

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 DIFFUSE | 800 mm (31.5 in) | NPN | QS18EN6CV45 | CONVERGENT | 43 mm (1.7 in) | NPN |
| QS18EP6D | | | PNP | QS18EP6CV45 | | | PNP |
| QS18EN6DB | | 500 mm (19.7 in) | NPN | QS18EN6FP | 660 nm Visible Red PLASTIC FIBER | Varies by mode and fiber optics used | NPN |
| QS18EP6DB | | | PNP | QS18EP6FP | | | PNP |
| QS18EN6W | 300 mm (11.8 in) | NPN | QS18EN6DV | 660 nm Visible Red DIFFUSE | 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.

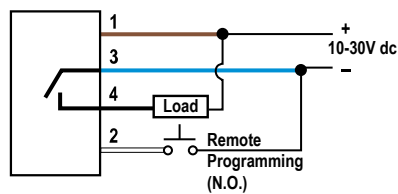
1. Amber output LED
2. Green power indicator LED
3. Receiver port
4. Emitter port
5. Configuration button

| 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 |

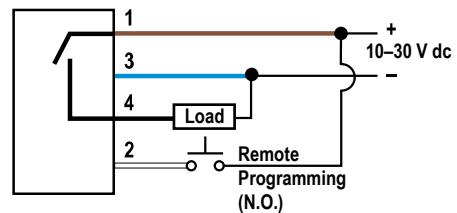
Figure 1. Sensor features

Wiring Diagrams

NPN (Sinking) Outputs



PNP (Sourcing) Outputs



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