EZ-LIGHT® QPMA Series

BANNER®
more sensors, more solutions

Datasheet

DC-Operated LED Indicators with 150mm PUR cable QD

Models

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

[1] Use with PNP or NPN I/O blocks to produce Green, Red, or Yellow indicator functions (see *Wiring Diagrams* on page 2).
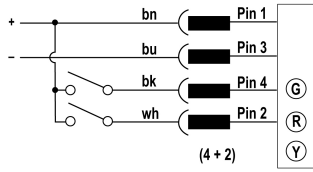[2] Use with discrete-output sensors to provide remote indication. Red is ON when the sensor is powered, Green is ON when the output is energized.
[3] Mating cable required. For use with mating Euro-style QD cables or with Euro splitter, model CSB-M1240M1240, or equivalent.
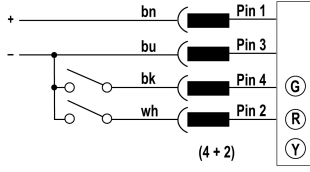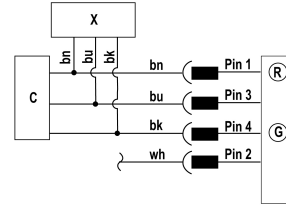
Wiring Diagrams

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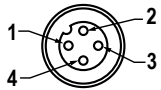

NPN (..GXRN..) 3-Color Models

2-Color (..RGX7P..) Models

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

Pinout

Key

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

X = Banner Sensor
C = Control Box
G = Green
R = Red
Y = Yellow

Specifications

Supply Voltage and Current
K30L, T18, and M18 Models:
2-color models: 10 V dc to 30 V dc at 30 mA max.
3-color models: 10 V dc to 30 V dc at 25 mA max. per color
T30 models:
2-color models: 10 V dc to 30 V dc at 50 mA max.
3-color models: 10 V dc to 30 V dc at 40 mA max. per color
K50L, K50FL, and K80L Models:
2-color models: 18 V dc to 30 V 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 cable with 4-pin M12/Euro-style quick disconnect
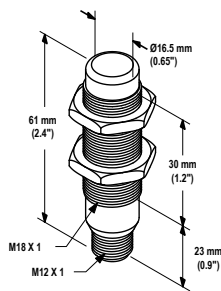
Environmental Rating
IEC IP67
K80L has encapsulated electronics only; other models are fully encapsulated.

Operating Conditions
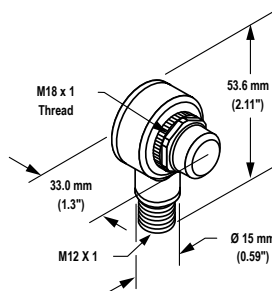−40 °C to +50 °C (−40 °F to +122 °F)
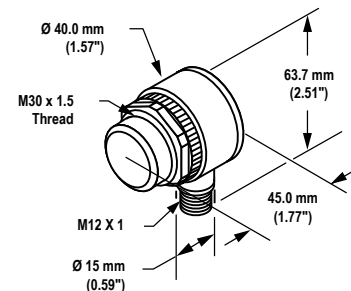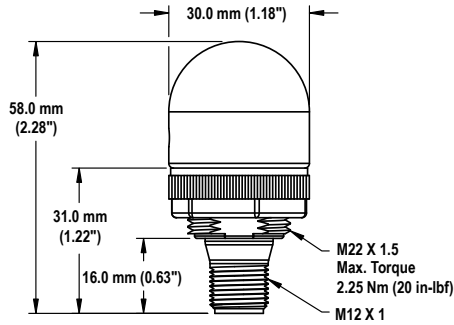
Dimensions

M18 Models

T18 Models

T30 Models

K30L Models

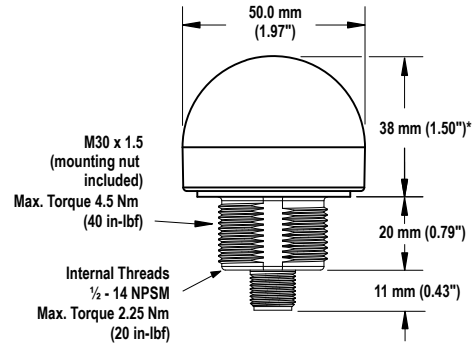**K50L Models**

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[4] Contact Banner Engineering for other colors and color combinations, including: blue, white, orange.

