



QS18 Series

Clear Object Detection Sensor



Coaxial Clear Object Detection

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QS18
Clear Object
Detection
Sensor

Fast. Reliable. Easy-to-Use.

QS18 coaxial clear object detection sensor



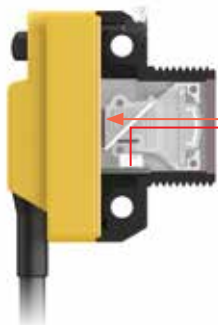
Response speed of **400 μ s ON/OFF**



Coaxial optics and small spot size for applications where space is limited



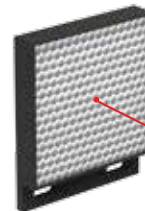
Banner's new **ClearTracking** algorithm provides reliable operation by compensating for dust build-up and ambient temperature changes



Coaxial Optics



- Detects clear and mirror-like surfaces
- Operates at very short distances from the reflector
- Enables very precise leading edge detection



Simple Pushbutton Teach

1. Align the sensor with the reflector
2. Push and hold the button for 2 seconds
3. Begin inspection



Applications

Accurate Tracking of Clear PET Bottles

Application Challenge

Identifying accumulations and gaps on the line is essential to ensuring a steady flow of bottles. Many commonly used sensing technologies cannot consistently detect clear bottles at high speeds.

Solution

The QS18E features a polarized coaxial optical design to ensure reliable detection of clear targets and has a fast 400 microsecond response time. The **ClearTracking** algorithm automatically compensates for the effects of dust and ambient temperature changes.

Three User-Selectable Thresholds

Optimize the sensor's performance to detect small changes in the amount of light received

8%



Glass



Wrapping Film

16%



PET Bottles



IV Bags



Glass Vials

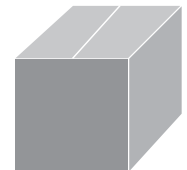


Glass Bottles

32%



Colored Glass Bottles



Boxes



QS18 Clear Object Detection Sensor

Order
Now

Family*	Output	Power	Sensing Mode	Connector
QS18E	P	6	XLPC	Q5
	N = NPN P = PNP	6 = DC Power	XLPC = Polar Retro with coaxial optics	Blank = 2 m Integral Cable Q = M8 4-pin Pico Pigtail QD Q5 = M12 4-pin Euro Pigtail QD Q7 = M8 4-pin Pico QD Q8 = M12 4-pin Euro QD

* All models require a reflector

QD models require mating cordset



Power	10 to 30 V dc	Construction	Housing: ABS Lens: PMMA
Range	depends on the reflector	Environmental Rating	IEC IP67
Output Response	400 µs ON/OFF	Repeatability	100 µs
Operating Conditions	-4 °F to +158 °F (-20 °C to +70 °C)	Certifications	CE cULus

Accessories

Brackets



Reflectors

Size (mm)	Range (m)	Model
92 x 92	3.0	BRT-92X92C
51 x 51	2.2	BRT-51X51BM
60 x 40	2.2	BRT-60X40C
50 x 50	2.2	BRT-2X2LVC
60 x 40	1.9	BRT-60X40C-PS
40 x 19	1.3	BRT-40X19A
75 x 75	0.5	BRT-THG-3X3

Cordsets

Type	Length	Model	Type	Length	Model
4-Pin Threaded M12/Euro-Style	2 m (6 ft)	MQDC-406	4-Pin Threaded M8/Pico-Style	2 m (6 ft)	PKG4M-2
	5 m (15 ft)	MQDC-415		5 m (15 ft)	PKG4M-5
	9 m (30 ft)	MQDC-430		9 m (30 ft)	PKG4M-9
	15 m (50 ft)	MQDC-450			

For right-angle models add RA to the model number. Example: **MQDC-406RA**

For right-angle models change **G** to **W** in the model number. Example: **PKW4M-2**



EN 194673

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