EZ-LIGHT® One-Color General-Purpose Indicators

BANNER®
more sensors, more solutions

Datasheet

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 [1]		LED Color [2]
	T8LGXXPQP	Color 1: Green
	T8LXRXPQP	Color 2: Red
	T8LXXYPQP	Color 3: Yellow
	• Polycarbonate/ABS alloy housing, thermoplastic diffuser. • IP67	
	M18GXXPQ	Color 1: Green
	M18XRXPQ	Color 2: Red
	M18XXYPQ	Color 3: Yellow
	• Nickel-plated brass housing, thermoplastic diffuser. • Fully encapsulated IP67	
	K30LGXXPQ	Color 1: Green
	K30LXRXPQ	Color 2: Red
	K30LXXYPQ	Color 3: Yellow
	• 22 mm threaded polycarbonate base, translucent polycarbonate dome. • Fully encapsulated IP67, IP69K per DIN 40050-9	
	K50LGXXPQ	Color 1: Green
	K50LXRXPQ	Color 2: Red
	K50LXXYPQ	Color 3: Yellow
	• 30 mm threaded polycarbonate base, translucent polycarbonate dome. • Fully encapsulated IP67, IP69K per DIN 40050-9	
	K50FLGXXPQ	Color 1: Green
	K50FLXRXPQ	Color 2: Red
	K50FLXXYPQ	Color 3: Yellow
	• ABS base, translucent polycarbonate dome. • Fully encapsulated IP67, IP69K per DIN 40050-9	

---

[1]
- **T8L Models:** Standard quick-disconnect models are listed. To order the integral 4-wire cabled model, omit the suffix QP. For example, T8LGXXP.
- **K30FL Models:** Standard integral 4-pin M12 quick-disconnect connector models are listed. For 2 m (6.5 ft) integral 4-wire cabled model, omit suffix Q. For example K30LGRXP. For 150 mm (6 inch) PVC-jacketed cable with 4-pin M12 quick-disconnect connector, replace suffix Q with QP. For example, K30LGRXPQP. For terminal model, replace suffix Q with T. For example, K30LGRXPT.
- **K80L Models:** Standard integral 4-pin M12 quick-disconnect connector models are listed. To order the terminal-wired model, omit suffix Q. For example, K80LGXXP.
- **Other Models:** Standard integral 4-pin M12 quick-disconnect connector models are listed. To order the 2 m (6.5 ft) integral 4-wire cable model, omit suffix Q. For example, M18GXXP. To order the 150 mm (6 inch) PVC-jacketed cable with 4-pin M12 quick-disconnect connector, replace suffix Q with QP. For example, M18GXXPQP.
- Models with a quick disconnect require a mating cordset.

[2] Contact Banner Engineering for other colors and color combinations.
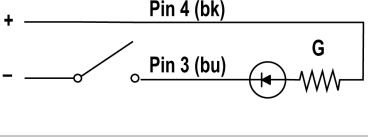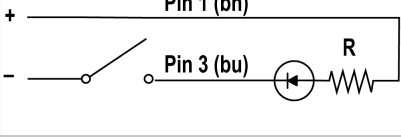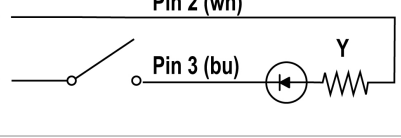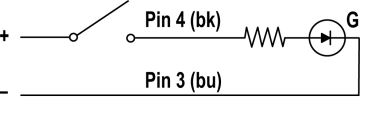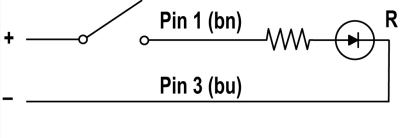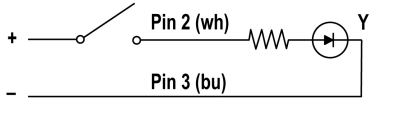
Models [1]	LED Color [2]
K80LGXXPQ	Color 1: Green
K80LXRXPQ	Color 2: Red
K80LXXYPQ	Color 3: Yellow
• Polycarbonate base, translucent polycarbonate dome. • Fully encapsulated IP67	

