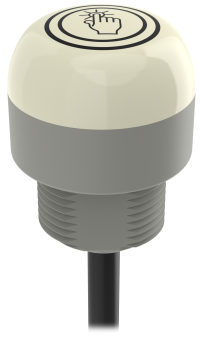
Features

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



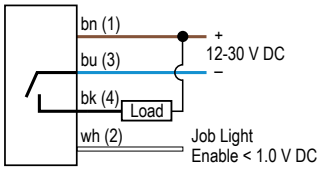
- FDA-grade materials; rated to IP67, IP68, and IP69K
- Laser-marked information withstands aggressive cleaning procedures
- Excellent immunity to false triggering by water spray, detergents, oils, and other foreign materials
- Rugged, cost-effective, and easy-to-install solutions for error-proofing and parts-verification applications
- Compact devices are completely self-contained, no controller is needed
- Illuminated dome provides an easy-to-see green job light: some models also light red for alternate operation
- Easy actuation, no force required
- 12 V DC to 30 V DC operation
- Can be actuated with bare hands or gloves

Models

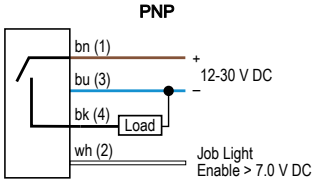
Model[1]	Function	Output	Connection	Job Light
K30APT2FGXDQP	• Job light is ON at all times while job input is active • Touch activates output	PNP, NO	150 mm (6 in) PVC-jacketed cable with a 4-pin M12 male, stainless steel quick-disconnect connector	Green
K30RPT2FGXDQP		PNP, NC		
K30ANT2FGXDQP		NPN, NO		
K30RNT2FGXDQP		NPN, NC		
K30APT2FGRCQP	• 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, NO		Green (Red)
K30RPT2FGRCQP		PNP, NC		
K30ANT2FGRCQP		NPN, NO		
K30RNT2FGRCQP		NPN, NC		
K30APT2FGREQP	• 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, NO		Green (Red)
K30RPT2FGREQP		PNP, NC		
K30ANT2FGREQP		NPN, NO		
K30RNT2FGREQP		NPN, NC		

Wiring

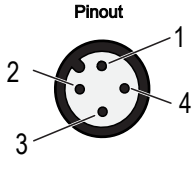
NPN



PNP



Pinout



NOTE: Cabled wiring diagrams are shown. Quick disconnect wiring diagrams are functionally identical.

Specifications

Supply Voltage
12 V DC to 30 V DC

Supply Current
55 mA max current (exclusive of load)

[1] To order the 2 m (6.5 ft) PVC cable models, omit suffix **QP** from model number (example, **K30APT2FGXD**). A model with a quick-disconnect connector requires a mating cordset (see "Cordsets" on page 3).

Original Instructions
20-Oct-25

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189834
p/n: 189834 Rev. C

ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Output Rating

Maximum load: 150 mA

ON-state saturation voltage: < 2 V DC at 10 mA; < 2.5 V DC at 150 mA

OFF-state leakage current: <10 µA at 30 V DC

Output Response Time:

150 milliseconds On and Off

Vibration and Mechanical Shock

Vibration: 10 Hz to 55 Hz, 1.0 mm peak-to-peak amplitude per IEC 60068-2-6

Shock: 30G 11 ms duration, half sine wave per IEC 60068-2-27

Environmental Rating

IP67, IP69K per ISO 20653

Storage

–40 °C to +70 °C (–40 °F to +158 °F)

Operating Conditions

Temperature: –40 °C to +50 °C (–40 °F to +122 °F)

Humidity: 90% at 50 °C maximum relative humidity (non-condensing)

Power-Up Delay

300 milliseconds

Construction

Base, dome, and nut: FDA-grade polycarbonate

Indicators

Job (pick) indicator: Green

Pick sensed indicator: Red or unilluminated, depending on model

Mounting

M22 × 1.5 Threaded base, max torque 2.25 N·m (20 in-lbf)

Connections

150 mm (6 in) PVC-jacketed cable with a 4-pin M12 male, stainless steel quick-disconnect connector or 2 m (6.5 ft) unterminated 3-wire PVC-jacketed cable, depending on model

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.

