Features

DC-Operated LED Indicators with 150 mm (6 in) PUR cable with quick-disconnect connector

To view or download the latest technical information about this product, including specifications, dimensions, accessories, and wiring, go to www.bannerengineering.com.

WARNING:

- **Do not use this device for personnel protection**
- Using this device for personnel protection could result in serious injury or death.
- This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A device failure or malfunction can cause either an energized (on) or de-energized (off) output condition.

Models

Models		Construction	Connector[1]	LED Function[2]	Inputs
	**M18GXRPQPMA**	Nickel-plated brass housing, M18x1 thread; thermoplastic diffuser. Fully encapsulated. IP67	150 mm (6 in) PUR-jacketed cable with 4-pin M12 male quick-disconnect connector	**3-color** Use with PNP or NPN I/O blocks to produce Green, Red, or Yellow indicator functions (see "Wiring Diagrams" on page 2).	PNP
	M18GXRNQPMA				NPN
	M18RGX7PQPMA			**2-color** 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.	PNP
	**K30LGXRPQPMA**	22 mm threaded polycarbonate base, translucent polycarbonate dome. Fully encapsulated. IP67, IP69K per ISO 20653		**3-color** Use with PNP or NPN I/O blocks to produce Green, Red, or Yellow indicator functions (see "Wiring Diagrams" on page 2).	PNP
	K30LGXRNQPMA				NPN
	K30LRGX7PQPMA			**2-color** 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.	PNP
	**K50LRGX7PQPMA**	30 mm threaded polycarbonate base, translucent polycarbonate dome. Fully encapsulated. IP67, IP69K per ISO 20653		**2-color** 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.	PNP
	**K50FLRGX7PQPMA**	Polycarbonate base, translucent polycarbonate dome. Fully encapsulated. IP67, IP69K per ISO 20653		**2-color** 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.	PNP
	**K80LRGX7PQPMA**	ABS and polycarbonate base, translucent polycarbonate dome. Electronics fully encapsulated. IP67		**2-color** 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.	PNP

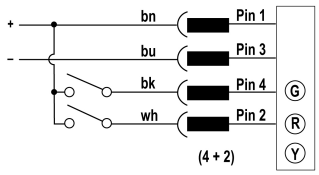
The following models are no longer available for order but are still covered by the information in this document.

[1] Mating cable required. For use with mating M12 quick-disconnect connector cables or with M12 splitter, model **CSB-M1240M1240**, or equivalent.
[2] Contact Banner Engineering for other colors and color combinations, including: blue, white, orange.

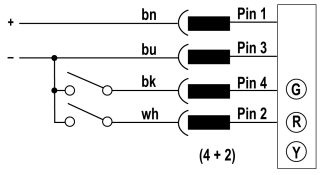
Models		Construction	Connector[3]	LED Function[4]	Inputs
	**T18GXRPQPMA**	Thermoplastic polyester housing, thermoplastic diffuser. Fully encapsulated. IP67	150 mm (6 in) PUR-jacketed cable with 4-pin M12 male quick-disconnect connector	**3-color** Use with PNP or NPN I/O blocks to produce Green, Red, or Yellow indicator functions (see "Wiring Diagrams" on page 2).	PNP
	T18GXRNQPMA				NPN
	T18RGX7PQPMA			**2-color** 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.	PNP
	**T30GXRPQPMA**	Thermoplastic polyester housing, thermoplastic diffuser. Fully encapsulated. IP67		**3-color** Use with PNP or NPN I/O blocks to produce Green, Red, or Yellow indicator functions (see "Wiring Diagrams" on page 2).	PNP
	T30GXRNQPMA				NPN
	T30RGX7PQPMA			**2-color** 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.	PNP
	T30GYX7PQPMA				

Wiring Diagrams

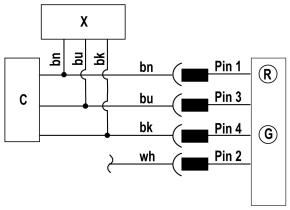
PNP (..GXRP..) 3-Color Models



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

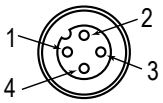


2-Color (..RGX7P..) Models



NOTE: When Green (G) is ON, Red (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-jacketed cable with 4-pin M12 male quick-disconnect connector

Environmental Rating

Rated IP67. K80L has encapsulated electronics only; other models fully encapsulated.

K30L, K50L, and K50FL quick-disconnect models meet IP69K per ISO 20653.

Cabled models also meet IP69K if the cable and cable entrance are protected from high-pressure spray.

