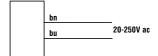
Self-contained, ac-operated sensors







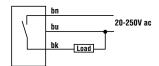
Cabled Emitters



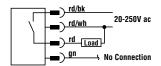
QD Emitters (4-pin Micro-Style)



All Other Cabled Models



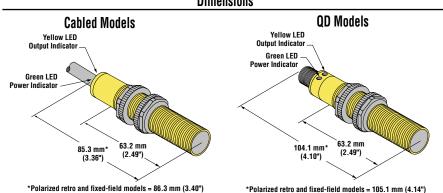
All Other QD Models (4-pin Micro-Style)



Sensing Mode		Range	LED	Output	Model*
	Opposed	20 m (66')	Infrared 950 nm	-	S183E
				L0	S18AW3R
				D0	S18RW3R
	Retro- reflective [†]	2 m (79")		L0	S18AW3L
				D0	S18RW3L
P	Polarized Retro-		Visible Red 680 nm	L0	S18AW3LP
	reflective [†]			DO	S18RW3LP
→	Diffuse	100 mm (4")	Infrared 880 nm	L0	S18AW3D
				D0	S18RW3D
		300 mm (12")		L0	S18AW3DL
				D0	S18RW3DL
□ ≥ X	Fixed Field	25 mm (1") cutoff		L0	S18AW3FF25
				D0	S18RW3FF25
		50 mm (2") cutoff		L0	S18AW3FF50
				D0	S18RW3FF50
		100 mm (4") cutoff		L0	S18AW3FF100
				D0	S18RW3FF100

- * Standard 2 m (6.5') cable models are listed.
 - 9 m (30') cable: add suffix "W/30" (e.g., \$183E W/30).
 - 4-pin Micro-style QD models: add suffix "Q1" (e.g., S183EQ1). A model with a QD connector requires a mating cable.
- † Use polarized models when shiny objects will be sensed.

Dimensions



Specifications

Supply Voltage and Current

20 to 250V ac (50/60 Hz). Average current: 20 mA

Peak current: 200 mA at 20V ac, 500 mA at 120V ac, 750 mA at 250V ac

Supply Protection Circuitry

Protected against transient voltages

Output Configuration

SPST solid-state ac switch; Three-wire hookup; Choose light operate or dark

operate models

Light Operate: Output conducts when sensor sees its own (or the emitter's)

modulated light

Dark Operate: Output conducts when the sensor sees dark

Output Rating

300 mA maximum (continuous);

Fixed-Field Models: derate 5 mA/°C above +50°C (+122°F) Inrush Capability 1 amp for 20 milliseconds, non-repetitive

OFF-state leakage current: < 100 microamps

ON-state saturation voltage: 3V at 300 mA ac; 2V at 15 mA ac

Output Protection Circuitry

Protected against false pulse on power-up

Output Response Time

Opposed Mode: 16 milliseconds ON, 8 milliseconds OFF

Other Models: 16 milliseconds ON and OFF NOTE: 100 millisecond delay on power-up

Repeatability

Opposed Mode: 2 milliseconds Other Models: 4 milliseconds

Repeatability and response are independent of signal strength.

Indicators

Two LEDs (Green and Yellow)

Green ON steady: power to sensor is ON Yellow ON steady: sensor sees light

Yellow flashing: excess gain marginal (1 to 1.5x) in light condition

Construction

PBT polyester housing; polycarbonate (opposed mode) or acrylic lens

Environmental Rating

Leakproof design rated NEMA 6P, DIN 40050 (IP69K)

Connections

2 m (6.5') attached cable, or 4-pin Micro-style quick-disconnect fitting

Operating Conditions

Temperature: -40° to $+70^{\circ}$ C (-40° to $+158^{\circ}$ F);

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

Vibration and Mechanical Shock

All models meet Mil. Std. 202F requirements. Method 201A (Vibration; frequency 10 to 60 Hz, max., double amplitude 0.06" acceleration 10G). Method 213B conditions H&I (Shock: 75G with unit operating; 100G for non-operation)

Certifications





Quick-Disconnect (QD) Cables

Style	Model	Length	Dimensions	Pin-Out
4-pin Micro-style Straight	MQAC-406 MQAC-415 MQAC-430	2 m (6.5') 5 m (15') 9 m (30')	44 mm max. (1.7") g 1/2-20UNF-2B	Red Wire Green Wire
4-pin Micro-style Right-angle	tyle MQAC-415RA 5 m (15')		38 mm max. (1.5") 38 mm max. (1.5")	Red/White Wire