

DIFFUSE LASER SENSOR

DLS Series

Diffuse Laser Triangulation Sensor



Adjustable sensing distance

The DLS-030-Q8 has an adjustable sensing distance from 50 to 300 mm.

NPN and PNP outputs

Both NPN and PNP outputs are standard on the sensor.

Quick connect standard

An 8mm connector is standard with the sensor.

Adjustable projected spot size

The projected spot size of the sensor can be adjusted with the precision 30 turn adjustment screw.

Potentiometer adjustment

In addition to being able to adjust the projected spot diameter. A potentiometer is built-in to make adjustments to the sensitivity.

Small object detection

It is possible to reliably detect a small object at long range due to the narrow projected beam size.

Selectable output operation

The output operation of the sensor can be selected to operate as either Light-On or Dark-On by changing the wiring.

Class II laser product

The DLS-030-Q8 uses a Class II laser as the light source.

Fast response

The response time is <150 microseconds.

CE/UL approval

Conforms to Europe's EMC Directive and has UL recognition for use in the U.S.



Specifications

Model Number	Diffuse Laser DLS-030-Q8
Sensing Distance	50 ~ 300 mm
Supply Voltage	10 ~ 30 VDC
Current Consumption	35 mA
Min. Detectable Object	< 0.5 mm diameter
Sensing Output	Both NPN and PNP open collector transistor operating simultaneously
Output Rating	100 mA
Response time	< 150 microsecond - 5 kHz
Output Operation	Light On / Dark On operation selectable by wiring
Short Circuit Protection	Incorporated
Timer	Fixed 40 ms Off delay timer - selectable by wiring
Emitting Element	Visible Red laser - Class II
Operation Indicator	Signal, Timer and LO/DO
Sensitivity Adjustment	Precision 30 turn adjustment screw
Ambient Temperature	0 to 50°C
Protection	IP 65
Housing	Plastic
Ratings	CE/UL

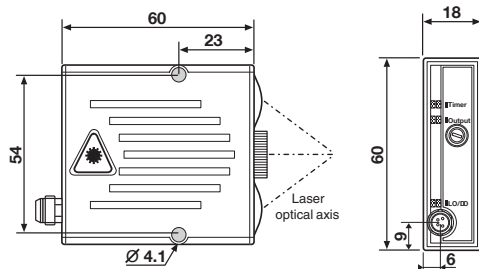
Note: The connecting cable is not included with the sensor, please order separately.

Type	Cable Part Number	Length
Q8	M8-FS4-PUR-2M	2 Meter
	M8-FS4-PUR-5M	5 Meter

DIMENSIONS (Unit: mm)

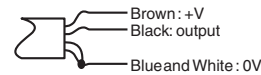
DLS-030-Q8

Sensor

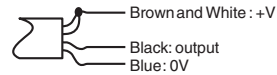


Wiring Connections and Outputs

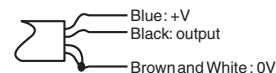
**Direct Function / Dark ON
without Timer**



**Direct Function with Timer
(40 msec. fixed Off delay)**



**Inverted Function / Light ON
without Timer**



**Inverted Function with Timer
(40 msec. fixed Off delay)**



Note:



Class 2 laser product
Laser Radiation do not look at the beam with an unprotected eye, nor with an optical instrument.