

# Laser pointer

## M18-2500-RT-LAS-P/92

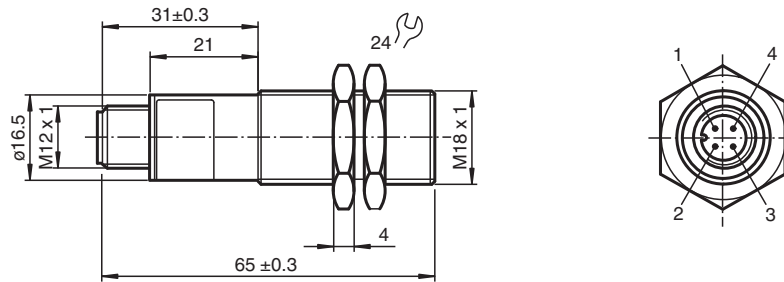


- Visible red light, pulsed LASER light
- Laser class 1, eyesafe

Laser pointer



### Dimensions



### Technical Data

#### General specifications

Effective detection range	0 ... 2.5 m
Threshold detection range	18 m

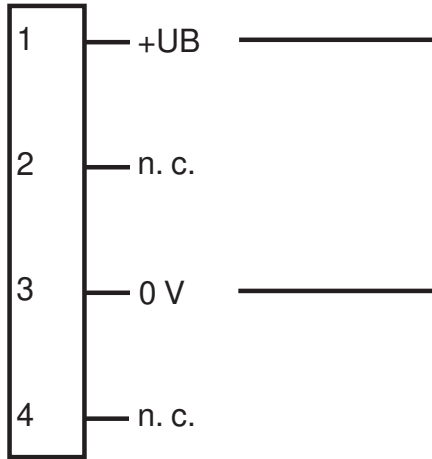
Release date: 2023-04-04 Date of issue: 2023-04-04 Filename: 233999\_eng.pdf

## Technical Data

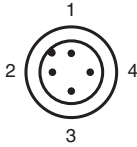
Light source	laser diode	
Light type	modulated visible red light	
<b>Laser nominal ratings</b>		
Note	LASER LIGHT , DO NOT STARE INTO BEAM	
Laser class	1	
Wave length	650 nm	
Beam divergence	1.5 mrad	
Pulse length	15 $\mu$ s	
Repetition rate	10 kHz	
max. pulse energy	< 10.2 nJ	
Diameter of the light spot	approx. 2.5 mm at detection range 2.5 m	
Optical face	frontal	
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>	520.4 a	
Mission Time (T <sub>M</sub> )	7 a	
Diagnostic Coverage (DC)	0 %	
<b>Electrical specifications</b>		
Operating voltage	U <sub>B</sub>	10 ... 30 V DC
Ripple	10 %	
No-load supply current	I <sub>0</sub>	emitter $\leq$ 25 mA
<b>Conformity</b>		
Product standard	EN 60947-5-2	
Laser safety	IEC 60825-1:2007	
<b>Compliance with standards and directives</b>		
Standard conformity		
Shock and impact resistance	IEC / EN 60068, half-sine, 30 g in X, Y and Z direction	
Vibration resistance	IEC / EN 60068-2-6. Sinus. 10 -150 Hz, 5 g in each X, Y and Z directions	
<b>Approvals and certificates</b>		
CCC approval	CCC approval / marking not required for products rated $\leq$ 36 V	
<b>Ambient conditions</b>		
Ambient temperature	0 ... 50 °C (32 ... 122 °F)	
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)	
<b>Mechanical specifications</b>		
Degree of protection	IP65	
Connection	4-pin, M12 x 1 connector	
Material		
Housing	brass, nickel-plated	
Optical face	glass	
Connector	metal	
Mass	45 g	

## Connection Assignment

Option: /92



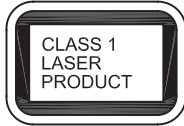
## Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

**Safety Information**



**Safety Information**

**Laser Class 1 Information**



The irradiation can lead to irritation especially in a dark environment. Do not point at people!  
 Maintenance and repairs should only be carried out by authorized service personnel!  
 Attach the device so that the warning is clearly visible and readable.  
 The warning accompanies the device and should be attached in immediate proximity to the device.  
 Caution – Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

**Accessories**

	<b>CPZ18B03</b>	Mounting Bracket with swivel nut
	<b>OMH-VL18</b>	Mounting Bracket with swivel nut
	<b>BF 18</b>	Mounting flange, 18 mm
	<b>BF 18-F</b>	Plastic mounting adapter, 18 mm
	<b>BF 5-30</b>	Universal mounting bracket for cylindrical sensors with a diameter of 5 ... 30 mm
	<b>V1-G-2M-PVC</b>	Female cordset single-ended M12 straight A-coded, 4-pin, PVC cable grey
	<b>V1-G-2M-PUR</b>	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey
	<b>V1-W-2M-PUR</b>	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey

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