

QS18 Series

Clear Object Detection Sensor



Coaxial Clear Object Detection

- 2 | Fast. Reliable. Easy-to-Use
- 3 | Applications
- 4 | Specifications and Ordering





QS18
Clear Object
Detection
Sensor

Fast. Reliable. Easy-to-Use.

QS18 coaxial clear object detection sensor



IP67 rated,
ABS Housing

LED status indicators

18 mm threads
or side mount for
easy installation

LED and
Coaxial Lens

Multiple connection
options available



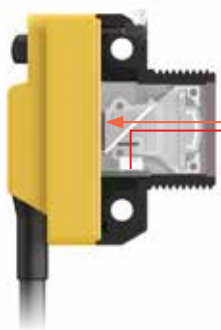
Response speed of **400 μ s ON/OFF**



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

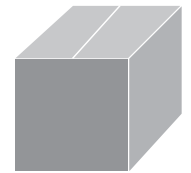


Glass Bottles

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				
NOTE: Potentiometer models are also available. Contact our factory for additional information.				

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	

Accessories

Brackets



SMB18A

SMBQ4XFA
Includes 3/8" bolt for mounting

SMBQ4XFAM10
Includes 10 mm bolt for mounting

SMBQ4XFAM12
Clamps directly onto industry standard bracket systems of 1/2" or 12 mm rods

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**



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