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

Models [1]	LED Color [2]
T18GXXPQ	Color 1: Green
T18XRXPQ	Color 2: Red
T18XXYPQ	Color 3: Yellow
• Thermoplastic polyester housing, thermoplastic diffuser. • Fully encapsulated IP67	
T30GXXPQ	Color 1: Green
T30XRXPQ	Color 2: Red
T30XXYPQ	Color 3: Yellow
• Thermoplastic polyester housing, thermoplastic diffuser. • Fully encapsulated IP67	

Wiring

For NPN Operation		
Color 1	Color 2	Color 3
Pin 4 (bk) Pin 3 (bu) G	Pin 1 (bn) Pin 3 (bu) R	Pin 2 (wh) Pin 3 (bu) Y
Pin 1 and Pin 2 not used	Pin 4 and Pin 2 not used	Pin 1 and Pin 4 not used

For PNP Operation		
Color 1	Color 2	Color 3
Pin 4 (bk) G Pin 3 (bu)	Pin 1 (bn) R Pin 3 (bu)	Pin 2 (wh) Y Pin 3 (bu)
Pin 1 and Pin 2 not used	Pin 4 and Pin 2 not used	Pin 1 and Pin 4 not used

Wiring Key

1. Brown (bn)
2. White (wh)
3. Blue (bu)
4. Black (bk)

---

[1] • **T8L Models:** Standard quick-disconnect models are listed. To order the integral 4-wire cabled model, omit the suffix QP. For example, T8LGXXP.
• **K30FL Models:** Standard integral 4-pin M12 quick-disconnect connector models are listed. For 2 m (6.5 ft) integral 4-wire cabled model, omit suffix Q. For example K30LGRXP. For 150 mm (6 inch) PVC-jacketed cable with 4-pin M12 quick-disconnect connector, replace suffix Q with QP. For example, K30LGRXPQP. For terminal model, replace suffix Q with T. For example, K30LGRXPT.
• **K80L Models:** Standard integral 4-pin M12 quick-disconnect connector models are listed. To order the terminal-wired model, omit suffix Q. For example, K80LGXXP.
• **Other Models:** Standard integral 4-pin M12 quick-disconnect connector models are listed. To order the 2 m (6.5 ft) integral 4-wire cable model, omit suffix Q. For example, M18GXXP. To order the 150 mm (6 inch) PVC-jacketed cable with 4-pin M12 quick-disconnect connector, replace suffix Q with QP. For example, M18GXXPQP.
• Models with a quick disconnect require a mating cordset.

[2] Contact Banner Engineering for other colors and color combinations.

Specifications

Supply Voltage and Current
T8L models: 10 V DC to 30 V DC at 20 mA maximum
T18, M18, and K30L models: 10 V DC to 30 V DC at 25 mA maximum per LED color
T30 models: 10 V DC to 30 V DC at 40 mA maximum per LED color
K50L, K50FL, and K80L models: 18 V DC to 30 V DC at 40 mA maximum per LED color

Indicators
Entire translucent diffuser or dome provides indication. Green and yellow, when connected to discrete output of 3-wire or 4-wire sensors. For other colors, contact factory for availability.

Input Response Time
Indicator ON/OFF: 1 ms max.

Environmental Rating
Rated IP67. T8L not encapsulated; K80L has encapsulated electronics only; other models fully encapsulated.
K30L, K50L, and K50FL QD models meet 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)

Certifications

All models:

Banner Engineering Europe
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:

UL LISTED

Connections
T8L models: 150 mm (6 in) PVC-jacketed cable with a 4-pin M12 male quick-disconnect connector (QP) or 2 m (6.5 ft) unterminated 4-wire integral cable, depending on model
K30L models: Integral 4-pin M12 male quick-disconnect connector (Q), 150 mm (6 in) PVC-jacketed cable with a 4-pin M12 male quick-disconnect connector (QP), 2 m (6.5 ft) unterminated 4-wire integral cable, or 5 color-coded screw terminal for up to 16 AWG wire, depending on model. Screw terminal max torque: 0.11 N·m (1.0 lbf·in).
K80L models: Integral 4-pin M12 male quick-disconnect connector (Q) standard; terminal-wired models available for use with bulk cable; compression fitting optional. Contact Factory for cable information.
Other models: Integral 4-pin M12 male quick-disconnect connector (Q), 150 mm (6 in) PVC-jacketed cable with a 4-pin M12 male quick-disconnect connector (QP), or 2 m (6.5 ft) unterminated 4-wire integral cable, depending on model

