Features

DC-Operated Indicators with 4 Colors and Multiple Flashing Frequencies



- Rugged, cost-effective, and easy-to-install indicators in K50, K50 Flat Pack, or K80 housing style
- Displays 4 colors and multiple flashing frequencies: steady ON, flashing, or alternating
- Illuminated dome provides easy-to-see operator guidance and indication of equipment status
- Compact devices are completely self-contained, no controller needed
- Choose NPN or PNP input, depending on model
- Immune to ambient light, EMI, and RFI interference
- 18 V DC to 30 V DC operation

QPMA

Contact factory for more information.

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	Connection	LED Function [1]	Inputs
K50LGRYB4PQ	50 mm dome / 30 mm mount polycarbonate	Integral 5-pin M12 male quick-disconnect connector	**4 Color:** Choose Green, Red, Yellow or Blue ON, flashing or alternative	PNP
K50LGRYB4NQ				NPN
K50FLGRYB4PQ	50 mm polycarbonate dome / polycarbonate base			PNP
K50FLGRYB4NQ				NPN
K80LGRYB4PQ	50 mm dome / Flat or DIN-mount polycarbonate			PNP
K80LGRYB4NQ				NPN

For the K50L and K50FL Models:

- To order the 150 mm PVC cable with QD model, replace the **Q** with a **QP** in model number (example, **K50LGRYB4PQP**).
- To order the 2 m (6.5 ft) cable model, omit the suffix **Q** from model number (example, **K50LGRYB4P**).
- Models with a QD require a mating cable.

For the K80L Models: To order the terminal-wired model, omit the suffix **Q** from model number (example, **K80LGRYB4P**).

[1] Contact the factory for other colors and color combinations.

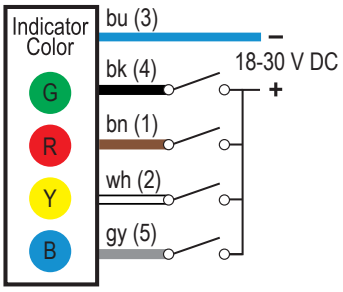
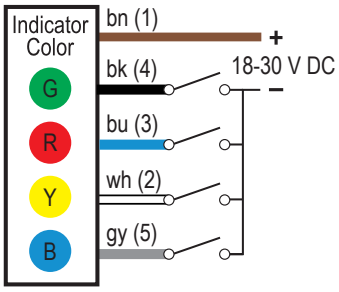
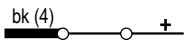
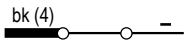
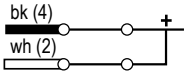
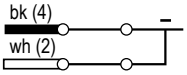
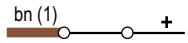
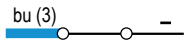
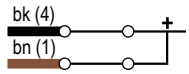
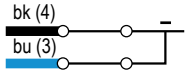
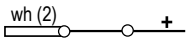
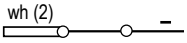
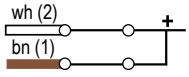
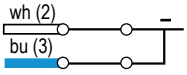
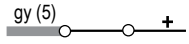
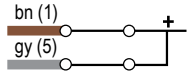
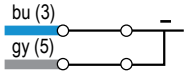
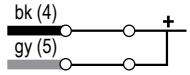
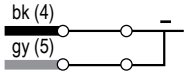
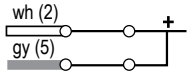
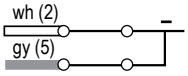
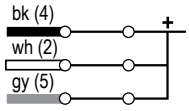
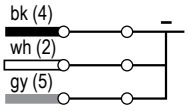
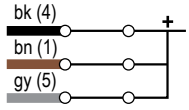
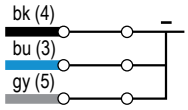
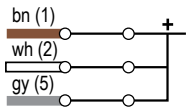
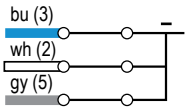
Original Instructions
23-Jun-25

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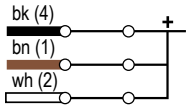
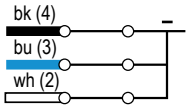
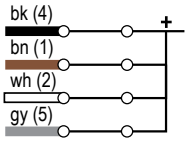
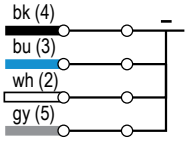
Wiring Diagrams

