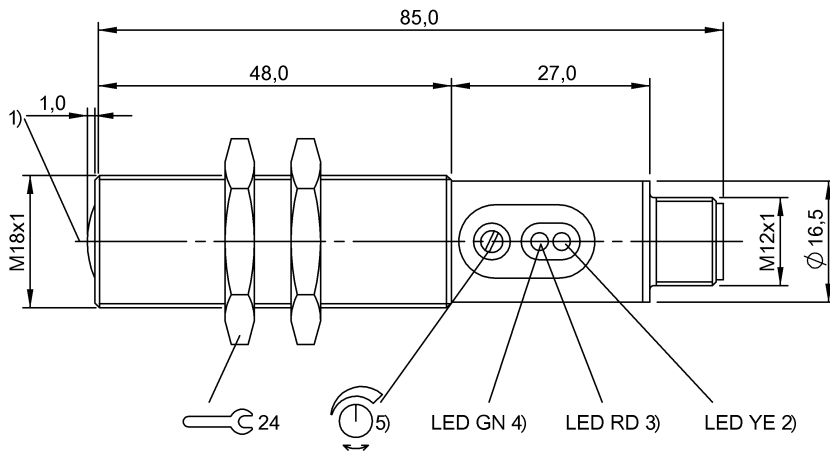


## BLE 18M-BA-1LT-S4-C BOS0074



1) Optical axis 2) Output function 3) Error 4) stability 5) Sn



### Display/Operation

Adjuster	Potentiometer 18-turn (1x)
Setting	Sensitivity (Sn)

### Electrical connection

Connection	M12x1-Connector, 4-pole, A-coded
Polarity reversal protected	yes
Short-circuit protection	yes

### Electrical data

Load capacitance max. at Ue	1 µF
MTTF (40 °C)	15 a
No-load current I <sub>o</sub> max. at Ue	15 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Pollution degree	3
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating current I <sub>e</sub> DC	200 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Ready delay t <sub>v</sub> max.	10 ms
Reference emitter	BLS 18M-XX-1LT-..
Residual current I <sub>r</sub> max.	50 µA
Switching frequency	6000 Hz
Turn-off delay t <sub>off</sub> max.	0.08 ms
Turn-on delay t <sub>on</sub> max.	0.08 ms
Utilization category	DC -13
Voltage drop U <sub>d</sub> max. at I <sub>e</sub>	2.5 V

### Environmental conditions

Ambient temperature	-10...50 °C
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Protection class	II
Protection type IEC 60529	IP65

### Functional safety

Diagnostic coverage	0 %
Functional safety	no
Mission Time	10 a

### General data

Approval/Conformity	CE cULus
Basic standard	IEC 60947-5-2
Series	18M
Style	Cylinder Straight optics

### Material

Housing material	Brass
Material sensing surface	Glass
Surface protection	nickel plates

### Mechanical data

Dimension	Ø 18 x 86 mm
Fastening detail	Nut M18x1
Smallest part typ.	30 µm at focal point, R0 = 20... 80 cm

### Optical data

Ambient light max.	2000 Lux
Light type	Laser Red light

## BLE 18M-BA-1LT-S4-C BOS0074

Principle of optical operation Through-beam sensor (receiver)

Temperature drift max. (% of Sr) 10 %

### Output/Interface

Switching output PNP Normally closed (NC)  
PNP Normally open (NO)

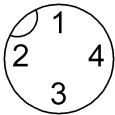
### Remarks

Order accessories separately.  
For additional information, refer to user's guide.  
The sensor is functional again after the overload has been eliminated.  
Only for applications per NFPA 79 (machines with a supply voltage of maximum 600 V). Use an R/C (CYJV2) cable with suitable properties for attaching the device.  
Actuation object (target): gray card, 200 x 200, lateral approach  
For further information on MTTF/B10d, please refer to the MTTF / B10d Certificate.  
Specification of the MTTF value and the B10d value do not represent any binding quality and/or life expectancy guarantees.

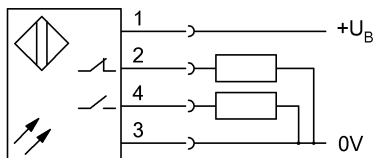
### Range/Distance

Measuring range 0...50 m  
Range 0...50 m  
Rated operating distance  $S_n$  50 m, Adjustable  
Ripple max. (% of  $U_e$ ) 15 %

### Connector view



### Wiring Diagram



### Symbols for Optoelectronic Sensors

