

Features



- Multiple mounting options accommodate almost any mounting requirements
- Exceptional optical performance, comparable to larger “MINI-style” or barrel sensors
- Patented wide-beam retroreflective models for enhanced ease of alignment
- 10 to 30V dc operation, with solid-state complementary NPN or PNP outputs, light operate or dark operate, depending on model
- Bright output LED indicates object is within the sensor’s field of view
- Rugged sealed housing with protected circuitry, rated IP67/NEMA 6
- All models feature 18 mm threaded barrel and base for easy, versatile mounting
- Choose 2 m (6.5') or 9 m (30') cable, or 4-pin Euro-style or Pico-style integral QD fitting or 150 mm (6") pigtail QD

[†] U.S. Patent(s) issued or pending

Models

	Sensing Mode	Models*	Range	Output		Sensing Mode	Models*	Range	Output	
Opposed	940 nm Infrared	DS186E	20 m (66')	N/A	Fixed-Field	660 nm Visible Red	DS18VN6FF50	50 mm (2")	NPN	
	Effective Beam: 13 mm (0.5")	DS18VN6R		NPN					DS18VP6FF50	PNP
		DS18VP6R		PNP						
Polarized Retro	660 nm Visible Red	DS18VN6LP	3.5 m (12')	NPN			FIXED-FIELD	DS18VN6FF100	100 mm (4")	NPN
		DS18VP6LP		PNP						DS18VP6FF100
Wide-Angle Polarized	660 nm Visible Red	DS18VN6LPW	3.0 m (10')	NPN				<p>* Only standard 2 m (6.5') cable models are listed. For 9 m (30') cable, add suffix "W/30" to the model number (e.g., DS186E W/30).</p> <p>QD models:</p> <ul style="list-style-type: none"> • For 4-pin integral Euro-style QD, add suffix "Q8" (e.g., DS186EQ8). • For 4-pin integral Pico-style QD, add suffix "Q7" (e.g., DS186EQ7). • For 4-pin Euro-style 150 mm (6") pigtail QD, add suffix "Q5" (e.g., DS186EQ5). • For 4-pin Pico-style 150 mm (6") pigtail QD, add suffix "Q" (e.g., DS186EQ). 		
		DS18VP6LPW		PNP						



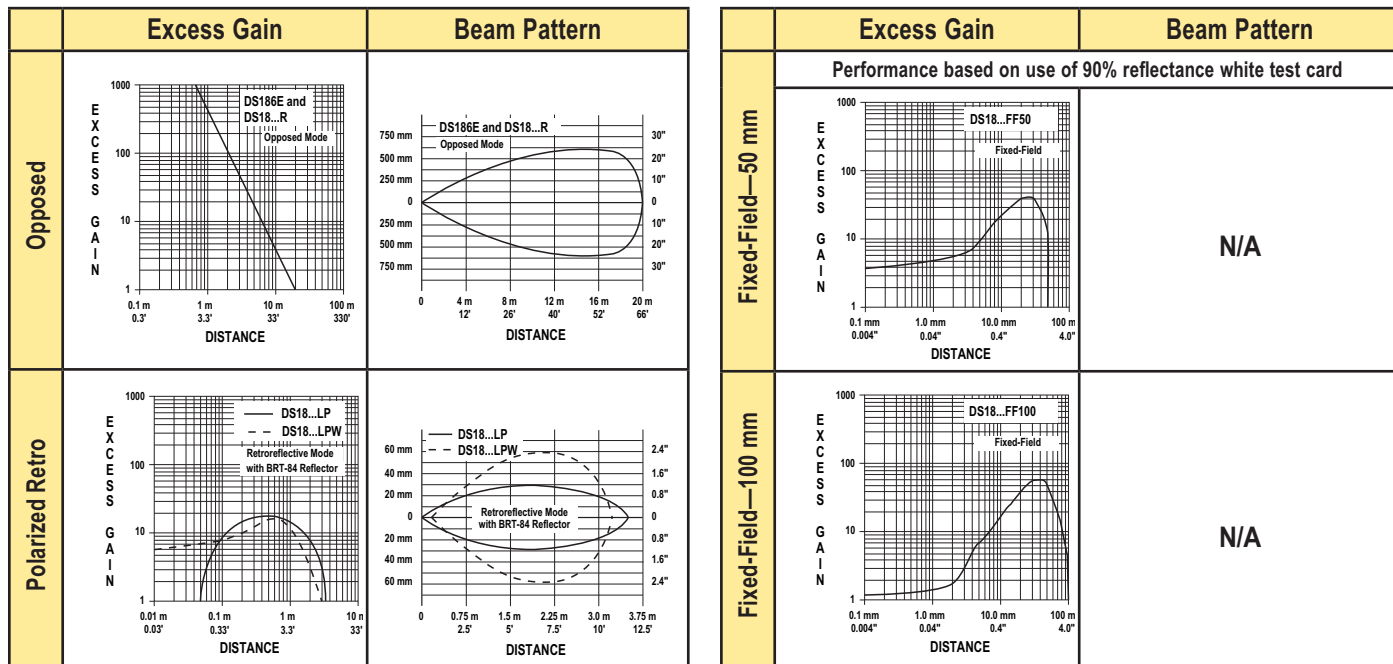
WARNING . . . Not To Be Used for Personnel Protection

