# **EZ-LIGHT® QPMA Series**



DC-operated LED indicators with PUR pigtail QD

## **Models**

Models		Construction	Connector <sup>3</sup>	LED Function <sup>4</sup>	Inputs
	M18GXRPQPMA	Nickel-plated brass housing,	150 mm (6 in) PUR Pigtail with 4-pin Euro-style QD fitting	3-color <sup>1</sup>	PNP (Sourcing)
	M18GXRNQPMA	M18x1 thread; thermoplastic			NPN (Sinking)
	M18RGX7PQPMA	diffuser. Fully encapsulated. IP67		2-color <sup>2</sup>	PNP (Sourcing)
	T18GXRPQPMA	Thermoplastic polyester		3-color <sup>®</sup>	PNP (Sourcing)
	T18GXRNQPMA	housing, thermoplastic diffus-			NPN (Sinking)
	T18RGX7PQPMA	er. Fully encapsulated. IP67		2-color <sup>2</sup>	PNP (Sourcing)
	T30GXRPQPMA	Thermoplastic polyester		3-color <sup>1</sup>	PNP (Sourcing)
	T30GXRNQPMA	housing, thermoplastic diffus-			NPN (Sinking)
	T30RGX7PQPMA	er. Fully encapsulated. IP67		2-color <sup>2</sup>	PNP (Sourcing)
	K30LGXRPQPMA	22 mm threaded polycarbon-		3-color <sup>1</sup>	PNP (Sourcing)
	K30LGXRNQPMA	ate base, translucent poly-			NPN (Sinking)
	K30LRGX7PQPMA	carbonate dome. Fully encapsulated. IP67		2-color <sup>2</sup>	PNP (Sourcing)
	K50LRGX7PQPMA	30 mm threaded polycarbonate base, translucent polycarbonate dome. Fully encapsulated.  IP67		2-color <sup>2</sup>	PNP (Sourcing)
Ç	K50FLRGX7PQPMA	Polycarbonate base, translucent polycarbonate dome. Fully encapsulated. IP67		2-color <sup>2</sup>	PNP (Sourcing)
	K80LRGX7PQPMA	ABS and polycarbonate base, translucent polycarbonate dome. Electronics fully encapsulated.		2-color <sup>2</sup>	PNP (Sourcing)

P/N 121903\_web Rev. F

Use with PNP or NPN I/O blocks to produce Green, Red, or Yellow indicator functions (see *Hookups* on page 2).
Use with discrete-output sensors to provide remote indication. Red is ON when the sensor is powered, Green is ON when the output is energized.

Mating cable required. For use with mating Euro-style QD cables or with Euro splitter, model CSB-M1240M1240, or equivalent.

<sup>4</sup> Contact Banner Engineering for other colors and color combinations, including: blue, white, orange.

# **Specifications**

## **Supply Voltage and Current**

K30L, T18, and M18 Models:

**2-color models:** 10 to 30V dc at 30 mA max. **3-color models:** 10 to 30V dc at 25 mA max. per

color

#### T30 models:

**2-color models:** 10 to 30V dc at 50 mA max. **3-color models:** 10 to 30V dc at 40 mA max. per

color

### K50L, K50FL, and K80L Models:

2-color models: 18 to 30V dc at 50 mA max.

#### **Indicators**

Entire translucent diffuser or dome provides indication. See notes 1 and 2 under *Models* on page 1. For other colors/combinations, contact Banner Engineering for availability.

#### Construction

See Models on page 1

#### Connections

150 mm (6 in) PUR pigtail with 4-pin Euro-style QD fitting

#### **Environmental Rating**

IEC IP67

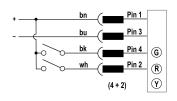
K80L has encapsulated electronics only; other models are fully encapsulated.

#### **Operating Conditions**

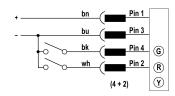
-40 °C to +50 °C (-40 °F to +122 °F)

