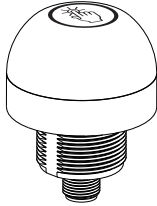


Datasheet

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	<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 Euro QD	Green	
K50RPTGXDQ		PNP, N.C.			
K50ANTGXDQ		NPN, N.O.			
K50RNTGXDQ		NPN, N.C.			
K50APTGRQC	<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.		Green (Red)	
K50RPTGRQC		PNP, N.C.			
K50ANTGRQC		NPN, N.O.			
K50RNTGRQC		NPN, N.C.			
K50APTGREQ	<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.			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)

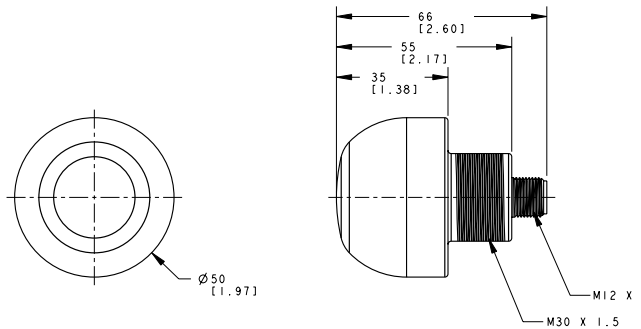
Vibration and Mechanical Shock

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

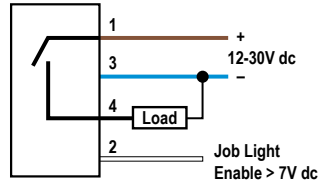
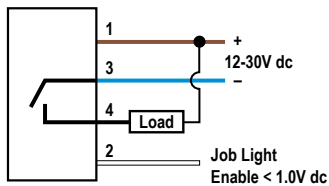


Dimensions



Wiring Diagrams

NPN	PNP	Color Key
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- 1 = Brown
- 2 = White
- 3 = Blue
- 4 = Black

Accessories

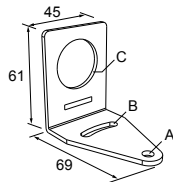
Cordsets

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		<p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
MQDC-415RA	4.57 m (15 ft)			
MQDC-430RA	9.14 m (30 ft)			
MQDC-450RA	15.2 m (50 ft)			

Brackets

SMB30A

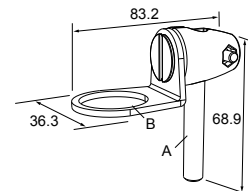
- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- 12-ga. stainless steel



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

SMB30FA

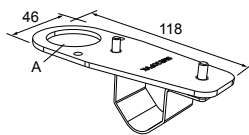
- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-ga. 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric and inch size bolt available



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

SMB30FVK

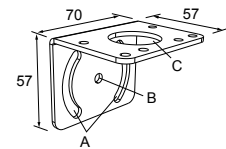
- V-clamp, flat bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions
- 30 mm hole for mounting sensors



Hole size: A= ø 31

SMB30MM

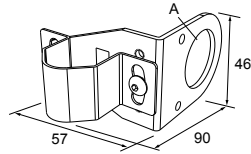
- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor



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

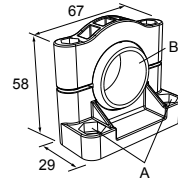
- V-clamp, right-angle bracket and fasteners for mounting sensors to pipe or extrusion
- Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions
- 30 mm hole for mounting sensors



Hole size: A = \varnothing 30.5

SMB30SC

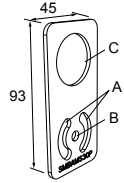
- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included



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

SMBAMS30P

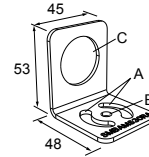
- Flat SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90° + rotation
- 12-ga. 300 series stainless steel



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

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