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.



Performance Curves



Hookups

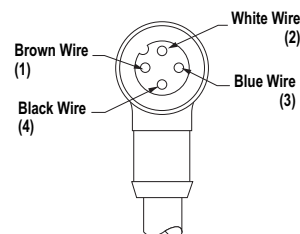
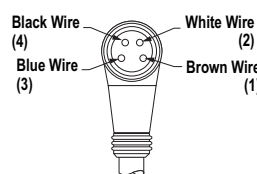
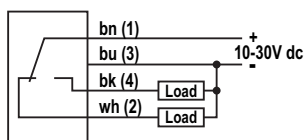
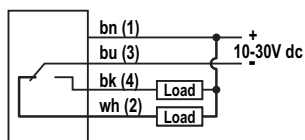
NPN (Sinking) Outputs

PNP (Sourcing) Outputs

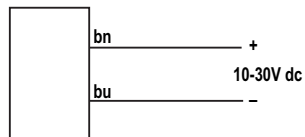
4-Pin Pico-Style Pinout (Cable Connector Shown)

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

State of sensor outputs when no object is present



Emitters

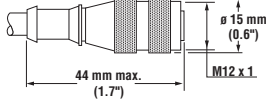
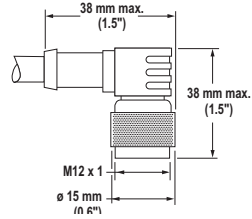
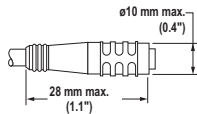
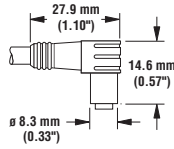


Overcurrent Protection

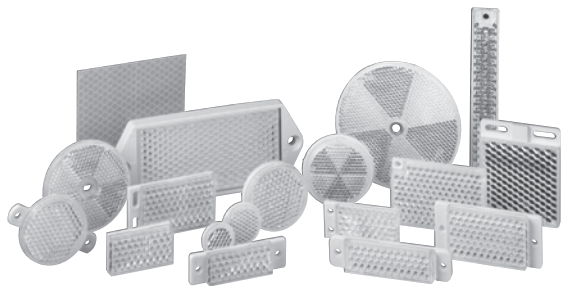
Conductor Size		Maximum ampere rating of the overcurrent protection
AWG	mm ²	
20	0.52	5
22	0.32	3
24	0.20	2
26	0.13	1
28	0.08	0.8
30	0.05	0.5

DS18 Series

Quick-Disconnect Cables

Style	Model	Length	Dimensions
4-pin Euro-style Straight	MQDC-406 MQDC-415 MQDC-430	2 m (6.5') 5 m (15') 9 m (30')	
4-pin Euro-style Right-angle	MQDC-406RA MQDC-415RA MQDC-430RA	2 m (6.5') 5 m (15') 9 m (30')	
4-pin Pico-style Straight	PKG4-2	2 m (6.5')	
4-pin Pico-style Right-angle	PKW4-2		

Retroreflective Targets



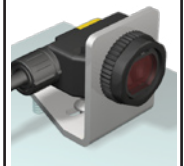
See the Accessories section of your current Banner Sensors catalog for complete information.

NOTE: Polarized sensors require corner cube type retroreflective targets only.

Mounting Bracket

SMB18A

- 12-gauge, stainless steel
- Right-angle mounting bracket



Refer to your current Banner Sensors catalog for more 18 mm barrel mounting bracket options.

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more sensors, more solutions

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.