



WORLD-BEAM™ : Model Selection & Accessories

■ Models with pre-wired cable ■ Models with Pico-style pigtail quick-disconnect

Model Number	Part Number	Sensing Mode	Range	Cable	Supply Voltage	Output Type	Output Rating	Response	Repeatability		
QS186E	61618	Opposed Emitter	20 m (67')	2 m (6.5')	10 to 30V dc	—	100 mA maximum	—	—		
QS186EQ	61619			4-pin Pico QD		—					
QS18VN6R	61621	Opposed Receiver		2 m (6.5')		NPN				750 µs ON and 350 µs OFF	100 µs
QS18VN6RQ	61622			4-pin Pico QD		—					
QS18VP6R	61624			2 m (6.5')		PNP					
QS18VP6RQ	61625			4-pin Pico QD		—					
QS186EB	61675	Opposed Emitter (Flush Front)	3 m (10')	2 m (6.5')		—		—			
QS186EBQ	61676			4-pin Pico QD		—					
QS18VN6RB	61669	Opposed Receiver (Flush Front)		2 m (6.5')		NPN			750 µs ON and 350 µs OFF	100 µs	
QS18VN6RBQ	61670			4-pin Pico QD		—					
QS18VP6RB	61672			2 m (6.5')		PNP					
QS18VP6RBQ	61673			4-pin Pico QD		—					
QS18VN6LP	61627	Polarized Retroreflective	3.5 m* (12')	2 m (6.5')		NPN		—			
QS18VN6LPQ	61628			4-pin Pico QD		—					
QS18VP6LP	61630			2 m (6.5')		PNP					
QS18VP6LPQ	61631	4-pin Pico QD		—							
QS18VN6LV	61633	Retroreflective		6.5 m* (21')		2 m (6.5')			NPN	—	
QS18VN6LVQ	61634					4-pin Pico QD			—		
QS18VP6LV	61636		2 m (6.5')			PNP					
QS18VP6LVQ	61637		4-pin Pico QD			—					
QS18VN6CV15	61639	Convergent 16 mm	16 mm (0.63")			2 m (6.5')		NPN	—		
QS18VN6CV15Q	61640					4-pin Pico QD		—			
QS18VP6CV15	61642			2 m (6.5')		PNP					
QS18VP6CV15Q	61643			4-pin Pico QD		—					
QS18VN6CV45	61645	Convergent 43 mm		43 mm (1.7")	2 m (6.5')	NPN	600 µs ON and OFF	150 µs			
QS18VN6CV45Q	61646				4-pin Pico QD	—					
QS18VP6CV45	61648		2 m (6.5')		PNP						
QS18VP6CV45Q	61649		4-pin Pico QD		—						
QS18VN6D	61651	Diffuse	450 mm (18")		2 m (6.5')	NPN			—		
QS18VN6DQ	61652				4-pin Pico QD	—					
QS18VP6D	61654			2 m (6.5')	PNP						
QS18VP6DQ	61655			4-pin Pico QD	—						
QS18VN6DB	61663	Diffuse (Flush Front)		450 mm (18")	2 m (6.5')	NPN	—				
QS18VN6DBQ	61664				4-pin Pico QD	—					
QS18VP6DB	61666		2 m (6.5')		PNP						
QS18VP6DBQ	61667		4-pin Pico QD		—						
QS18VN6W	61657	Wide Angle Diffuse (Flush Front)	100 mm (4")		2 m (6.5')	NPN		—			
QS18VN6WQ	61658				4-pin Pico QD	—					
QS18VP6W	61660			2 m (6.5')	PNP						
QS18VP6WQ	61661			4-pin Pico QD	—						

* Based on BRT-84 retroreflector. NOTE: All cabled models also available with attached 9 m (30') cable (add W/30 to model number).

A complete selection of brackets offers flexible, esthetic mounting options.

Having the right mounting options readily available will assure optimum performance and quick installation of your Banner sensors. These attractively designed stainless steel and reinforced thermoplastic polyester units also enhance the appearance of your equipment and save you time and money through reduced installation time and lower total installed cost. Choose angled, through-hole brackets; split-clamp models that mount to a flat surface; versatile swivel-mount models that mount flat and have an adjustable ball to position the sensor at any angle; and many more. Request the Banner Sensor Catalog (P/N 99000) or CD ROM (P/N 99100) for available models. *Custom brackets* can also be designed for your unique applications.





WORLD-BEAM™ *Expert*™ Adjustable-Field & Fiber Optic Model Selection.

