

LASER SENSOR

BL-20 Series

Convergent, Diffuse and Retro-reflective Laser Sensor



Retroreflective and Diffuse models

The BL-20 series is offered in both retroreflective and diffuse models. Sensing distance for the diffuse model is 12 inches, convergent models 4, 6, and 8 inches, retroreflective model up to 160 ft.

Potentiometer adjustment

A single turn potentiometer (General Purpose - Slim Body and Background Suppression) or an eight turn potentiometer (General Purpose - M18) is built-in to make adjustments to the sensitivity.

Quick connect standard

An 8mm connector is standard with the sensor, there is also an optional 12mm connector (pigtail) offered.



Small object detection

A small object can reliably be detected at long range due to the narrow projected beam size.

NPN and PNP outputs

Both NPN and PNP outputs are standard on the unit.

Selectable output operation

The output operation of the sensor can be selected to operate as either Light-On or Dark-On via a switch.

Class II laser product

The BL-20 series uses a Class II laser as the light source.



Specifications

Type		General Purpose - Slim Body		General Purpose - M18 Body		Background Suppression		
		Diffuse/Retro	Polarized Retro	Diffuse/Retro	Polarized Retro	Convergent Beam		
Model Number	M8 - QD	BL-26D-Q8	BL-26R-Q8	BL-28D-Q8	BL-28R-Q8	BL-22D-Q8	BL-23D-Q8	BL-24D-Q8
	M12 - Pigtail	BL-26D-Q12	BL-26R-Q12	BL-28D-Q12	BL-28R-Q12	---	---	---
Sensing Range	Diffuse	305mm (12")	---	305mm (12")	---	60 ~ 100mm (2.4 ~ 4.0")	86 ~ 150mm (3.4 ~ 6.0")	107 ~ 203mm (4.2 ~ 8.0")
	Retro	48.8M (160')	7.3M (24')	48.8M (160')	7.3M (24')	---	---	---
Supply Voltage	10 ~ 30 VDC							
Current Consumption	30 mA							
Sensing Output	NPN and PNP - Open Collector Transistor							
Output Rating	200 mA max.							
Output Operation	Selectable Light-On / Dark-On operation by switch							
Short Circuit Protection	Incorporated							
Response Time	Less than 2 msec.							
Operation Indicator	Power (Green) and Output (Red)							
Sensitivity Adjuster	Single turn intensity control	Eight turn intensity control		Single turn intensity control				
Environmental Protection	NEMA 6							
Ambient Temperature	0 to 40°C							
Emitting Element	Class II laser product							
Emitted Beam	670 nm visible red laser diode							
Housing	ABS housing, acrylic lens, polycarbonate cover							
Ratings	CE							
Accessories Included	Sensor mounting bracket and reflector				Sensor mounting bracket			

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

Type	Cable Part Number	Length	Connector
Q8	M8-FS4-PUR-2M	2 Meter	M8 - 4 wire
	M8-FS4-PUR-5M	5 Meter	
Q12	M12-FS4-PUR-2M	2 Meter	M12 - 4 wire
	M12-FS4-PUR-5M	5 Meter	

DIMENSIONS (Unit: mm)

