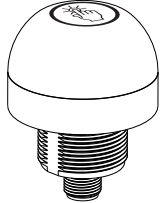


EZ-LIGHT® Touch Gen 2 K50 Series Pick-to-Light



Datasheet

Compact, single-point devices for error-proofing of bin-picking operations



- Excellent immunity to false triggering by water spray, detergents, oils, and other foreign materials
- Rugged, cost-effective and easy-to-install solutions for error-proofing and parts-verification applications
- Compact devices are completely self contained—No controller needed
- Waterproof IP69K construction for washdown environments
- Easy actuation—no force required
- 12 to 30 V dc operation
- Can be actuated with bare hands or in gloves

Models

Model ¹	Function	Output	Connection	Job Light		
K50APT2GXDO	<ul style="list-style-type: none"> • Job light is ON at all times while job input is active • Touch activates output 	PNP, N.O.	Integral 4-pin M12/ Euro-style male quick disconnect (QD)	Green		
K50RPT2GXDO		PNP, N.C.				
K50ANT2GXDO		NPN, N.O.				
K50RNT2GXDO		NPN, N.C.				
K50APT2GRCQ	<ul style="list-style-type: none"> • Job light is Green while job input is active • Touch activates output and overrides job light (turns Red) for visual verification that action was sensed 	PNP, N.O.		Integral 4-pin M12/ Euro-style male quick disconnect (QD)	Green (Red)	
K50RPT2GRCQ		PNP, N.C.				
K50ANT2GRCQ		NPN, N.O.				
K50RNT2GRCQ		NPN, N.C.				
K50APT2GREQ	<ul style="list-style-type: none"> • Job light is Green at all times while job input is active • Touch activates output • A touch while job input is inactive causes unit to light Red, providing visual verification that sensor is functioning properly 	PNP, N.O.			Integral 4-pin M12/ Euro-style male quick disconnect (QD)	Green (Red)
K50RPT2GREQ		PNP, N.C.				
K50ANT2GREQ		NPN, N.O.				
K50RNT2GREQ		NPN, N.C.				

Specifications

Supply Voltage
12 to 30 V dc

Supply Current
< 75 mA max current at 12 V dc (exclusive of load)
< 50 mA max current at 30 V dc (exclusive of load)

Supply Protection Circuitry
Protected against reverse polarity and transient voltages

Output Rating
Maximum Load: 150 mA
ON-state saturation voltage: < 2 V at 10 mA dc; < 2.5 V at 150 mA dc
OFF-state leakage current: <10 µA at 30 V dc

Output Response Time
50 milliseconds On and Off

Power-Up Delay
300 milliseconds

Indicators
Job ("Pick") Indicator: Green
Pick Sensed Indicator: Red or Off, depending on model

Connections
Integral 4-pin Euro style QD, or 2 m (6.5 ft) PVC integral cable

Storage
-40 °C to +70 °C (-40 °F to +158 °F)

Construction
Housing: polycarbonate
Translucent dome: polycarbonate
Mounting Nut: PBT

Mounting
M30 × 1.5 Threaded base Max torque 4.5 N·m (40 in·lbf)

¹ Integral QD models are listed. To order the 2 m (6.5 ft) PVC cable models, omit suffix Q from model number (for example, K50APT2GXD). A model with a QD requires a mating cable (see Cordsets).



Operating Conditions

Temperature: -40 °C to +50 °C (-40 °F to +122 °F)
 Humidity: 90% at 50 °C maximum relative humidity (non-condensing)

Environmental Rating

IEC IP67, IP69K per DIN 40050-9.
 Cabled models also meet IP69K if the cable and cable entrance are protected from high-pressure spray.

Vibration and Mechanical Shock

Vibration 10 Hz to 55 Hz 1.0 mm p-p amplitude per IEC 60068-2-6
 Shock 30G 11 ms duration, half sine wave per IEC 60068-2-27

Certifications



Required Overcurrent Protection

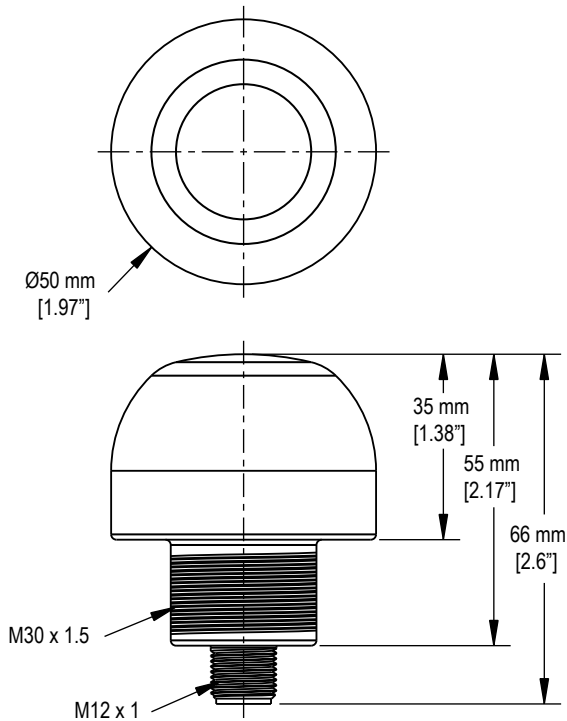


WARNING: Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

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 <http://www.bannerengineering.com>.