## **Hookups**

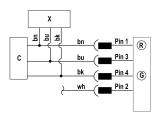
### PNP (..GXRP..) 3-Color Models



#### NPN (..GXRN..) 3-Color Models



#### 2-Color (..RGX7P..) Models



NOTE: When "G" is ON, "R" is OFF

### **Pinout**



#### Key

 1 = Brown
 X = Banner Sensor

 2 = White
 C = Control Box

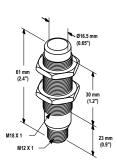
 3 = Blue
 G = Green

 4 = Black
 R = Red

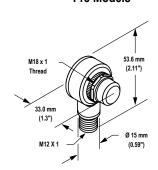
 Y = Yellow

## **Dimensions**

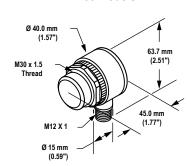
M18 Models



#### T18 Models



#### T30 Models



# 30.0 mm (1.18") 58.0 mm (2.28") 31.0 mm (1.22") M22 X 1.5 Max. Torque 2.25 Nm (20 in-lbf) 16.0 mm (0.63") M12 X 1

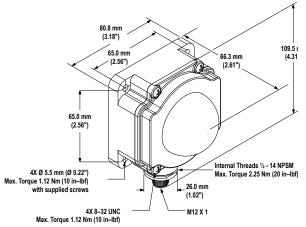
**K30L Models** 

**K50L Models** 50.0 mm (1.97") 38 mm (1.50")\* M30 x 1.5 (mounting nut included) Max. Torque 4.5 Nm (40 in-lbf) 20 mm (0.79") Internal Threads 1/2 - 14 NPSM 11 mm (0.43") Max. Torque 2.25 Nm (20 in-lbf)

**K50FL Models** 

44.6 [1.76"] Ø50 [1.97"] 60.0 [2.36"] 35.0 [1.38"] 2x 5.0 [0.20"] 16.0 [0.63"] 2x 5.5 [0.21"] 17.0 [0.67"] - 2x 5.0 [0.20"] 40.0 [1.58"]

**K80L Models** 



## **Accessories**

### **Cordsets**

4-Pin Threaded M12/Euro-Style Cordsets					
Model	Length	Style	Dimensions	Pinout	
MQDC-406	1.83 m (6 ft)		<del></del>		
MQDC-415	4.57 m (15 ft)	Ctualabt	M12 x 1 — ø 14.5 —	1 6 3 3	
MQDC-430	9.14 m (30 ft)	Straight			
MQDC-450	15.2 m (50 ft)				
MQDC-406RA	1.83 m (6 ft)		, 32 Typ.	1 = Brown	
MQDC-415RA	4.57 m (15 ft)		[1.26"] 30 Typ. [1.18"]	2 = White 3 = Blue 4 = Black	
MQDC-430RA	9.14 m (30 ft)	Right-Angle			
MQDC-450RA	15.2 m (50 ft)	Might-Angle			
			M12 x 1 — — — — — — — — — — — — — — — — — —		

4-Pin Threaded M12/Euro-Style Cordsets—Double Ended					
Model	Length	Style	Dimensions	Pinout	
MQDEC-401SS	0.31 m (1 ft)				
MQDEC-403SS	0.91 m (3 ft)	1	40 Typ [1.58"]	1 = Brown 2 = White 3 = Blue 4 = Black	
MQDEC-406SS	1.83 m (6 ft)	1			
MQDEC-412SS	3.66 m (12 ft)	Male Straight/ Female Straight	M12 x 1		
MQDEC-420SS	6.10 m (20 ft)		ø 14.5 [0.57"]		
MQDEC-430SS	9.14 m (30 ft)				
MQDEC-450SS	15.2 m (50 ft)		M12 x 1 g 14.5 [0.57"]		
MQDEC-403RS	0.91 m (1 ft)		32 Typ. 		
MQDEC-406RS	1.83 m (3 ft)	Male Right-An-gle/ Female Straight	[1.26"]		
MQDEC-412RS	3.66 m (12 ft)		30 Typ. [1.18"]		
MQDEC-420RS	6.10 m (20 ft)		M12 x 1		
MQDEC-430RS	9.14 m (30 ft)				
MQDEC-450RS	15.2 m (50 ft)		ø 14.5 [0.57"]  44 Typ.  [1.73"]  M12 x 1		

4-Pin Threaded M12/Euro-Style Splitter Cordsets — Flat Junction				
Model	Branches (Female)	Trunk (Male)	Dimensions	Pinout
CSB-M1240M1240	No branch	No trunk		1 2
CSB-M1240M1241	2 x 0.30 m (1 ft)	No trunk	04.5 [0.18] 014.5 [0.57] 014.5 [0.57] 014.5 [0.57] 014.5 [0.57] 014.5 [0.57]	3
CSB-M1241M1241		0.30 m (1 ft)		
CSB-M1248M1241		2.50 m (8 ft)		2 -1
CSB-M12415M1241		4.57 m (15 ft)		4
CSB-M12425M1241		7.60 m (25 ft)		1 = Brown
CSB-UNT425M1241		7.60 m (25 ft) Unterminated		2 = White 3 = Blue 4 = Black

## **Mounting Brackets**

For more information about these and other available brackets, visit www.bannerengineering.com.