Operating Conditions

–40 °C to +50 °C (–40 °F to +122 °F)

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.

[3] Mating cable required. For use with mating M12 quick-disconnect connector cables or with M12 splitter, model **CSB-M1240M1240**, or equivalent.
[4] Contact Banner Engineering for other colors and color combinations, including: blue, white, orange.

For additional product support, go to www.bannerengineering.com.

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

Certifications

All models:

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

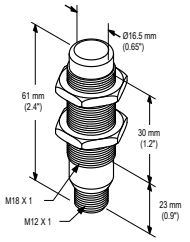
K50L, K50FL, T18, and T30 models only:

Turck Banner LTD Blenheim House
Blenheim Court
Wickford, Essex SS11 8YT
GREAT BRITAIN

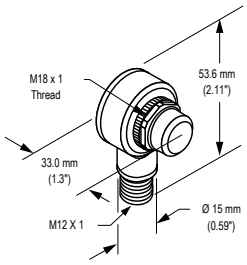
K30L and K50L models only:

Dimensions

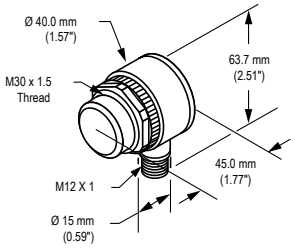
M18 Models



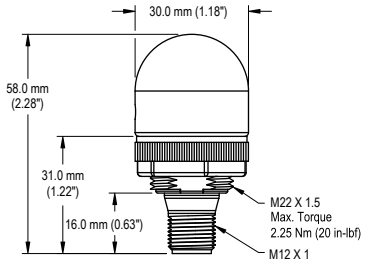
T18 Models



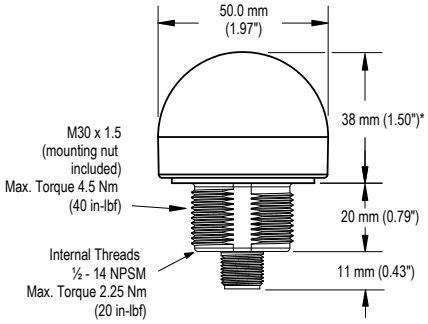
T30 Models



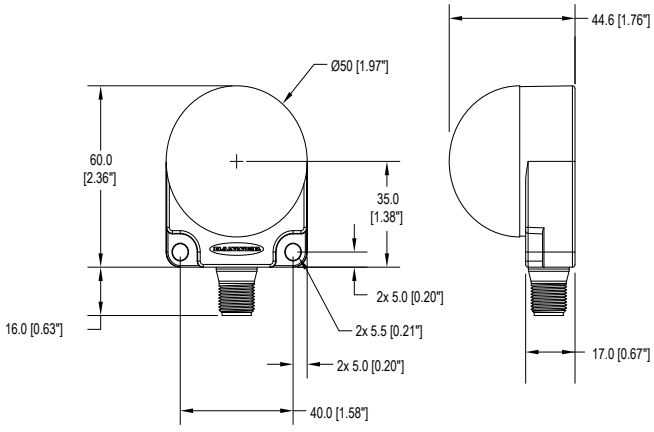
K30L Models



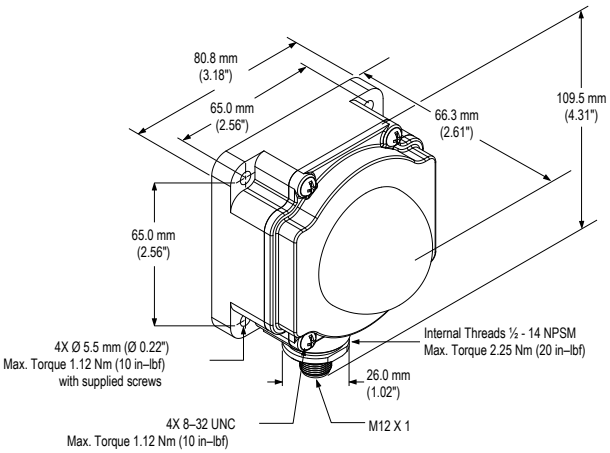
K50L Models



K50FL Models

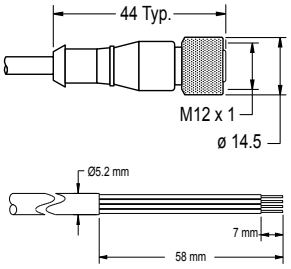
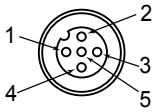
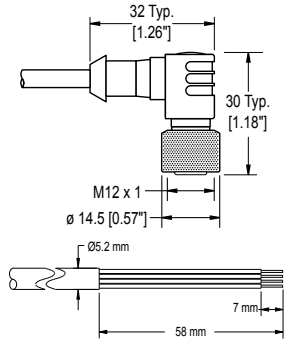
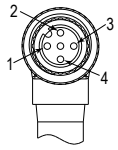


