

Features

50 mm Multicolor LED Indicator



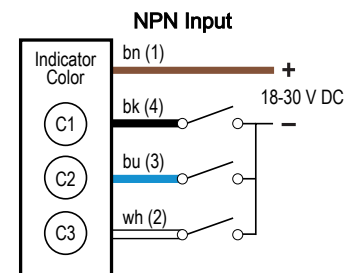
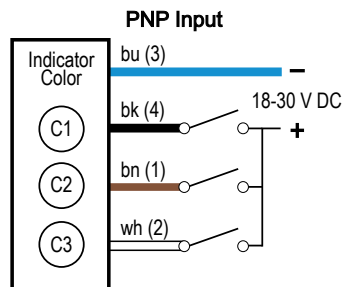
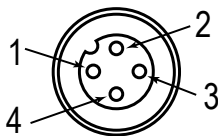
- Bright, uniform indicator light
- Rugged IP69K per ISO 20653 and IP67-rated design
- 18 V DC to 30 V DC operation
- Operate up to three colors in one device
- Up to six colors to choose from
- PNP or NPN models available
- Variety of connector options

Models

Family	LED Color			Input	Connector ⁽¹⁾
K50L	G	R	Y	P	Q
	C1	C2	C3		
K50L	G = Green			P = PNP	Blank = 2 m (6.5 ft) integral PVC-jacketed cable
K50FL	R = Red			N = NPN	Q = Integral 4-pin M12 male quick-disconnect connector
	Y = Yellow				QP = 150 mm (6 in) PVC-jacketed cable with a 4-pin M12 male quick-disconnect connector
	B = Blue				QPMA = 100 mm (6 in) PUR-jacketed cable with a 4-pin M12 quick-disconnect connector
	W = White				
	O = Orange				
	X = No color ⁽²⁾				

Wiring

4-pin M12 Male Pinout



Specifications

Supply Voltage and Current

18 V DC to 30 V DC
40 mA maximum current per color

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Leakage Current Immunity

400 μ A

Input Response Time

Indicator On/Off: 1 ms maximum

Connections

Integral 4-pin M12 male quick-disconnect connector, 150 mm (6 in) PVC-jacketed or PUR-jacketed cable with a 4-pin M12 male quick-disconnect connector, or 2 m (6.5 ft) integral PVC-jacketed cable, depending on model

Construction

Base and dome: Polycarbonate

Mounting

M30 \times 1.5 threaded base, maximum torque 4.5 N·m (40 in-lbf)
Mounting nut included

Environmental Rating

Quick-disconnect models meet IP69K per ISO 20653
Cable models rated IP67

NOTE: Cable models meet IP69K per ISO 20653 if the cable and cable entrance is protected from high-pressure spray.

⁽¹⁾ Models with a quick-disconnect connector require a mating cordset.

⁽²⁾ LED color designated with X also indicates that the associated input wire is not used.



Vibration and Mechanical Shock

All models meet MIL-STD-202F, Method 201A (Vibration: 10 Hz to 60 Hz maximum, 0.06 inch (1.52 mm) double amplitude, 10G maximum acceleration) requirements. Also meets IEC 60947-5-2 (Shock: 30G 11 ms duration, half sine wave) requirements.

Operating Conditions

−40 °C to +50 °C (−40 °F to +122 °F)

Indicator Characteristics

Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Lumen Output (Typical at 25 °C)
Green	528 nm	20
Red	625 nm	6.0
Yellow	590 nm	20
Blue	470 nm	5.0
Orange	608 nm	11
White	6000 K	16

