



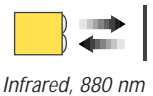
# QMT42 Series Long-Range Diffuse Sensors

Adjustable Sensing Distance of up to 6 m (20')



## Features

- Powerful, collimated infrared light source and special lensing allows reliable long-range detection of even the darkest objects
- Compact, rugged, low cost self-contained sensors in metal die cast housings
- Leakproof IP67 (NEMA 6) construction for reliable sensing in harsh environments
- Outstanding electrical noise immunity
- Dual LED system indicates sensor performance
- Choice of integral cable or quick disconnect connector



## QMT42 Long-Range Diffuse Mode

Models	Range	Cable	Supply Voltage	Output Type	Excess Gain	Beam Pattern
					Performance based on 90% reflectance white test card	
QMT42VN6DX QMT42VN6DXQ	10 mm (0.4") to 6 m (20')	2 m (6.5') 4-pin Euro QD	10-30V dc	NPN		
QMT42VP6DX QMT42VP6DXQ		2 m (6.5') 4-pin Euro QD		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.

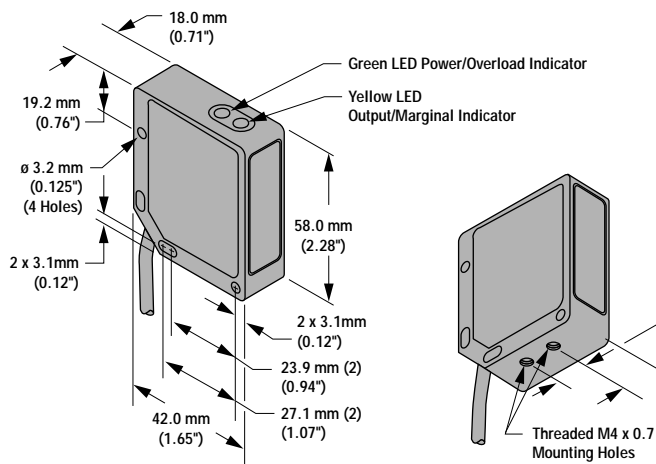
# QMT42 Series Long-Range Diffuse Sensors

## QMT42DX Specifications

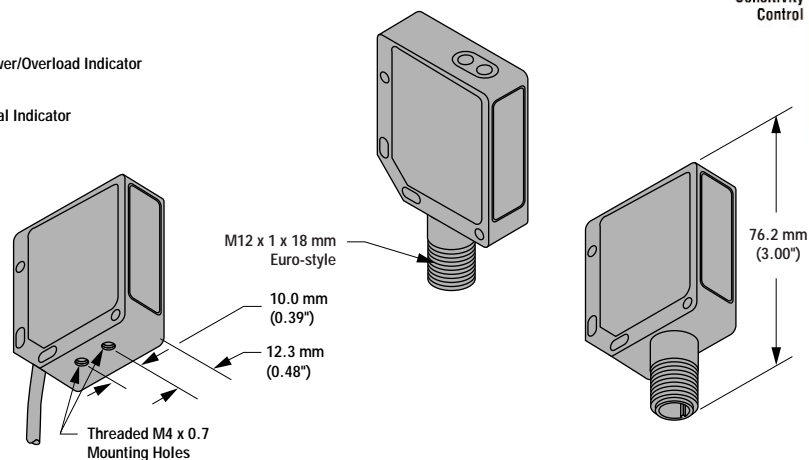
<b>Sensing Beam</b>	Infrared, 880 nm
<b>Supply Voltage and Current</b>	10 to 30V dc (10% maximum ripple) at less than 40 milliamps
<b>Supply Protection Circuitry</b>	Protected against reverse polarity and transient voltages
<b>Output Configuration</b>	SPDT (complementary) solid-state dc switch; Choose NPN (current sinking) or PNP (current sourcing) models. <i>Light operate:</i> N.O. output conducts when the sensor sees its own modulated light <i>Dark operate:</i> N.C. output conducts when the sensor sees dark
<b>Output Rating</b>	100 mA maximum (each output) <b>Off-state leakage current:</b> <5 microamps at 30V dc; <b>On-state saturation voltage:</b> <1V at 10 mA dc; <1.5V at 100 mA dc
<b>Output Protection Circuitry</b>	Protected against false pulse on power-up and continuous overload or short-circuit of outputs Overload trip point $\geq 130$ mA, typical, at 20°C
<b>Output Response Time</b>	1 millisecond on and off NOTE: 100 millisecond delay on power-up; outputs are non-conducting during this time
<b>Repeatability of Response</b>	250 microseconds
<b>Sensing Hysteresis</b>	Less than 20% of set sensing distance
<b>Adjustments</b>	4-turn slotted Gain (sensitivity) adjustment potentiometer (clutched at both ends of travel)
<b>Indicators</b>	Two LEDs: Green and Yellow GREEN <b>glowing steadily</b> = power to sensor is ON GREEN <b>flashing</b> = output is overloaded YELLOW <b>glowing steadily</b> = light is sensed; normally open output ON YELLOW <b>flashing</b> = marginal excess gain (1-1.5x) in light condition
<b>Construction</b>	Housings are die-cast zinc alloy with black acrylic polyurethane finish; lenses are acrylic
<b>Environmental Rating</b>	IP67; NEMA 6
<b>Connections</b>	2 m (6.5') or 9 m (30') attached cable, or 4-pin Euro-style quick-disconnect fitting; Cables for QD models are purchased separately
<b>Operating Temperature</b>	-20° to +55°C (-4° to +131°F); Maximum relative humidity 90% at 50°C (non-condensing)
<b>Certifications</b>	Approvals in process