Construction
See Models lists

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.
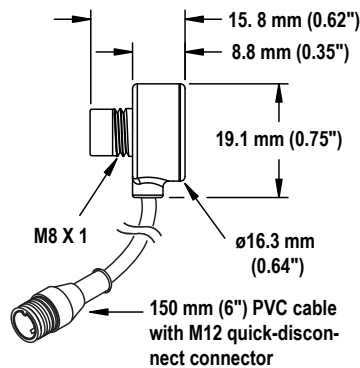Supply wiring leads < 24 AWG shall not be spliced.
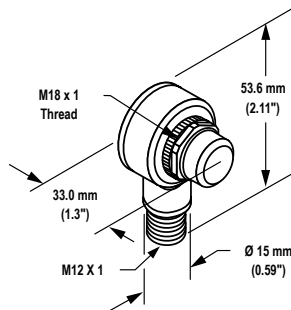For additional product support, go to www.bannerengineering.com.

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

T8L Models	T18 Models	M18 Models

T8L Models
15. 8 mm (0.62")
8.8 mm (0.35")
19.1 mm (0.75")
M8 X 1
ø16.3 mm (0.64")
150 mm (6") PVC cable with M12 quick-disconnect connector

T18 Models
M18 x 1 Thread
53.6 mm (2.11")
33.0 mm (1.3")
M12 X 1
Ø 15 mm (0.59")

M18 Models
Ø16.5 mm (0.65")
61 mm (2.4")
30 mm (1.2")
M18 X 1
M12 X 1
23 mm (0.9")

T30 Models	K30L Models	K30 Terminal Models

T30 Models

Ø 40.0 mm (1.57")
M30 x 1.5 Thread
63.7 mm (2.51")
45.0 mm (1.77")
M12 X 1
Ø 15 mm (0.59")

K30L Models

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

K30 Terminal Models

42 [1.65]
52.4 [2.06]
M22 X 1.5 -6g

K50L Models	K50FL Models	K80L Models

K50L Models

50.0 mm (1.97")
M30 x 1.5 (mounting nut included) Max. Torque 4.5 Nm (40 in-lbf)
38 mm (1.50")*
Internal Threads ½ - 14 NPSM Max. Torque 2.25 Nm (20 in-lbf)
20 mm (0.79")
11 mm (0.43")

K50FL Models

44.6 [1.76"]
Ø50 [1.97"]
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"]
17.0 [0.67"]
40.0 [1.58"]

K80L Models

80.8 mm (3.18")
65.0 mm (2.56")
66.3 mm (2.61")
109.5 (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 Cordsets—Single Ended

Model	Length	Style	Dimensions	Pinout (Female)	
MQDC-406	2 m (6.56 ft)	Straight	44 Typ. M12 x 1 ø 14.5	1 Brown, 2 White, 3 Blue, 4 Black, 5 Unused	
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	32 Typ. [1.26"] 30 Typ. [1.18"] M12 x 1 ø 14.5 [0.57"]	1 = Brown 2 = White 3 = Blue 4 = Black 5 = Unused	
MQDC-415RA	5 m (16.4 ft)				
MQDC-430RA	9 m (29.5 ft)				
MQDC-450RA	15 m (49.2 ft)				

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 T8L models

SMB8MM
- Right-angle bracket
- 300 series stainless steel
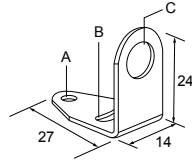
Hole size: A = ø 3.5, B = 4.9 × 3.6, C = ø 8.4

