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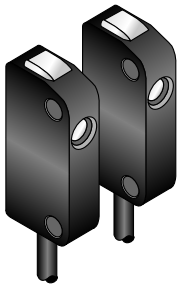
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Find the *Banner Engineering Q14AN6R* at our website: *Click HERE*

Datasheet

Miniature Self-Contained Opposed-Mode DC Photoelectric Sensors



- Self-contained dc sensors in miniature right-angle housings
- IEC IP54; NEMA 4 construction; hermetically-sealed optics
- 1.8 m (70 in) opposed range
- Choose models for light operate or dark operate; choose either NPN or PNP output models
- Choice of integral cable or quick-disconnect connector
- Mounting bracket is included

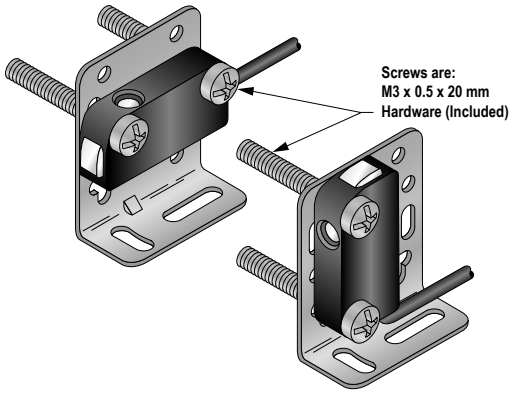
WARNING: Not To Be Used for Personnel **Protection**

Never use this device as a sensing device for personnel **protection.** Doing so could lead to serious injury or death. This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition.

Models

Models	Range	Cable[1]	Supply Voltage	NPN/ PNP	L.O./ D.O.
Q146E	1.8 m (70 in)	2 m (6.5 in)	10 V dc to 30 V dc	-	-
Q146EQ		3-Pin Pico-style 150 mm (6 in) QD			
Q14AN6R		2 m (6.5 in)		NPN	L.O.
Q14AN6RQ		3-Pin Pico-style 150 mm (6 in) QD			
Q14RN6R		2 m (6.5 in)			D.O.
Q14RN6RQ		3-Pin Pico-style 150 mm (6 in) QD			
Q14AP6R		2 m (6.5 in)		PNP	L.O.
Q14AP6RQ		3-Pin Pico-style 150 mm (6 in) QD			
Q14RP6R		2 m (6.5 in)			D.O.
Q14RP6RQ		3-Pin Pico-style 150 mm (6 in) QD			

Mounting Orientation

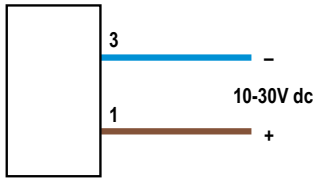


[1] Models with a quick disconnect require a mating cordset.

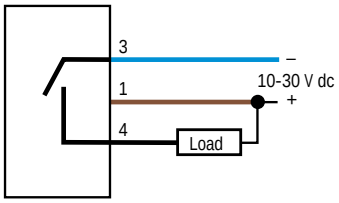
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Wiring Diagrams

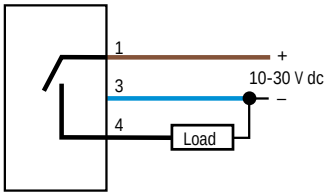
Emitters



NPN Receivers



PNP Receivers



Key

1 = Brown
3 = Blue
4 = Black

Quick disconnect (QD) wiring diagrams are functionally identical.

Specifications

Supply Voltage and Current
10 Vdc to 30 V dc (10% maximum ripple)
Emitter: 15 mA
Receiver: 15 mA (exclusive of load)

Supply **Protection** Circuitry
Protected against reverse polarity

Output **Configuration**
SPST solid-state dc switch;
Choose NPN (current sinking) or PNP (current sourcing) models
Choose light operate (N.O.) or dark operate (N.C.) models

Output **Rating**
150 mA maximum
Off-state leakage current: <10 microamps at 30V dc
On-state saturation voltage: <0.5 V at 10 mA dc; <1.0 V at 150 mA dc

Output **Protection** Circuitry
Protected against output short-circuit, continuous overload, and false pulse on power-up

Output Response Time
8 ms ON, 4 ms OFF

Repeatability
1.0 ms

Sensing Beam
Infrared, 880 nm

Indicators
Receiver: Two LEDs, Green and Amber
Green on = power to sensor is ON
Green flashing = output is overloaded
Amber on = light is sensed
Amber flashing = marginal excess gain (1-1.5x) in light condition
Emitter: One GREEN LED indicates power to sensor is ON

Construction
Housings are black ABS; Rated UL 94V0
Lenses are hermetically-sealed glass
Stainless steel M3 mounting hardware is included; stainless steel mounting bracket is included

Environmental **Rating**
IEC IP54; NEMA 4

Connections
2 m (6.5 ft) or 9 m (30 ft) attached cable, or 150 mm (6 in) 3-pin Pico-style quick-disconnect fitting. QD cables are ordered separately.