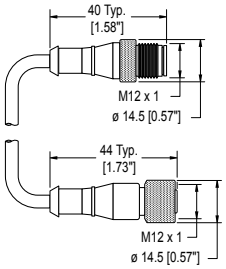
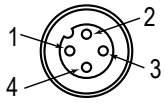
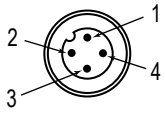
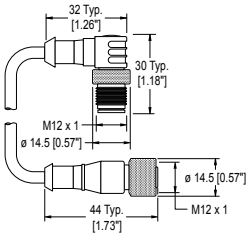
K80L Models



Accessories

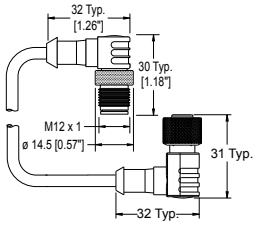
Cordsets

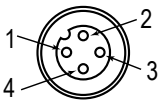
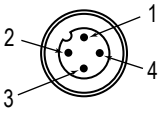
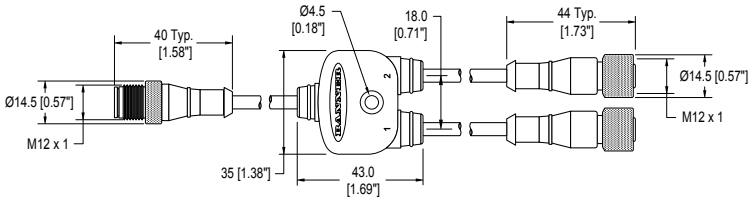
4-Pin Single-Ended M12 Female Cordsets					
Model	**Length**	**Style**	**Dimensions**	**Pinout (Female)**	
MQDC-406	2 m (6.56 ft)	Straight			1 = Brown 2 = White 3 = Blue 4 = Black 5 = Not used c UL us
MQDC-415	5 m (16.4 ft)				
MQDC-430	9 m (29.5 ft)				
MQDC-450	15 m (49.2 ft)				
MQDC-406RA	2 m (6.56 ft)	Right-Angle			
MQDC-415RA	5 m (16.4 ft)				
MQDC-430RA	9 m (29.5 ft)				
MQDC-450RA	15 m (49.2 ft)				

4-Pin Double-Ended M12 Female to M12 Male Cordsets				
Model	**Length**	**Style**	**Dimensions**	**Pinout**
MQDEC-401SS	0.31 m (1 ft)	Male Straight / Female Straight		Female  Male  1 = Brown 2 = White 3 = Blue 4 = Black c UL us
MQDEC-403SS	0.91 m (2.99 ft)			
MQDEC-406SS	1.83 m (6 ft)			
MQDEC-412SS	3.66 m (12 ft)			
MQDEC-415SS	4.58 m (15 ft)			
MQDEC-420SS	6.10 m (20 ft)			
MQDEC-430SS	9.14 m (30.2 ft)			
MQDEC-450SS	15.2 m (49.9 ft)			
MQDEC-403RS	0.91 m (2.99 ft)	Male Right-Angle / Female Straight		
MQDEC-406RS	1.83 m (6 ft)			
MQDEC-412RS	3.66 m (12 ft)			
MQDEC-420RS	6.10 m (20 ft)			
MQDEC-430RS	9.14 m (30.2 ft)			
MQDEC-450RS	15.2 m (49.9 ft)			

Continued on page 5

Continued from page 4

4-Pin Double-Ended M12 Female to M12 Male Cordsets				
Model	**Length**	**Style**	**Dimensions**	**Pinout**
MQDEC-403RR	0.9 m (2.9 ft)	Male Right-Angle / Female Right-Angle		
MQDEC-406RR	1.8 m (5.9 ft)			
MQDEC-412RR	3.6 m (11.8 ft)			
MQDEC-420RR	6.1 m (20 ft)			