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

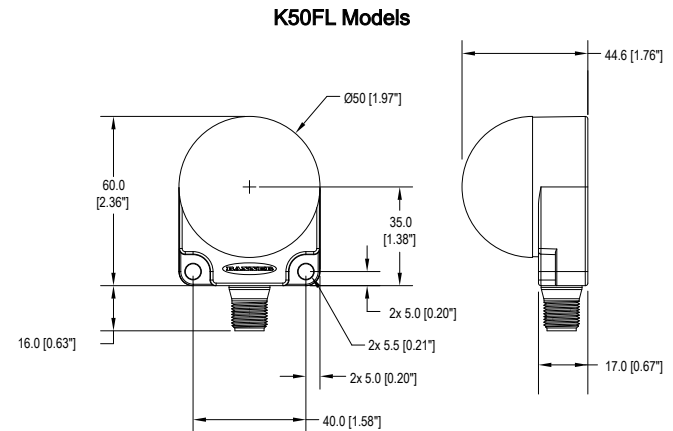
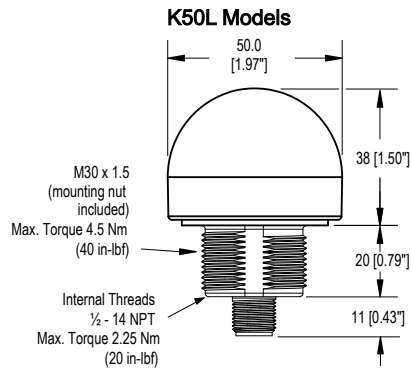
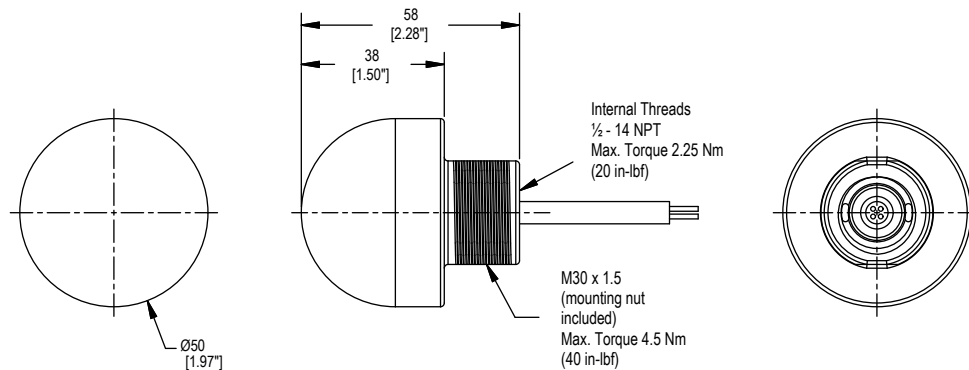
Banner Engineering BV
Park Lane, Culliganlaan 2F bus 3
1831 Diegem, BELGIUM



UL applies to K50L models only

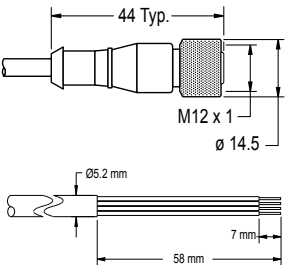
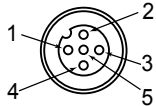
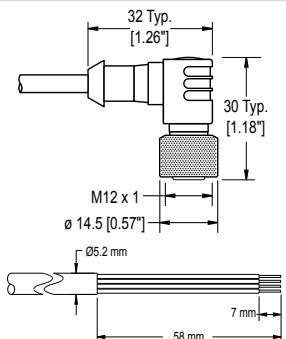
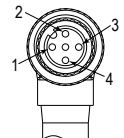
Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.

**K50L Cabled Models**

Accessories

Cordsets

4-Pin Single-Ended M12 Female Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	2 m (6.56 ft)	Straight		
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)			

1 = Brown
2 = White
3 = Blue
4 = Black
5 = Not used



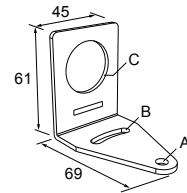
Brackets

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

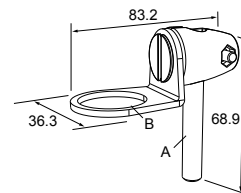


SMB30FA

- 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

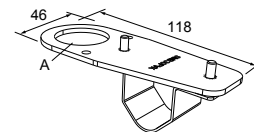
Hole size: B= Ø 30.1



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

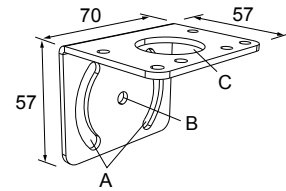


SMB30MM

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

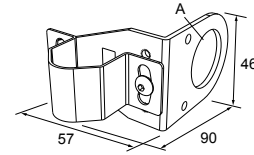
Hole center spacing: A = 51, A to B = 25.4

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

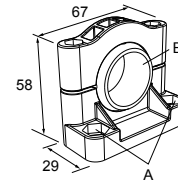
Hole size: A = Ø 30.5

**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

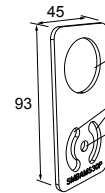
Hole size: A=Ø 7.0, B=Ø 30.0

**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

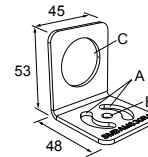
Hole size: A=26.8 × 7.0, B=Ø 6.5, C=Ø 31.0

**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



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