30.0 mm (1.18")

58.0 mm (2.28")

31.0 mm (1.22")

16.0 mm (0.63")

M22 X 1.5
Max. Torque
2.25 Nm (20 in-lbf)

M12 X 1

50.0 mm (1.97")

M30 x 1.5 (mounting nut included)
Max. Torque 4.5 Nm (40 in-lbf)

38 mm (1.50")*

20 mm (0.79")

Internal Threads ½ - 14 NPSM
Max. Torque 2.25 Nm (20 in-lbf)

11 mm (0.43")

K50FL Models

Ø50 [1.97"]

44.6 [1.76"]

60.0 [2.36"]

35.0 [1.38"]

16.0 [0.63"]

2x 5.0 [0.20"]
2x 5.5 [0.21"]
2x 5.0 [0.20"]

40.0 [1.58"]

17.0 [0.67"]

K80L Models

80.8 mm (3.18")

65.0 mm (2.56")

66.3 mm (2.61")

109.5 mm (4.31")

65.0 mm (2.56")

4X Ø 5.5 mm (Ø 0.22")
Max. Torque 1.12 Nm (10 in-lbf)
with supplied screws

4X 8–32 UNC
Max. Torque 1.12 Nm (10 in–lbf)

Internal Threads ½ - 14 NPSM
Max. Torque 2.25 Nm (20 in-lbf)

26.0 mm (1.02")

M12 X 1

Accessories

Cordsets

4-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	1.83 m (6 ft)	Straight	44 Typ. M12 x 1 ø 14.5	
MQDC-415	4.57 m (15 ft)			
MQDC-430	9.14 m (30 ft)			1 2 3 4
MQDC-450	15.2 m (50 ft)			
MQDC-406RA	1.83 m (6 ft)	Right-Angle	32 Typ. [1.26"] 30 Typ. [1.18"] M12 x 1 ø 14.5 [0.57"]	1 = Brown 2 = White 3 = Blue 4 = Black
MQDC-415RA	4.57 m (15 ft)			
MQDC-430RA	9.14 m (30 ft)			
MQDC-450RA	15.2 m (50 ft)			

4-Pin Threaded M12/Euro-Style Cordsets—Double Ended

Model	Length	Style	Dimensions	Pinout
MQDEC-401SS	0.31 m (1 ft)	Male Straight/ Female Straight		Female
MQDEC-403SS	0.91 m (3 ft)			
MQDEC-406SS	1.83 m (6 ft)			
MQDEC-412SS	3.66 m (12 ft)			
MQDEC-420SS	6.10 m (20 ft)			
MQDEC-430SS	9.14 m (30 ft)			
MQDEC-450SS	15.2 m (50 ft)			Male
MQDEC-403RS	0.91 m (1 ft)	Male Right-Angle/ Female Straight		1 = Brown
MQDEC-406RS	1.83 m (3 ft)			2 = White
MQDEC-412RS	3.66 m (12 ft)			3 = Blue
MQDEC-420RS	6.10 m (20 ft)			4 = Black
MQDEC-430RS	9.14 m (30 ft)			
MQDEC-450RS	15.2 m (50 ft)			

4-Pin Threaded M12/Euro-Style Splitter Cordsets—Flat Junction

Model	Branches (Female)	Trunk (Male)	Pinout
CSB-M1240M1240	No branch	No trunk	Female
CSB-M1240M1241	2 x 0.30 m (1 ft)	No trunk	
CSB-M1241M1241		0.30 m (1 ft)	
CSB-M1248M1241		2.50 m (8 ft)	
CSB-M12415M1241		4.57 m (15 ft)	Male
CSB-M12425M1241		7.60 m (25 ft)	
CSB-UNT425M1241		7.60 m (25 ft) Unterminated	1 = Brown
			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
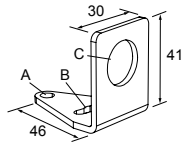
Hole center spacing: A to B = 24.2
Hole size: A = ø 4.6, B = 17.0 × 4.6, C = ø 18.5