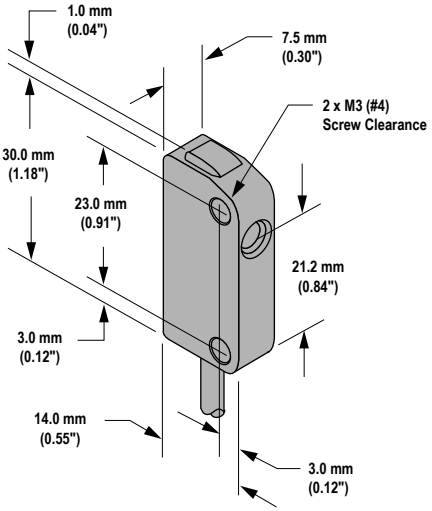
Operating Conditions
–20 °C to +55 °C (–4 °F to +131°F)
90% at +50 °C maximum relative humidity (non-condensing)

Certifications

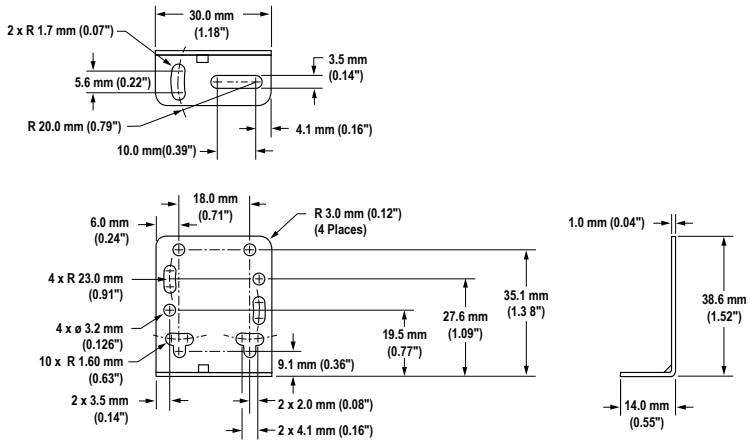
CE

Dimensions

Q14



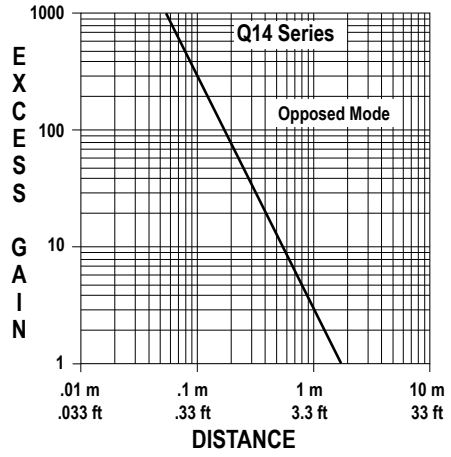
Mounting Bracket (Included)



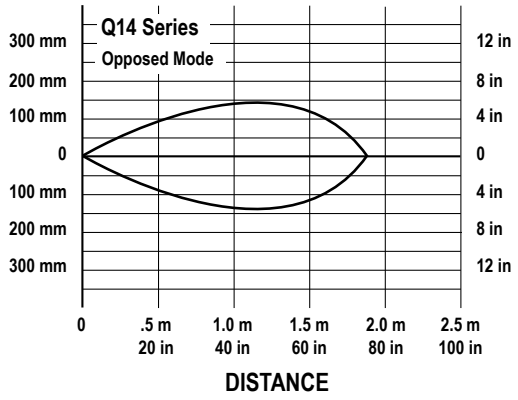
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Performance Curves

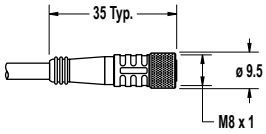
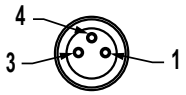
Excess Gain Curve



Beam **Pattern**



Quick-Disconnect Cables

3-Pin Threaded M8/Pico-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
PKG3M-2	2 m (6.56 ft)	Straight		 1 = Brown 3 = Blue 4 = Black
PKG3M-5	5 m (16.40 ft)			
PKG3M-7	7 m (22.97 ft)			
PKG3M-9	9 m (29.53 ft)			
PKG3M-10	10 m (32.81 ft)			

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