

Datasheet

Miniature self-contained photoelectric sensors in universal housing



- Easily fits (or retrofits) almost any mounting situation
- Exceptional optical performance, comparable to larger "MINI-style" or barrel sensors
- 10 to 30 V dc operation, with complementary (SPDT) NPN or PNP outputs, depending on model
- Bright LED operating status indicators are visible from 360°
- Rugged sealed housing, protected circuitry
- Models available with or without 18 mm threaded "nose"
- Less than 1 millisecond output response for excellent sensing repeatability
- Choose 2 m (6.5 ft) or 9 m (30 ft) cable or 150 mm (6 inch) Pico-style pigtail QD



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.







Models

To order the 9 m (30 ft) cable models, add the suffix "W/30" to the cabled model number.

QD Models. For 4-pin integral Euro-style QD, add suffix "Q8" (for example, QS186EQ8). For 4-pin integral Pico-style QD, add suffix "Q7" (for example, QS186EQ7). For 4-pin 150 mm (6 in) Euro-style pigtail, add suffix "Q5" (for example, QS186EQ5). For 4-pin 150 mm (6 in) Pico-style pigtail, add suffix "Q" (for example, QS186EQ).

| Opposed Mode | Model | Range | Output |
|--------------------------------------|------------------------------|---------------|--------|
| Effective beam: 13 mm (0.5 inch) | QS186EV (624 nm Visible Red) | 20 m (66 ft) | N/A |
| | QS186E (940 nm Infrared) | | N/A |
| | QS18VN6R | | NPN |
| | QS18VP6R | | PNP |
| Effective beam: 13 mm (0.5 inch) | QS186EB (940 nm Infrared) | 3 m (10 ft) | N/A |
| | QS18VN6RB | | NPN |
| | QS18VP6RB | | PNP |
| Polarized Retroreflective Mode | Model | Range | Output |
| 630 nm Visible Red | QS18VN6LP | 3.5 m (12 ft) | NPN |
| | QS18VP6LP | | PNP |
| Retroreflective Mode | Model | Range | Output |
| 628 nm Visible Red | QS18VN6LV | 6.5 m (21 ft) | NPN |
| | QS18VP6LV | | PNP |



| Convergent Mode | Model | Range | Output |
|---|---------------------------|--|--------|
| 630 nm Visible Red  | QS18VN6CV15 | 16 mm (0.63 in) | NPN |
| | QS18VP6CV15 | | PNP |
| | QS18VN6CV45 | 43 mm (1.7 in) | NPN |
| | QS18VP6CV45 | | PNP |
| Diffuse Mode | Model | Range | Output |
| 940 nm Infrared  | QS18VN6D | 450 mm (18 in) | NPN |
| | QS18VP6D | | PNP |
| | QS18VN6DB (Diffuse, wide) | | NPN |
| | QS18VP6DB (Diffuse, wide) | | PNP |
| Divergent Mode | Model | Range | Output |
| 940 nm Infrared  | QS18VN6W | 100 mm (4 in) | NPN |
| | QS18VP6W | | PNP |
| Fixed Field Mode | Model | Range | Output |
| 660 nm Visible Red  | QS18VN6FF50 | 50 mm (2 in) | NPN |
| | QS18VP6FF50 | | PNP |
| | QS18VN6FF100 | 100 mm (4 in) | NPN |
| | QS18VP6FF100 | | PNP |
| Plastic Fiber Optic Mode | Model | Range | Output |
| 660 nm Visible Red  | QS18VN6FP | Range varies by sensing mode and fiber optics used | NPN |
| | QS18VP6FP | | PNP |
| Glass Fiber Optic Mode | Model | Range | Output |
| 940 nm Infrared  | QS18VN6F | Range varies by sensing mode and fiber optics used | NPN |
| | QS18VP6F | | PNP |

Wiring Diagrams