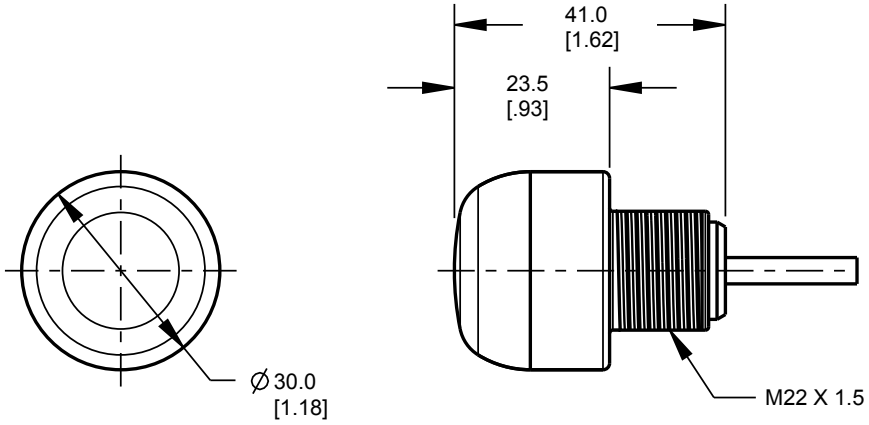
Supply Wiring (AWG)	Required Overcurrent Protection (A)	Supply Wiring (AWG)	Required Overcurrent Protection (A)
20	5.0	26	1.0
22	3.0	28	0.8
24	2.0	30	0.5

Certifications

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

Dimensions

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



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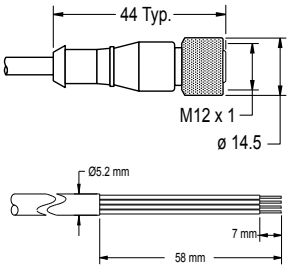
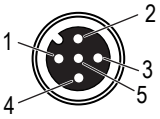
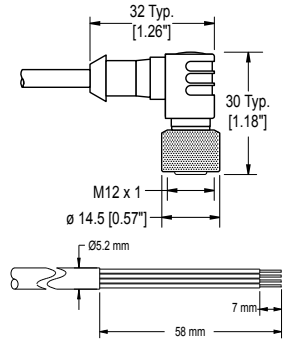
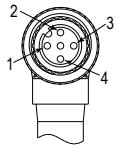
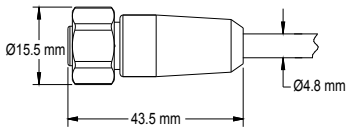
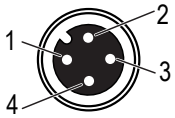
Accessories

Cordsets

4-Pin Single-Ended M12 Female Cordsets					
Model	**Length**	**Style**	**Dimensions**	**Pinout (Female)**	
MQDC-406	2 m (6.56 ft)	Straight			1 = Brown 2 = White 3 = Blue 4 = Black 5 = Not used c UL us
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)				

4-Pin Single-Ended M12 Female Washdown, Stainless Steel Cordsets				
Model	**Length**	**Style**	**Dimensions**	**Pinout (Female)**
MQDC-WDSS-0406	2 m (6.56 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black
MQDC-WDSS-0415	5 m (16.4 ft)			
MQDC-WDSS-0430	9 m (29.5 ft)			

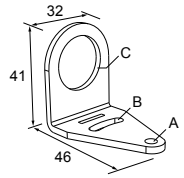
Brackets

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

SMB22A

- Right-angle bracket with curved slot for versatile orientation
- 12-ga. stainless steel
- Mounting hole for 22 mm sensor

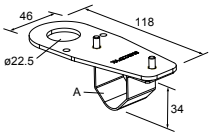
Hole center spacing: A to B = 26.0
Hole size: A = ø 4.6, B = 4.6 x 16.9, C = 22.2



SMB22FVK

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

Hole size: A = ø 22.5



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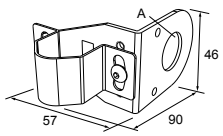
SMB22RAVK

- V-clamp, right-angle bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor

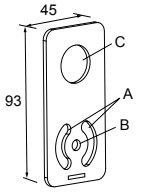
Hole size: A = ø 22.5



SMBAMS22P

- Flat SMBAMS series bracket with 22 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel

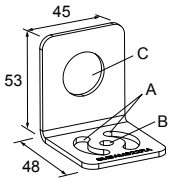
Hole center spacing: A = 26.0, A to B = 13.0
Hole size: A = 26.8 x 7.0, B = ø 6.5, C = ø 22.5



SMBAMS22RA

- Right-angle SMBAMS series bracket with 22 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel

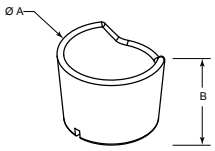
Hole center spacing: A = 26.0, A to B = 13.0
Hole size: A = 26.8 x 7.0, B = ø 6.5, C = ø 22.5



TC-K30-CL

- Touch cover

Diameter: A = 40.7 mm
Height: B = 31 mm



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