



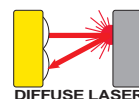
WORLD BEAM® QS18LD Series

Miniature Diffuse-Mode Laser Sensors



Features

- Visible Class 1 laser for diffuse sensing
- Narrow effective beam provides small-object detection and precise position control
- Crosstalk rejection algorithm protects against optical disturbance from adjacent sensors
- Excellent optical performance throughout sensing range, even close up
- 10 to 30V dc operation, with complementary (SPDT) NPN or PNP outputs, depending on model
- Bright LED operating status indicators are visible from 360°
- Compact, rugged sealed housing, protected circuitry
- Mounting versatility – popular 18 mm threaded barrel or side-mount
- Choose 2 m (6.5') or 9 m (30') cable or one of four QD options



Models

Model	Sensing Beam and Range	Spot Size at Focus	Cable*	Output	Excess Gain	Beam Pattern
					Performance based on 90% reflectance white test card	
QS18VN6LD	650 nm Visible Red, Class 1 Laser 300 mm (12")	Approx. 1 mm at 300 mm (0.039" at 12")	4-wire, 2 m (6.5') integral cable	NPN		
QS18VP6LD				PNP		

*Only standard 2m (6.5') cable models are listed. For 9 m (30') cable, add suffix "W/30" to the model number (e.g., QS18VN6LD W/30).

QD models:

- For 4-pin integral Euro-style QD, add suffix "Q8" (e.g., QS18VN6LDQ8).
- For 4-pin integral Pico-style QD, add suffix "Q7" (e.g., QS18VN6LDQ7).

- For 4-pin Euro-style 150 mm (6") pigtail QD, add suffix "Q5" (e.g., QS18VN6LDQ5).
- For 4-pin Pico-style 150 mm (6") pigtail QD, add suffix "Q" (e.g., QS18VN6LDQ).

A model with a QD connector requires a mating cordset (see page 3).

⚠ WARNING . . . Not To Be Used for Personnel Protection

Never use these products as sensing devices for personnel protection. Doing so could lead to serious injury or death.

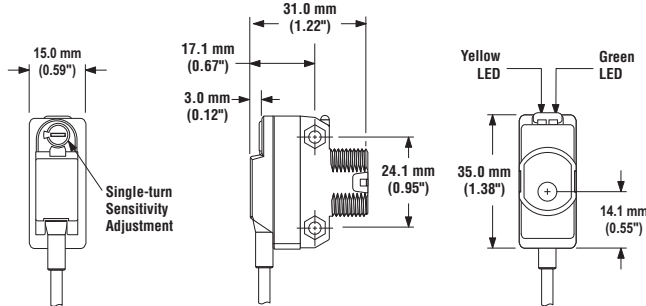
These sensors do NOT include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition. Consult your current Banner Safety Products catalog for safety products which meet OSHA, ANSI and IEC standards for personnel protection.



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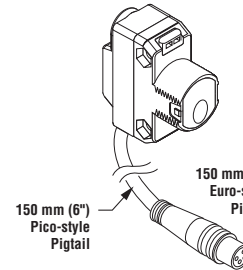
Dimensions and Features

Cabled Models

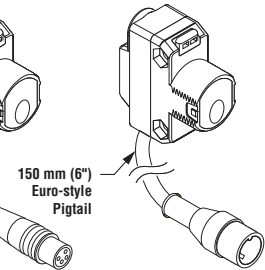


QD Models

Model Suffix Q



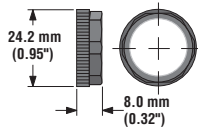
Model Suffix Q5



Mounting Hardware (included)

Packing List:

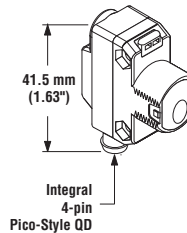
- Sensor
- M18 x 1 jam nut
- M3 hardware packet



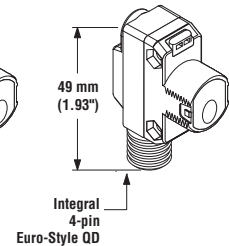
M3 Hardware Packet Contents:

- 2 – M3 x 0.5 x 20 mm SS Screw
- 2 – M3 x 0.5 SS Hex Nut
- 2 – M3 SS Washer

Model Suffix Q7

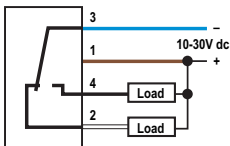


Model Suffix Q8

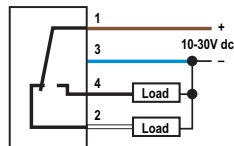


Hookups

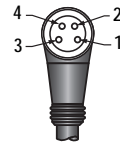
NPN (Sinking) Outputs



PNP (Sourcing) Outputs

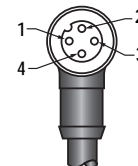


4-Pin Pico-Style Pin-out (Cable Connector Shown)



- 1 = Brown
- 2 = White
- 3 = Blue
- 4 = Black

4-Pin Euro-Style Pin-out (Cable Connector Shown)



- 1 = Brown
- 2 = White
- 3 = Blue
- 4 = Black

Euro-Style Quick-Disconnect Cordsets

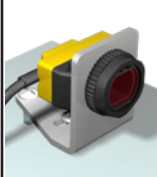
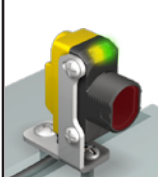
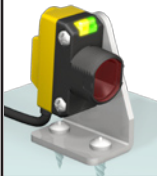

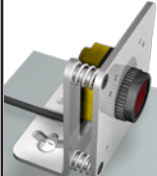

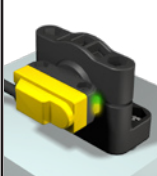


Style	Model	Length	Dimensions
4-Pin Straight	MQDC-406	2 m (6.5')	
	MQDC-415	5 m (15')	
	MQDC-430	9 m (30')	
4-Pin Right-angle	MQDC-406RA	2 m (6.5')	
	MQDC-415RA	5 m (15')	
	MQDC-430RA	9 m (30')	

Pico-Style Quick-Disconnect Cordsets

Style	Model	Length	Dimensions
4-Pin Straight	PKG4-2	2 m (6.5')	
4-Pin Right-angle	PKW4Z-2	2 m (6.5')	

WORLD BEAM® QS18LD Series

Mounting Brackets

SMB18A	<ul style="list-style-type: none"> • 12-gauge, stainless steel • Right-angle barrel-mount bracket 		SMBQS18RA	<ul style="list-style-type: none"> • 14-gauge, 304 stainless steel • Right-angle side-mount bracket 	
SMB312S	<ul style="list-style-type: none"> • Stainless steel • 2-axis, side-mounting bracket 		SMB18FA	<ul style="list-style-type: none"> • 14-gauge, 304 stainless steel • 18 mm swivel bracket with tilt and pan movement for precision adjustment 	
SMB46A	<ul style="list-style-type: none"> • 2-piece, 12-gauge, stainless steel bracket assembly with precision sensor alignment adjustment • Includes 2 mm hex key 		SMBQS18Y	<ul style="list-style-type: none"> • Die-cast bracket for mounting into 18 mm holes • Metal hex nut and lock washer included • Cabled sensors tilt $\pm 8^\circ$ 	
SMB18SF	<ul style="list-style-type: none"> • 18 mm swivel bracket • Black thermoplastic polyester • Includes stainless steel swivel locking hardware 				
SMB3018SC	<ul style="list-style-type: none"> • 18 mm swivel side-mount bracket • Black reinforced thermoplastic polyester • Includes stainless steel swivel locking hardware 		SMBQS18A	<ul style="list-style-type: none"> • Nickel-plated die-cast zinc • Wrap-around bracket 	



WARRANTY: Banner Engineering Corp. warrants its products to be free from defects for one year. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture found to be defective at the time it is returned to the factory during the warranty period. This warranty does not cover damage or liability for the improper application of Banner products. This warranty is in lieu of any other warranty either expressed or implied.