Expert Models

■ Models with pre-wired cable ■ Models with Pico-style pigtail quick-disconnect

Model Number	Part Number	Sensing Mode	Range	Cable**	Supply Voltage	Output Type	Output Rating	Response	Repeatability		
QS18EN6LP	68741	Polarized Retro	3.5 m (12')	2 m (6.5')	10 to 30V dc	NPN	100 mA maximum	600 µs ON and OFF	75 µs		
QS18EN6LPQ	68747			4-pin Pico Pigtail QD							
QS18EP6LP	68742			2 m (6.5')							
QS18EP6LPQ	68748			4-pin Pico Pigtail QD							
QS18EN6CV15	68850	Convergent	16 mm (0.65")	2 m (6.5')		NPN					
QS18EN6CV15Q	68852			4-pin Pico Pigtail QD							
QS18EP6CV15	68851			2 m (6.5')							
QS18EP6CV15Q	68853			4-pin Pico Pigtail QD							
QS18EN6CV45	68743			2 m (6.5')		NPN					
QS18EN6CV45Q	68749			4-pin Pico Pigtail QD							
QS18EP6CV45	68744			2 m (6.5')							
QS18EP6CV45Q	68750			4-pin Pico Pigtail QD							
QS18EN6D	69205			Diffuse		800 mm (31.5")				2 m (6.5')	NPN
QS18EN6DQ	69206									4-pin Pico Pigtail QD	
QS18EP6D	69209	2 m (6.5')									
QS18EP6DQ	69210	4-pin Pico Pigtail QD									
QS18EN6DB	68745	500 mm (19.7")	2 m (6.5')		NPN						
QS18EN6DBQ	68751		4-pin Pico Pigtail QD								
QS18EP6DB	68746		2 m (6.5')								
QS18EP6DBQ	68752		4-pin Pico Pigtail QD								
QS18EN6W	69213	300 mm (11.8")	2 m (6.5')		NPN						
QS18EN6WQ	69214		4-pin Pico Pigtail QD								
QS18EP6W	69217		2 m (6.5')								
QS18EP6WQ	69218		4-pin Pico Pigtail QD								

Adjustable Field & Fiber Optic Models

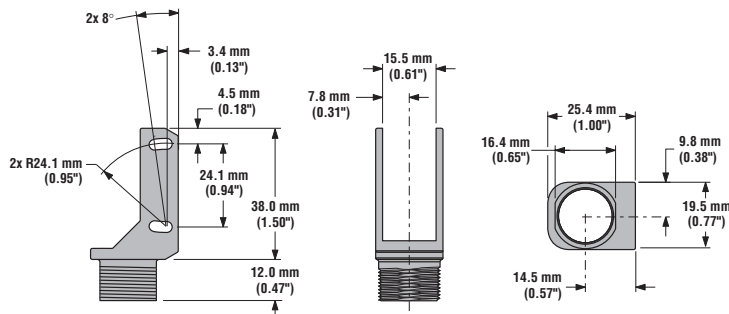
■ Models with pre-wired cable ■ Models with Pico-style pigtail quick-disconnect

Model Number	Part Number	Sensing Mode	Range	Cable**	Supply Voltage	Output Type	Output Rating	Response	Repeatability
QS18VN6AF100	65500	Adjustable Field	1 mm (0.04") to cutoff point. Cutoff point adjustable between 20-100 mm (0.8"-4").	2 m (6.5') 4-wire	10 to 30V dc	NPN	100 mA maximum	700 µs ON and OFF	175 µs
QS18VN6AF100Q	65501			4-pin Pico Pigtail QD					
QS18VP6AF100	65502			2 m (6.5') 4-wire					
QS18VP6AF100Q	65503			4-pin Pico Pigtail QD					
QS18VN6FP	66222	Fiber Optic	Range varies by sensing mode and fiber optics used.	2 m (6.5')		NPN			
QS18VN6FPQ	66223			4-pin Pico Pigtail QD					
QS18VP6FP	66224			2 m (6.5')					
QS18VP6FPQ	66225			4-pin Pico Pigtail QD					

**Additional cable options: Pre-wired 9 m (30') cable: add W/30 to standard model number. Pigtail QD, Euro-style, 4-pin, 15 cm (6"): add Q5 to standard model number. Integral QD, Pico-style, 4-pin: add Q7 to standard model number. Integral QD, Euro-style, 4-pin: add Q8 to standard model number. Integral QD not available on *Expert*™ and Adjustable field models.

WORLD-BEAM Threaded Mounting Bracket, Model SMBQS18Y.

This special bracket allows WORLD-BEAM and WORLD-BEAM *Expert* sensors to be mounted vertically in 18 mm (0.71") diameter holes. It features an 18 mm threaded base and slots for mounting the sensor that allow 8° of adjustment. It accommodates both QD and pre-wired cable sensor versions. The rugged, die-cast, metal bracket includes metal hex nut and lock washer. Part number 68865.





Specifications: WORLD-BEAM™ Sensors

Supply Voltage: 10 to 30V dc (10% maximum ripple) at less than 25 mA, exclusive of load.

Supply Protection Circuitry: Protected against reverse polarity and transient voltages.

Output Configuration: Solid-state complementary (SPDT): NPN or PNP (current sinking or sourcing) output, depending on model.