SMB312PD

- Right-angle mounting bracket with a curved slot for versatile orientation
- 12-ga. stainless steel
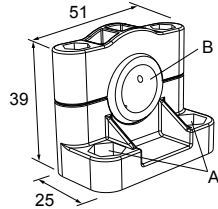- 18 mm sensor mounting hole
- Clearance for M4 (#8) hardware
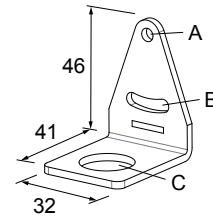
Hole center spacing: A to B = 24.2
Hole size: A = ø 4.6, B = 17 × 4.6, C = ø 18.5

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 = 36.0
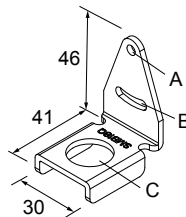Hole size: A = ø 5.0, B = ø 15.0

SMBAMS18RA

- Right-angle SMBAMS series bracket with 18 mm hole
- Articulation slots for 90+ ° rotation
- 12-ga. (2.6 mm) cold-rolled steel
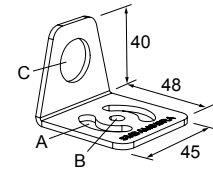
Hole center spacing: A = 26.0, A to B = 13.0
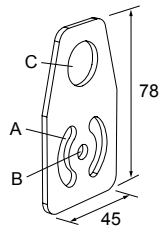Hole size: A = 26.8 × 7.0, B = ø 6.5, C = ø 19.0

SMB18Q

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

Hole center spacing: A to B = 24.2
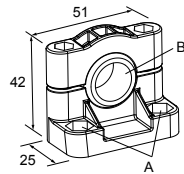Hole size: A = ø 4.6, B = 17.0 × 4.6, C = ø 19.0

SMBAMS18P

- Flat SMBAMS series bracket with 18 mm hole
- 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 × 7.0, B = ø 6.5, C = ø 19.0

SMB18SF

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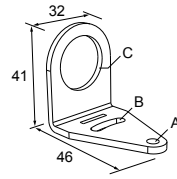- Stainless steel swivel locking hardware included

Hole center spacing: A = 36.0
Hole size: A = ø 5.3, B = ø 18.0

For use with base-mount K30L models

SMB22A

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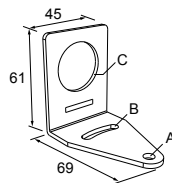- 12-ga. stainless steel
- Mounting hole for 22 mm sensor

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

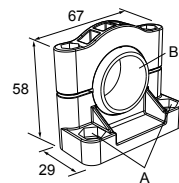## For use with T30 models or base-mount K50L models

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

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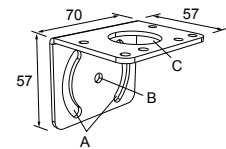Hole size: A=ø 7.0, B=ø 30.0

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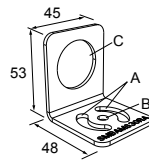
Hole center spacing: A=26.0, A to B=13.0
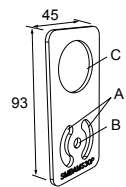Hole size: A=26.8 x 7.0, B=ø 6.5, C=ø 31.0

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

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
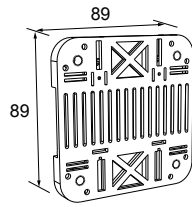- Stainless steel swivel locking hardware included
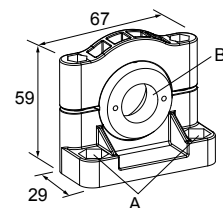
Hole center spacing: A = 50.8
Hole size: A = ø 7.0, B = ø 18.0

DIN-mount bracket for K80L models

SMBDX80DIN

    Black reinforced thermoplastic

    Bracket for mounting on a 35 mm DIN rail

89

89

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