



WORLD-BEAM® QS30 Series

High-power opposed-mode sensors

Features



- Infrared beam with high excess gain — range over 213 m (700')
- Excellent noise immunity and crosstalk avoidance
- Excellent optical performance throughout the sensing range
- Easy-to-read operating status indicators, with bargraph display
- Bipolar discrete outputs, PNP and NPN
- Light Operate and Dark Operate models available
- Models available with 2 m or 9 m (6.5' or 30') cable, or quick-disconnect fitting
- Tough ABS housing rated IEC IP67; NEMA 6P; QD models are wash down-tested to DIN 40050-9 (IP69K)
- Unique water/debris-shedding lens design reduces lens contamination; lens material survives impact, washdown and cleaning chemicals
- Encapsulated electronics
- Compact housing, mounting versatility — popular 30 mm threaded barrel or side-mount



Excellent for applications where high sensing power is required due to long sensing range or contamination on lenses.

Infrared, 875 nm

Models

Model	Cable*	Supply Voltage	Output Type	Beam Pattern	Excess Gain
Emitters					
QS30EX	2 m (6.5') 5-wire Cable	10V dc to 30V dc	—		
QS30EXQ	5-pin Euro-style QD				
Receivers					
QS30ARX	2 m (6.5') 5-wire Cable	10V dc to 30V dc	Bipolar NPN/PNP Light Operate		
QS30ARXQ	5-pin Euro-style QD				
QS30RRX	2 m (6.5') 5-wire Cable		Bipolar NPN/PNP Dark Operate		
QS30RRXQ	5-pin Euro-style QD				

*9 m (30') cables are available by adding suffix "W/30" to the model number of any cabled sensor (e.g., QS30EX W/30).

A model with a QD connector requires a mating cable (see page 4).

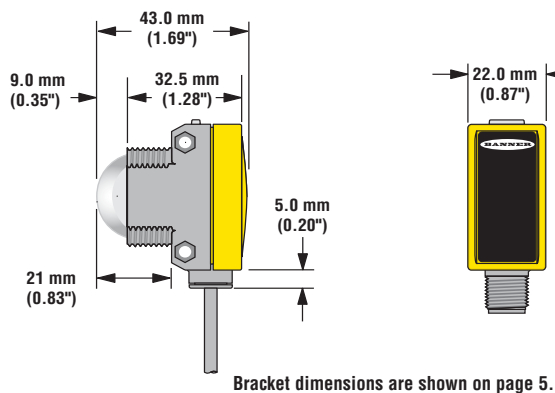
WORLD-BEAM® QS30 Series – High-Power Opposed-Mode Sensors

Specifications

Supply Voltage	Emitter: 10 to 30V dc (10% maximum ripple) at less than 70 mA Receiver: 10 to 30V dc (10% maximum ripple) at less than 22 mA (exclusive of load)
Beam	875 nm, infrared
Sensing Range	Excess gain of 2 at 213 m (700')
Output Configuration	Bi-polar current sinking (NPN) white wire; current sourcing (PNP) black wire
Output Rating	100 mA maximum load OFF-state leakage current: less than 200 µA ON-state saturation voltage: less than 1.5V at 100 mA, less than 900 millivolts at 10 mA Protected against false power up and continuous overload or short circuit
Output Response	30 milliseconds ON and 30 milliseconds OFF; 5 ms repeatability
Adjustments	Light Operate/Dark Operate – dependent on model selected Frequency via gray wire A: Gray (+) B: Gray (-) Emitter only: LED inhibit, via white wire White (-) turns emitter LED OFF (to allow verification of sensor operation)
Indicators	Green LED: Power ON Frequency Indicator (A or B) Receiver only: Yellow LED: Output conducting 4-LED Signal Strength light bar
Environmental Rating	Cabled models: IP67, NEMA 6P QD models: IP69K per DIN 40050-9
Construction	ABS plastic housing; impact-resistant lens material
Connection	5-wire cable (2 m or 9 m) or 5-pin integral Euro-style quick-disconnect fitting
Operating Conditions	Temperature: -20° to +60°C (-4° to +140°F) Relative Humidity: 90%; non-condensing
Mounting Torque	Maximum 4.5 Nm (40 in lbs) with included 30 mm mounting nut
Certifications	CE

Dimensions

Cabled Models



QD Models