Output Rating: 100 mA maximum, each output at 25° C. OFF-state leakage current: less than 50 µA @ 30V dc. ON-state saturation voltage: less than 1 V @ 10 mA; less than 1.5 V @ 100 mA.

Output Protection Circuitry: Protected against false pulse on power-up and continuous overload or short circuit of outputs.

Output Response: Opposed Mode: 750 µs ON, 350 µs OFF. All others, 600 µs ON and OFF. NOTE: 100 millisecond delay on power-up, outputs do not conduct during this time.

Repeatability: Opposed mode: 100 µs. All others 150 µs.

Adjustments: Convergent, retroreflective and diffuse models (only): Single-turn sensitivity (GAIN) adjustment potentiometer.

Indicators: 2 LEDs, visible from all sides of sensor; 1 green and 1 red.

Construction: Polycarbonate/ABS alloy housing.

Environmental Ratings: IEC IP67 and NEMA 6

Connections: 2 m (6.5') 4-wire PVC cable, 9 m (30') PVC cable, or 4-pin Pico-style 150 mm (6") pigtail QD, depending on model.

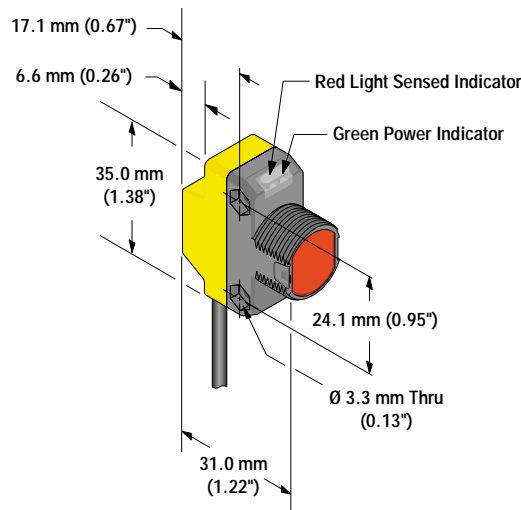
Operating Conditions: Temperature: -20°C to +70°C (-4°F to 158°F). Relative humidity: 90% @ 50°C (non-condensing).



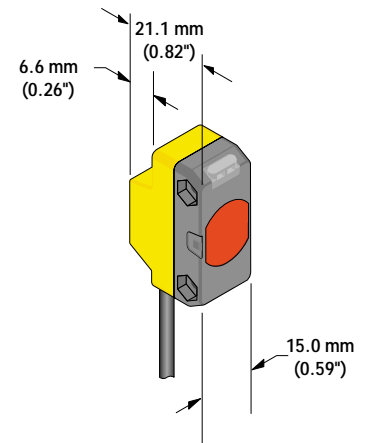
Optical-quality retroreflectors.

Choose from a complete line of high-quality acrylic targets, high-temperature targets and adhesive-backed retro tapes (not shown). Numerous sizes, shapes and mounting options meet your application requirements. Standard reflectivity model BRT-3 is used to conservatively rate the range of Banner retroreflective sensors, however, new high-reflectivity models dramatically increase the sensing ranges with reflectivity factors up to 3. Maximum temperature ratings range from 50°C (120°F) up to 480°C (900°). Various mounting options are available. Request the Banner Sensor Catalog (P/N 99000) or CD ROM (P/N 99100) for available models.

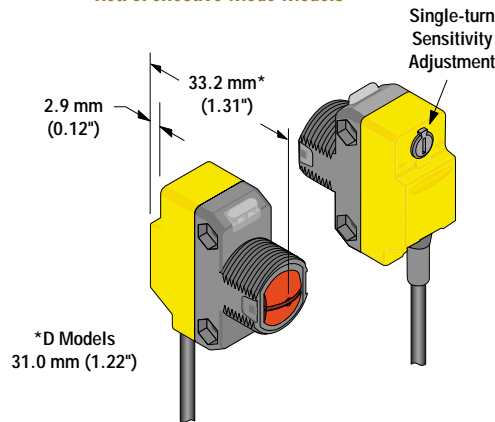
Opposed Emitter, Receiver & Polarized Retroreflective Mode Models



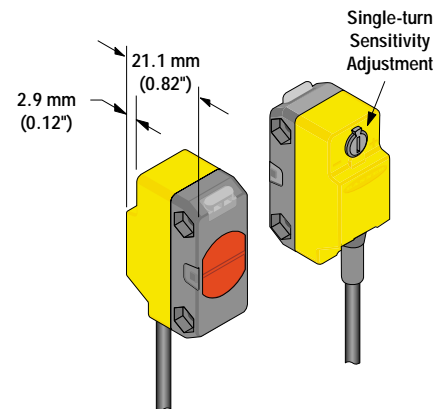
Flush Front Opposed Mode Emitter & Receiver Models



Diffuse, Convergent & Retroreflective Mode Models



Flush Front Diffuse Mode Models



M18 x 1 Jam Nut