4-Pin Flat Junction M12 Female Branch to M12 MaleTrunk Splitter Cordsets			
Model	**Branches (Female)**	**Trunk (Male)**	**Pinout**
CSB-M1240M1240	No branch	No trunk	Female 
CSB-M1240M1241	2 × 0.3 m (1 ft)	No trunk	
CSB-M1241M1241		0.31 m (1 ft)	
CSB-M1248M1241		2.44 m (8 ft)	
CSB-M12415M1241		4.57 m (15 ft)	
CSB-M12425M1241		7.60 m (25 ft)	
CSB-UNT425M1241		7.60 m (25 ft) Unterminated	
CSB-M1243M1243	2 × 1 m (3.28 ft)	1 m (3.28 ft)	Male 
			1 = Brown 2 = White 3 = Blue 4 = Black

Mounting Brackets

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

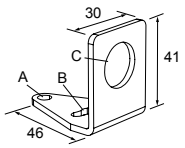
K50FL models include a 48 mm (1.9 in) circular hook-and-loop mounting kit for easy mounting with no additional hardware required.

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

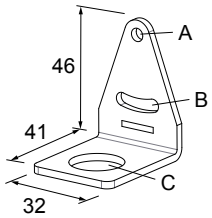


SMB312PD

- 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

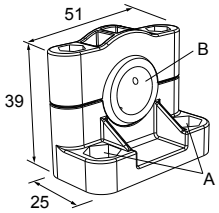
NOTE: Not for use with plastic fiber optic sensors



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

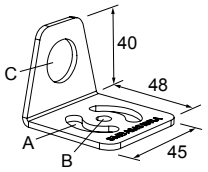
Hole center spacing: A = 36.0
Hole size: A = ø 5.0, B = ø 15.0



SMBAMS18RA

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

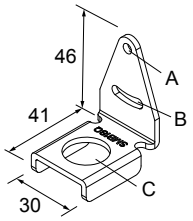
Hole center spacing: A = 26.0, A to B = 13.0
Hole size: A = 26.8 × 7.0, B = ø 6.5, C = ø 19.0



SMB18Q

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

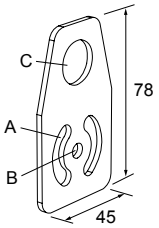
Hole center spacing: A to B = 24.2
Hole size: A = ø 4.6, B = 17.0 × 4.6, C = ø 19.0



SMBAMS18P

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

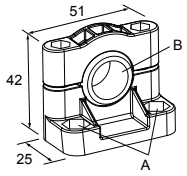
Hole center spacing: A = 26.0, A to B = 13.0
Hole size: A = 26.8 × 7.0, B = ø 6.5, C = ø 19.0



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

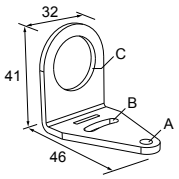


For use with base-mount K30L models

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

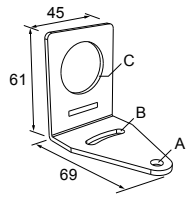


For use with T30 models or base-mount K50L models

SMB30A

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

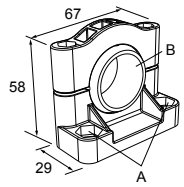
Hole center spacing: A to B=40
Hole size: A=ø 6.3, B= 27.1 × 6.3, C=ø 30.5



SMB30SC

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

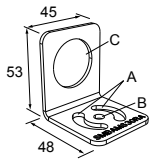
Hole center spacing: A=ø 50.8
Hole size: A=ø 7.0, B=ø 30.0



SMBAMS30RA

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

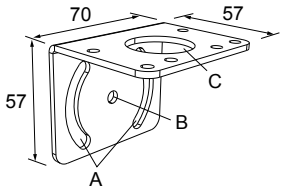
Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 × 7.0, B=ø 6.5, C=ø 31.0



SMB30MM

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

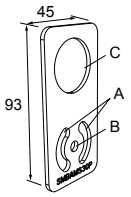
Hole center spacing: A = 51, A to B = 25.4
Hole size: A = 42.6 × 7, B = ø 6.4, C = ø 30.1



SMBAMS30P

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

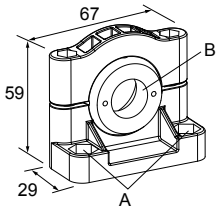
Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 × 7.0, B=ø 6.5, C=ø 31.0



SMB3018SC

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

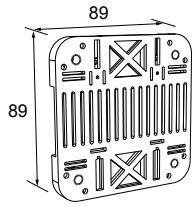
Hole center spacing: A = 50.8
Hole size: A = ø 7.0, B = ø 18.0



DIN-mount bracket for K80L models

SMBDX80DIN

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



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