

Datasheet



- Easy-to-use Expert-style Static and Dynamic TEACH options, plus Window, Light, and Dark SET, via push button or remote input
- Smart power-control algorithm to maximize performance in low-contrast applications
- Easy push-button or remote sensor setup options:
 - Dark-Operate/Light-Operate select
 - Selectable 30 ms output OFF-delay
- Less than 1 millisecond output response for excellent sensing repeatability
- Tough ABS housing is rated IEC IP67; NEMA 6
- Bright LED operating status indicators are visible from 360°
- Discrete PNP or NPN output, depending on model
- Multiple connection options available (see Models)
- Compact housing, easy barrel-mount (some models) or side-mount installation



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.

Model	Sensing Mode	Range	Output	Model	Sensing Mode	Range	Output	
QS18EN6LP	660 nm Visible Red	3.5 m (12 ft)	NPN	QS18EN6CV15	CONVERGENT	16 mm (0.65 in)	NPN	
QS18EP6LP	POLAR RETRO		PNP	QS18EP6CV15			PNP	
QS18EN6D	940 nm Infrared	800 mm (31.5 in)	NPN	QS18EN6CV45	PLASTIC FIBER	43 mm (1.7 in)	NPN	
QS18EP6D			PNP	QS18EP6CV45			PNP	
QS18EN6DB		500 mm (19.7 in)	NPN	QS18EN6FP		660 nm Visible Red	Varies by mode and fiber optics used	NPN
QS18EP6DB			PNP	QS18EP6FP				PNP
QS18EN6W	DIFFUSE	300 mm (11.8 in)	NPN	QS18EN6DV	660 nm Visible Red	600 mm (23.6 in)	NPN	
QS18EP6W			PNP	QS18EP6DV			PNP	

The standard 2 m (6.5 ft) cable models are listed. To order the 9 m (30 ft) cable models, add the suffix "W/30" to the cabled model number. For example, QS18EN6FP W/30. Models with a quick disconnect (QD) connector require a mating cable.

To order a model with a 4-pin QD 150 mm (6 in) Euro-style pigtail, add suffix "Q5" (for example, QS18EN6FPQ5).

To order a model with a 4-pin 150 mm (6 in) Pico-style pigtail, add suffix "Q" (for example, QS18EN6FPQ).

To order a model with a 4-pin Integral Euro-style QD, add suffix "Q8" (for example, QS18EN6FPQ8).

To order a model with a 4-pin Integral Pico-style QD, add suffix "Q7" (for example, QS18EN6FPQ7).

¹ Specified using BRT-84 reflector (sold separately)



Overview of QS18E Expert Series Sensors



The QS18E Expert Sensors family of sensors provides high-performance sensing in a compact package. The sensors feature a discrete output (NPN or PNP, depending on model), two bright LEDs for easy status monitoring during configuration and operation, multiple configuration options, remote configuration, and security lockout options.

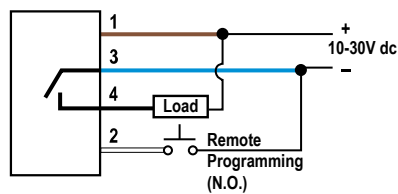
1. Amber output LED
2. Green power indicator LED
3. Receiver port
4. Emitter port
5. Configuration button

Indicators (Two LEDs: One Green, One Amber)		
Sensor Condition (Run Mode)	Green LED	Amber LED
Output OFF	ON	OFF
Output ON	ON	ON
Output ON, marginal signal	ON	Flashing
Output Short Circuit	Flashing	OFF

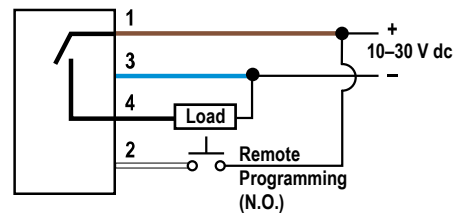
Figure 1. Sensor features

Wiring Diagrams

NPN (Sinking) Outputs



PNP (Sourcing) Outputs



Cabled wiring diagrams are shown. Quick disconnect (QD) wiring diagrams are functionally identical.