mounting sensors to pipe or extrusion
- Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions
- 30 mm hole for mounting sensors

Hole size: A = \varnothing 30.5

**SMBAMS30P**

- Flat SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90° + rotation
- 12-ga. 300 series stainless steel

Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 x 7.0, B= \varnothing 6.5, C= \varnothing 31.0



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