EZ- LIGHT® Touch K50 Series Pick to Light

BANNER
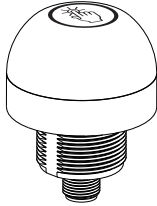*more sensors, more solutions*

Datasheet

Compact, Single-Point Devices for Error-Proofing of Bin-Picking Operations

- Rugged, cost-effective and easy-to-install solutions for error-proofing and parts-verification applications
- Compact devices are completely self contained—No controller needed
- Illuminated dome provides an easy-to-see green job light: some models also light red for alternate operation
- Waterproof IP69K construction for washdown environments
- Easy actuation—No force required
- 12 to 30V dc operation
- Can be actuated with bare hands or in gloves

Models

Model[1]	Function	Output	Connection	Job Light
K50APTGXDQ	• Job light is ON at all times while job input is active • Touch activates output	PNP, N.O.	Integral 4-pin Euro QD	Green
K50RPTGXDQ		PNP, N.C.		
K50ANTGXDQ		NPN, N.O.		
K50RNTGXDQ		NPN, N.C.		
K50APTGRCQ	• 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.		Green (Red)
K50RPTGRCQ		PNP, N.C.		
K50ANTGRCQ		NPN, N.O.		
K50RNTGRCQ		NPN, N.C.		
K50APTGREQ	• 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.		Green (Red)
K50RPTGREQ		PNP, N.C.		
K50ANTGREQ		NPN, N.O.		
K50RNTGREQ		NPN, N.C.		

[1] Integral QD models are listed. To order the 2 m (6.5 ft) PVC cable, omit suffix Q from model number (for example, K50APTGXD). A model with a QD requires a mating cable (see Cordsets).

Specifications

Supply Voltage
12 to 30 V dc

Supply Current
< 75 mA max current at 12 V dc (exclusive of load)
< 40 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: < 2V at 10 mA dc; < 2.5V at 150 mA dc
OFF-state leakage current: <10 µA at 30 V dc

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

Output Response Time:
50 milliseconds On and Off

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

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.

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

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

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

Mounting
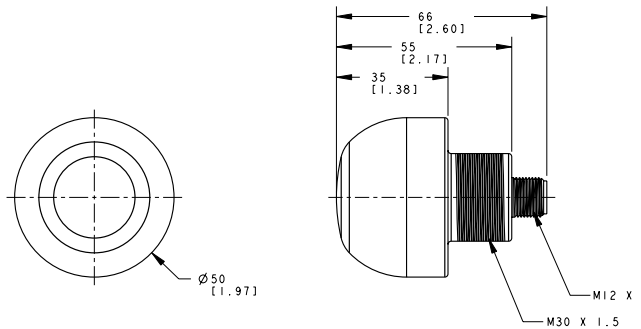M30 x 1.5 Threaded base Max torque 4.5 Nm (40in lb f)

Vibration and Mechanical Shock
All models meet Mil. Std. 202F requirements method 201A (vibration: 10 to 60 Hz max., double amplitude 0.06 in. maximum acceleration 10G). Also meets IEC 947-5-2; 30G 11 ms duration, half sine wave.
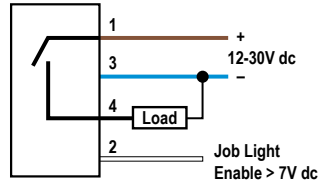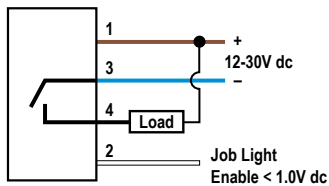
Certifications

CE   cULus LISTED

Dimensions

Wiring Diagrams

NPN	PNP	Color Key

1 = Brown
2 = White
3 = Blue
4 = Black

Accessories

Cordsets

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

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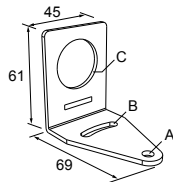
Hole center spacing: A to B=40
Hole size: A=ø 6.3, B= 27.1 x 6.3, C=ø 30.5

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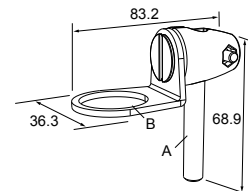
Bolt thread: SMB30FA, A= 3/8 - 16 x 2 in; SMB30FAM10, A= M10 - 1.5 x 50
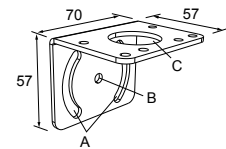Hole size: B= ø 30.1

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
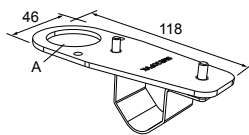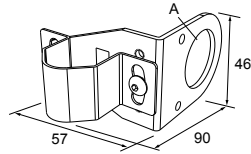
Hole size: A= ø 31

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

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
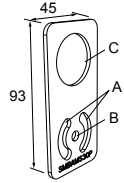
Hole size: A = ø 30.5

SMB30SC
- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included
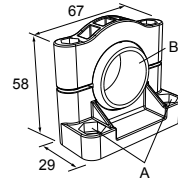
Hole center spacing: A=ø 50.8
Hole size: A=ø 7.0, B=ø 30.0

SMBAMS30P
- Flat SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90°+ rotation
- 12-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

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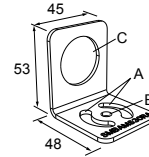
Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 x 7.0, B=ø 6.5, C=ø 31.0

Banner Engineering Corp Limited Warranty