Function	PNP Wiring	NPN Wiring
Wiring Key: 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray		
Green steady		
Green flashes		
Red steady		
Red flashes		
Yellow steady		
Yellow flashes		
Blue steady		
Blue flashes		
Green, Red flash cycle		
Red, Blue flash cycle		
Green, Yellow flash cycle		
Green, Blue flash cycle		
Red, Yellow flash cycle		

Continued on page 2

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Continued from page 2

Function	PNP Wiring	NPN Wiring
Yellow, Blue flash cycle		
Green, Red, Yellow, Blue flash cycle		

Specifications

Supply Voltage and Current

18 V DC to 30 V DC at 50 mA maximum

Indicators

Entire translucent diffuser or dome provides indication. LEDs are independently selected: Green, Red, Yellow, or Blue; ON steady or flashing, alternating or rotating

Input Response Time

Indicator ON: 250 ms maximum

Indicator OFF: 10 ms maximum

Operating Conditions

–40 °C to +50 °C (–40 °F to +122 °F)

Environmental Rating

K50L and K50FL models: fully encapsulated, rated IP67 and IP69K per DIN 40050-9. Cabled models also meet IP69K if the cable and cable entrance are protected from high-pressure spray.

K80L models: IP67 (encapsulated electronics)

Indicator Flash Rate

1-Color: 1-second flash rate (500 ms ON)

2- and 4-Color Flash: 500 ms per color

Construction

See Models table

Connections

Integral 5-pin M12 male quick-disconnect connector; 150 mm (6 in) PVC-jacketed cable with a 5-pin M12 male quick-disconnect connector; or 2 m (6.5 ft) unterminated 5-wire PVC-jacketed cable depending on the model ordered

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 (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

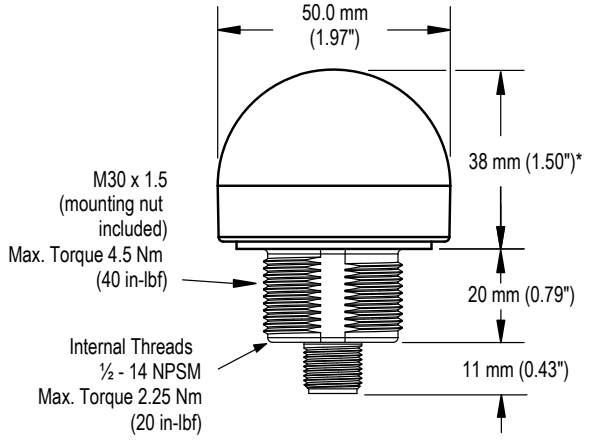
All models: CE Banner Engineering BV, Park Lane, Culliganlaan 2F bus 3, 1831 Diegem, BELGIUM

K50L models only: c UL us LISTED

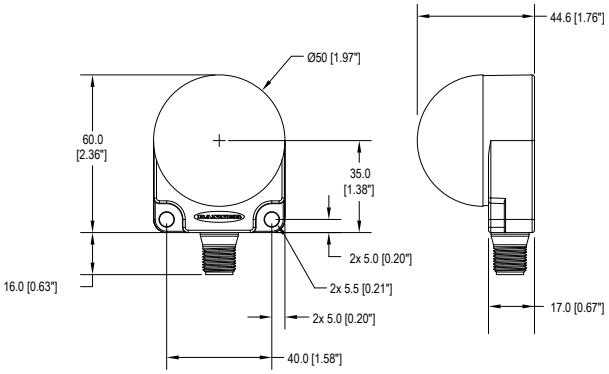
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Dimensions