## QMT42DX Dimensions

### Cabled models



### Quick-Disconnect models

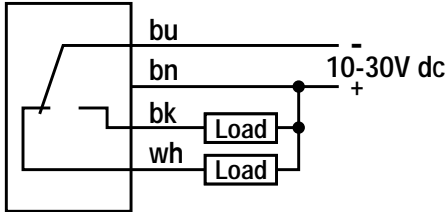


# QMT42 Series Long-Range Diffuse Sensors

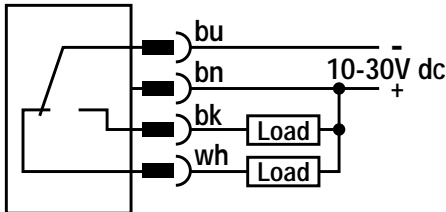
## QMT42DX Hookups

### Sensors with NPN (Sinking) Outputs

#### Cabled Models

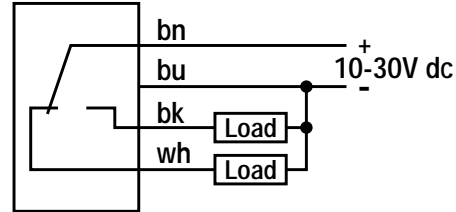


#### Quick Disconnect Models

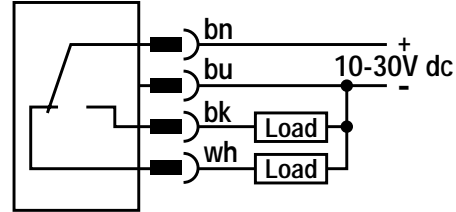


### Sensors with PNP (Sourcing) Outputs

#### Cabled Models



#### Quick Disconnect Models



## Quick-Disconnect (QD) Cables

The following is the selection of cables available for the QMT42 QD models

Style	Model	Length	For use with	Dimensions	Pinout
4-pin Euro-Style straight	MQDC-406 MQDC-415 MQDC-430	2 m (6.5') 5 m (15') 9 m (30')	All QMT42 sensors with quick-disconnect fitting		
4-pin Euro-Style right-angle	MQDC-406RA MQDC-415RA MQDC-430RA	2 m (6.5') 5 m (15') 9 m (30')			

# QMT42 Series Long-Range Diffuse Sensors

## QMT42 Mounting Brackets

<p><b>SMB42T</b></p> <ul style="list-style-type: none"> <li>• Right-angle</li> <li>• Stainless steel</li> </ul>	<p><b>SMB42F</b></p> <ul style="list-style-type: none"> <li>• 13 gauge</li> <li>• Stainless steel</li> </ul>
<p><b>SMB42L</b></p> <ul style="list-style-type: none"> <li>• 13 gauge</li> <li>• Stainless steel</li> </ul>	<p><b>SMB42U</b></p> <ul style="list-style-type: none"> <li>• 13 gauge</li> <li>• Stainless steel</li> </ul>
<p><b>SMB30SK</b></p> <ul style="list-style-type: none"> <li>• 13 gauge</li> <li>• Stainless steel and PBT polyester</li> </ul>	<div data-bbox="933 1480 1315 1596" data-label="Image"> </div> <p><b>WARRANTY:</b> Banner Engineering Corporation warrants its products to be free from defects for one year. Banner Engineering Corporation 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.</p>

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [banner manufacturer](#):*

Other Similar products are found below :

[Q45VR2FPQ](#) [BTA23S](#) [RS-11](#) [L16F](#) [2LM3](#) [2PBA](#) [LM8-1](#) [LMT](#) [SM312CV](#) [SM31RQD](#) [LS4ELQ](#) [FX1](#) [Q45BB6LLQ](#) [QM42VP6AFV150Q](#)  
[D12SP6FP](#) [MBCC-412](#) [BA23S](#) [BT21S](#) [BTA13S](#) [LM4-2](#) [QS18VN6DB](#) [ES-FA-6G](#) [T183E](#) [SLSP30-600Q88](#) [SLSP30-1200Q88](#) [OPBA5](#)  
[PBAT](#) [SBLV1](#) [SMA91EQD](#) [SMA91E](#) [SMA912LVQD](#) [SMA912DQD](#) [SM2A312CVQD](#) [SM2A912LVQD](#) [SM31RL](#) [TL70RAQ](#) [TL70RQ](#)  
[K50LGRYPQ](#) [LEDRR70X70-78587](#) [BRT-THG-4X4-5](#) [T18-2VNDL-Q8](#) [SLLP14-1190P88](#) [SME312DQD](#) [SM312CUQD](#) [BR-2](#) [BR23P](#)  
[SM2A312FPQD](#) [SM2A312LVQD](#) [SM31EQD](#) [D12EP6FP](#)