



## S62-PL...B Laser

Polarised retroreflex

### INSTRUCTION MANUAL



### CONTROLS

#### OUTPUT LED (yellow)

The yellow LED ON indicates the following output status: N.O. closed and N.C. open.

#### POWER ON LED (green)

The green LED ON indicates the sensor powering status and laser emission presence.

#### SENSITIVITY TRIMMER (ADJ.)

Monoturn trimmer that adjusts the sensitivity and thus the sensor operating distance.

Please refer to "SETTING" paragraph for the correct use procedure.

**WARNING:** the maximum mechanical trimmer rotation is equal to 240°. Do not apply excessive torque over the maximum and minimum positions.

### INSTALLATION

The sensor can be positioned by means of the three housing's holes using two screws (M4x25 or longer, 1.5 Nm maximum tightening torque) with washers.

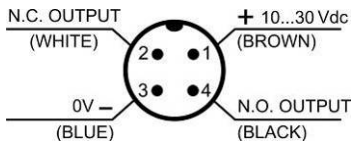


Various orientable fixing brackets to ease the sensor positioning are available (please refer to the accessories listed in the general catalogue). The operating distance is measured from the front surface of the sensor optics.

The M12 connector can be oriented at two different positions using the specific fastening spring and rotating the block to 180°.

### CONNECTIONS

#### M12 connector



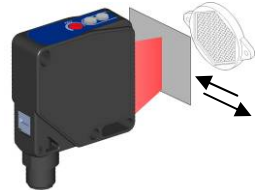
### TECHNICAL DATA

Power supply:	10 ... 30 Vcc
Ripple:	2 Vpp max.
Consumption (output current excluded):	30 mA max
Outputs:	PNP or NPN N.O. / N.C.; 30 Vdc max. (short-circuit protection)
Output current:	100 mA max (overload and overvoltage protection)
Output saturation voltage:	≤ 2 V
Response time:	200 μs
Switching frequency:	2.5 kHz
Emission type:	RED LASER (λ = 645...665 nm): Class 2 EN 60825-1 (1994), Class II CDRH 21 CFR PART 1040.10 Pulsed emission: pot. max ≤ 5 mW; pulse duration = 5 μs; frequency max = 32 KHz
Operating distance (typical values):	refer to TAB.1
Min. detectable object dimension:	0.5 mm at 0.5m (minimum spot)
Indicators:	OUTPUT LED (YELLOW) / POWER ON LED (GREEN)
Setting:	Monoturn sensitivity adjustment trimmer
Functioning temperature:	-10 ... 55 °C
Storage temperature:	-20 ... 70 °C
Dielectric strength:	500 Vac 1 min., between electronics and housing
Insulating resistance:	>20 MΩ 500 Vdc, between electronics and housing
Ambient light rejection:	according to EN 60947-5-2
Vibrations:	0.5 mm amplitude, 10 ... 55 Hz frequency, for every axis (EN60068-2-6)
Shock resistance:	11 ms (30 G) 6 shock for every axis (EN60068-2-27)
Housing material:	ABS
Lens material:	PMMA window, polycarbonate lenses
Mechanical protection:	IP67
Connections:	M12 4-pole connector
Weight:	40 g. max.

### SETTING

#### Alignment:

- Position the sensor and reflector aligned on opposite sides at the desired distance.
- Turn to maximum the sensitivity adjustment trimmer (ADJ.) (clockwise).
- Determine the powering on and powering off points of the yellow LED (OUT) by moving vertically and horizontally the sensor and mount the sensor in the middle of the points found.

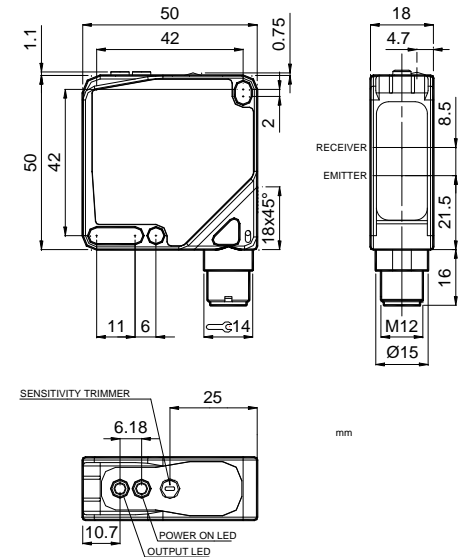


#### Control:

- Enter laterally the object inside the operating field and control that the yellow LED turns on.
- Remove the object and check that the yellow LED turns off immediately



### DIMENSIONS



### SAFETY PRECAUTIONS

All the electric and mechanical safety regulations have to be respected during sensor functioning.

The sensor has to be protected against mechanical damage.

Apply the labels supplied in a visible position near the laser emission beam.

Do not stare directly into the laser beam!

Do not point the laser beam towards people!

Eye irradiation superior to 0.25 seconds is dangerous.

Please refer to the Class 2 Standard (EN60825-1).

These sensors can not be used for safety applications!



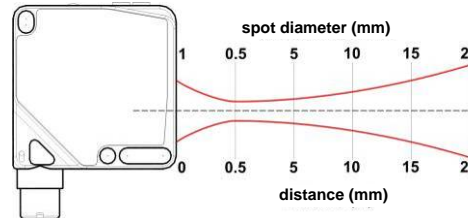
	<b>EX-II-3D T6</b>	
	Temperature class:	T6 (<85°C)
	Max. Power consumption:	800 mW at 30 Vdc
	Max. Internal capacitance:	100 nF
	Internal inductance:	negligible

### PERFORMANCES

TAB.1: Operating distances (m)

REFLECTOR				
R1	R2	R6	R7 /R20	R8
0.3 ... 16	0.3 ... 20	0.4 ... 22	0.3 ... 22	0.2 ... 2

Note: The use of the RT 3970 reflecting tape is not suggested.



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800-262-4332

#### DECLARATION OF CONFORMITY

IDEC and DATASENSOR jointly declare under their sole responsibility that these products conform to the 2004/108/CE, 2006/95/CE Directives, and successive amendments.

IDEC and DATASENSOR reserve the right to make modifications and improvements without prior notification.