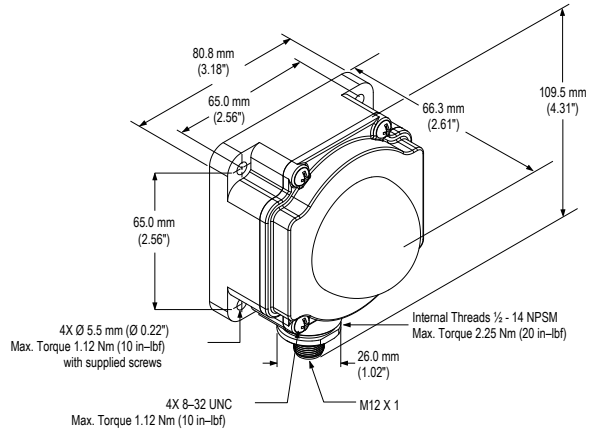
K50L



K50FL

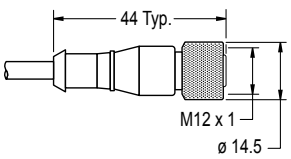
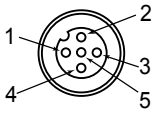


K80L



Accessories

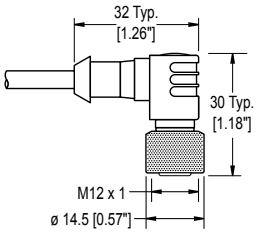
Cordsets

5-Pin Single-Ended M12 Female Cordsets				
Model	**Length**	**Style**	**Dimensions**	**Pinout (Female)**
MQDC1-501.5	0.5 m (1.5 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
MQDC1-503	0.9 m (2.9 ft)			
MQDC1-506	2 m (6.5 ft)			
MQDC1-515	5 m (16.4 ft)			
MQDC1-530	9 m (29.5 ft)			
MQDC1-560	18 m (59 ft)			
MQDC1-5100	31 m (101.7 ft)			

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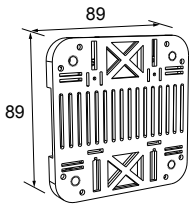
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5-Pin Single-Ended M12 Female Cordsets				
Model	**Length**	**Style**	**Dimensions**	**Pinout (Female)**
MQDC1-506RA	2 m (6.5 ft)	Right-Angle		
MQDC1-515RA	5 m (16.4 ft)			
MQDC1-530RA	9 m (29.5 ft)			
MQDC1-560RA	19 m (62.3 ft)			

Brackets

Brackets for K80L models

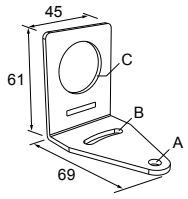
SMBDX80DIN
- Black reinforced thermoplastic
- Bracket for mounting on a 35 mm DIN rail



Brackets for K50L and K50FL models

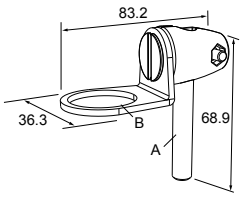
SMB30A
- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- 12-gauge stainless steel

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



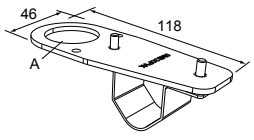
SMB30FA
- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-gauge 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric- and inch-size bolt available

Bolt thread: SMB30FA, A= 3/8 - 16 × 2 in; SMB30FAM10, A= M10 - 1.5 × 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

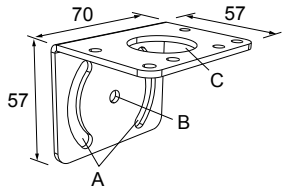


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SMB30MM

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

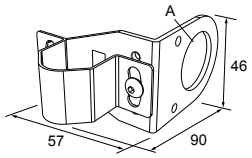
Hole center spacing: A = 51, A to B = 25.4
Hole size: A = 42.6 × 7, B = ø 6.4, C = ø 30.1



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

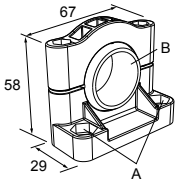
Hole size: A = ø 30.5



SMB30SC

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

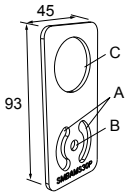
Hole center spacing: A=ø 50.8
Hole size: A=ø 7.0, B=ø 30.0



SMBAMS30P

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

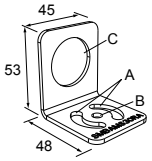
Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 × 7.0, B=ø 6.5, C=ø 31.0



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



NOTE: K50FL models include a 48 mm (1.9 in) circular velcro mounting kit for easy mounting with no additional hardware.

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