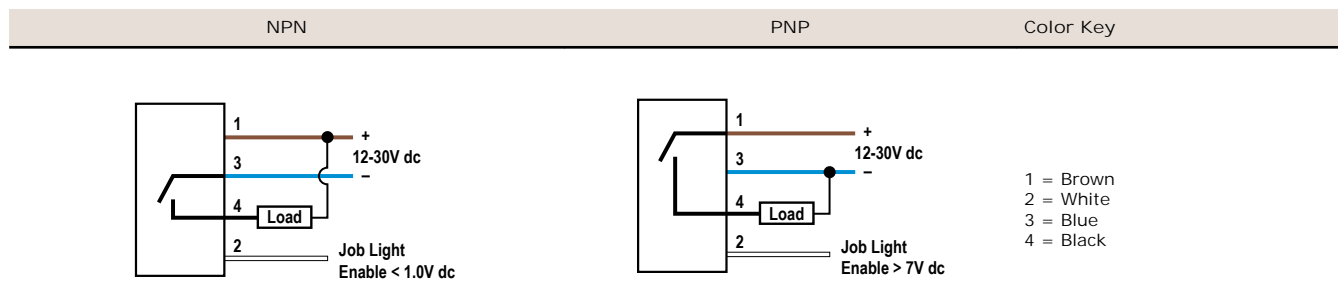
Supply Wiring (AWG)	Required Overcurrent Protection (Amps)
20	5.0
22	3.0
24	2.0
26	1.0
28	0.8
30	0.5

Dimensions



All measurements are listed in millimeters (inches), unless noted otherwise.

Wiring Diagrams



Cabled wiring diagrams are shown. Quick disconnect (QD) wiring diagrams are functionally identical.

Accessories

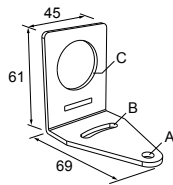
Cordsets

4-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	1.83 m (6 ft)	Straight		<p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
MQDC-415	4.57 m (15 ft)			
MQDC-430	9.14 m (30 ft)			
MQDC-450	15.2 m (50 ft)			
MQDC-406RA	1.83 m (6 ft)	Right-Angle		
MQDC-415RA	4.57 m (15 ft)			
MQDC-430RA	9.14 m (30 ft)			
MQDC-450RA	15.2 m (50 ft)			

Brackets

SMB30A

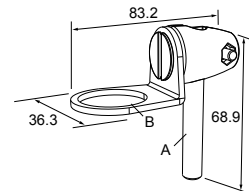
- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- 12-ga. stainless steel



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

SMB30FA

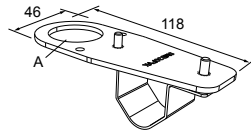
- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-ga. 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric and inch size bolt available



Bolt thread: SMB30FA, A= 3/8 - 16 x 2 in; SMB30FAM10, A= M10 - 1.5 x 50
Hole size: B= ø 30.1

SMB30FVK

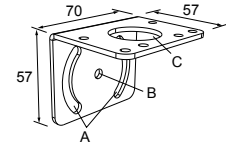
- V-clamp, flat bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions
- 30 mm hole for mounting sensors



Hole size: A = \varnothing 31

SMB30MM

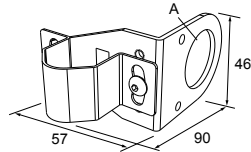
- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (1/4 in) hardware
- Mounting hole for 30 mm sensor



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

SMB30RAVK

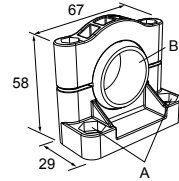
- V-clamp, right-angle bracket and fasteners for mounting sensors to pipe or extrusion
- Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions
- 30 mm hole for mounting sensors



Hole size: A = \varnothing 30.5

SMB30SC

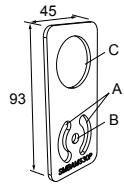
- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included



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

SMBAMS30P

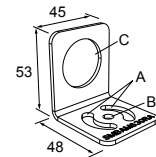
- Flat SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90° + rotation
- 12-ga. 300 series stainless steel



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

SMBAMS30RA

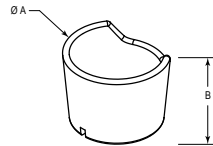
- Right-angle SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90° + rotation
- 12-ga. (2.6 mm) cold-rolled steel



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

TC-K50-CL

- Touch cover



Diameter: A =
Height: B =

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