

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

QS18 with NPN (Sinking) Outputs	QS18 with PNP (Sourcing) Outputs	QS18 Emitters
		