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
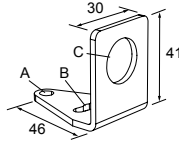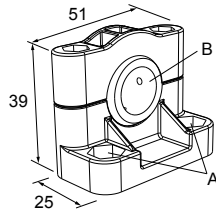
Hole center spacing: A to B = 24.2
Hole size: A = ø 4.6, B = 17.0 × 4.6, C = ø 18.5

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
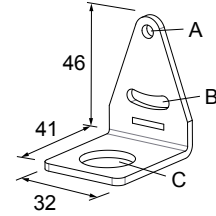
Hole center spacing: A to B = 24.2
Hole size: A = ø 4.6, B = 17 × 4.6, C = ø 18.5

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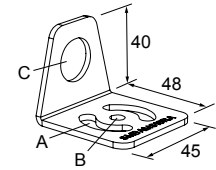
Hole center spacing: A = 26.0, A to B = 13.0
Hole size: A = 26.8 × 7.0, B = ø 6.5, C = ø 19.0

SMB18Q
- Right-angle flanged bracket
- 18 mm sensor mounting hole
- 12-ga. stainless steel
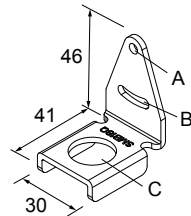
Hole center spacing: A to B = 24.2
Hole size: A = ø 4.6, B = 17.0 × 4.6, C = ø 19.0

SMBAMS18P
- Flat SMBAMS series bracket with 18 mm hole
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel
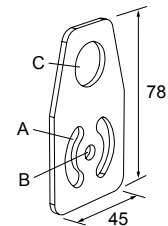
Hole center spacing: A = 26.0, A to B = 13.0
Hole size: A = 26.8 × 7.0, B = ø 6.5, C = ø 19.0

SMB18SF
- 18 mm swivel bracket with M18 × 1 internal thread
- Black thermoplastic polyester
- Stainless steel swivel locking hardware included
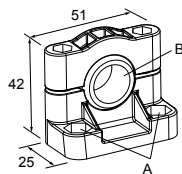
Hole center spacing: A = 36.0
Hole size: A = ø 5.3, B = ø 18.0

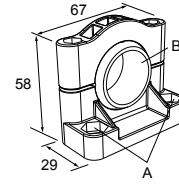## For use with T30 models or base-mount K50L models

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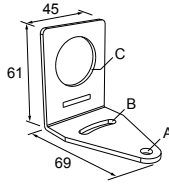
Hole center spacing: A to B=40
**Hole size:** A=ø 6.3, B= 27.1 x 6.3, C=ø 30.5

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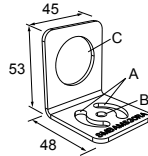
Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 x 7.0, B=ø 6.5, C=ø 31.0

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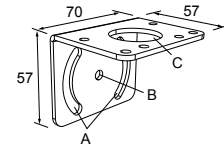
Hole center spacing: A = 51, A to B = 25.4
Hole size: A = 42.6 x 7, B = ø 6.4, C = ø 30.1

SMBAMS30P
- Flat SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90°+ rotation
- 12-ga. 300 series stainless steel
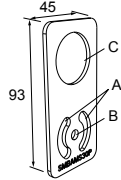
Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 x 7.0, B=ø 6.5, C=ø 31.0

SMB3018SC
- 18 mm swivel side or barrel-mount bracket
- Black reinforced thermoplastic polyester
- Stainless steel swivel locking hardware included
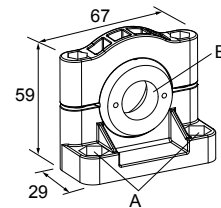
Hole center spacing: A = 50.8
Hole size: A = ø 7.0, B = ø 18.0

DIN-mount bracket for K80L models

SMBDX80DIN
- Black reinforced thermoplastic
- Bracket for mounting on a 35 mm DIN rail
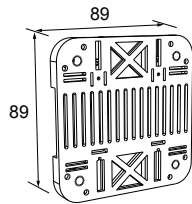
Banner Engineering Corp. Limited Warranty

BANNER®
more sensors, more solutions