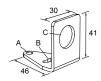
K50FL models include a 48 mm (1.9 in) circular hook-and-loop mounting kit for easy mounting with no additional hardware required.

#### For use with M18 and T18 models or base-mount T30 models

#### SMB18A

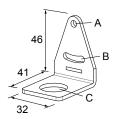
- Right-angle mounting bracket with a curved slot for versatile orientation
- · 12-ga. stainless steel
- 18 mm sensor mounting hole
- Clearance for M4 (#8) hardware

**Hole center spacing:** A to B = 24.2 **Hole size:** A =  $\emptyset$  4.6, B = 17.0 × 4.6, C =  $\emptyset$  18.5



### SMB312PD

- Right-angle mounting bracket with a curved slot for versatile orientation
- 12-ga. stainless steel
- 18 mm sensor mounting hole
- Clearance for M4 (#8) hardware



**Hole center spacing:** A to B = 24.2 **Hole size:** A =  $\emptyset$  4.6, B = 17 × 4.6, C =  $\emptyset$  18.5

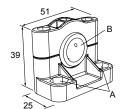


**NOTE:** Not for use with plastic fiber optic sensors

#### **SMB1815SF**

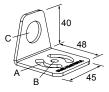
- Swivel with set screws for mounting sensors by the cable hub
- Black reinforced thermoplastic polyester
- Stainless steel swivel locking hardware and hex wrench included

Hole center spacing: A = 36.0Hole size:  $A = \emptyset 5.0$ ,  $B = \emptyset 15.0$ 



#### SMBAMS18RA

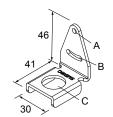
- Right-angle SMBAMS series bracket with 18 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel



**Hole center spacing:** A = 26.0, A to B = 13.0**Hole size:** A =  $26.8 \times 7.0$ , B =  $\emptyset 6.5$ , C =  $\emptyset 19.0$ 

## SMB18Q

- Right-angle flanged bracket
- 18 mm sensor mounting hole
- 12-ga. stainless steel

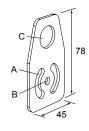


Hole center spacing: A to B = 24.2

**Hole size:**  $A = \emptyset 4.6$ ,  $B = 17.0 \times 4.6$ ,  $C = \emptyset 19.0$ 

## SMBAMS18P

- Flat SMBAMS series bracket with 18 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel

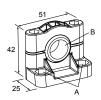


**Hole center spacing:** A = 26.0, A to B = 13.0 **Hole size:** A =  $26.8 \times 7.0$ , B =  $\emptyset 6.5$ , C =  $\emptyset 19.0$ 

#### SMB18SF

- 18 mm swivel bracket with M18 × 1 internal thread
- · Black thermoplastic polyester
- Stainless steel swivel locking hardware included

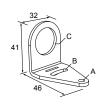
Hole center spacing: A = 36.0Hole size:  $A = \emptyset 5.3$ ,  $B = \emptyset 18.0$ 



#### For use with base-mount K30L models

#### SMB22A

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



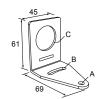
Hole center spacing: A to B = 26.0

**Hole size:**  $A = \emptyset 4.6$ ,  $B = 4.6 \times 16.9$ , C = 22.2

#### For use with T30 models or base-mount K50L models

#### 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

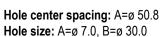


Hole center spacing: A to B=40

**Hole size:** A=ø 6.3, B= 27.1 x 6.3, C=ø 30.5

#### SMB30SC

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





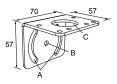
## SMBAMS30RA

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



### 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



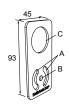
**Hole center spacing:** A=26.0, A to B=13.0 **Hole size:** A=26.8 x 7.0, B=Ø 6.5, C=Ø 31.0

**Hole center spacing:** A = 51, A to B = 25.4 **Hole size:** A =  $42.6 \times 7$ , B =  $\emptyset 6.4$ , C =  $\emptyset 30.1$ 

#### SMBAMS30P

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

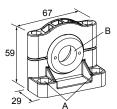
Hole center spacing: A=26.0, A to B=13.0 Hole size: A=26.8 x 7.0, B=Ø 6.5, C=Ø 31.0



#### SMB3018SC

- 18 mm swivel side or barrel-mount bracket
- Black reinforced thermoplastic polyester
- Stainless steel swivel locking hardware included

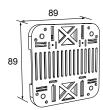
Hole center spacing: A = 50.8Hole size:  $A = \emptyset 7.0$ ,  $B = \emptyset 18.0$ 



#### DIN-mount bracket for K80L models

#### SMBDX80DIN

- Black reinforced thermoplastic
- Bracket for mounting on 35 mm DIN rail



## **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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