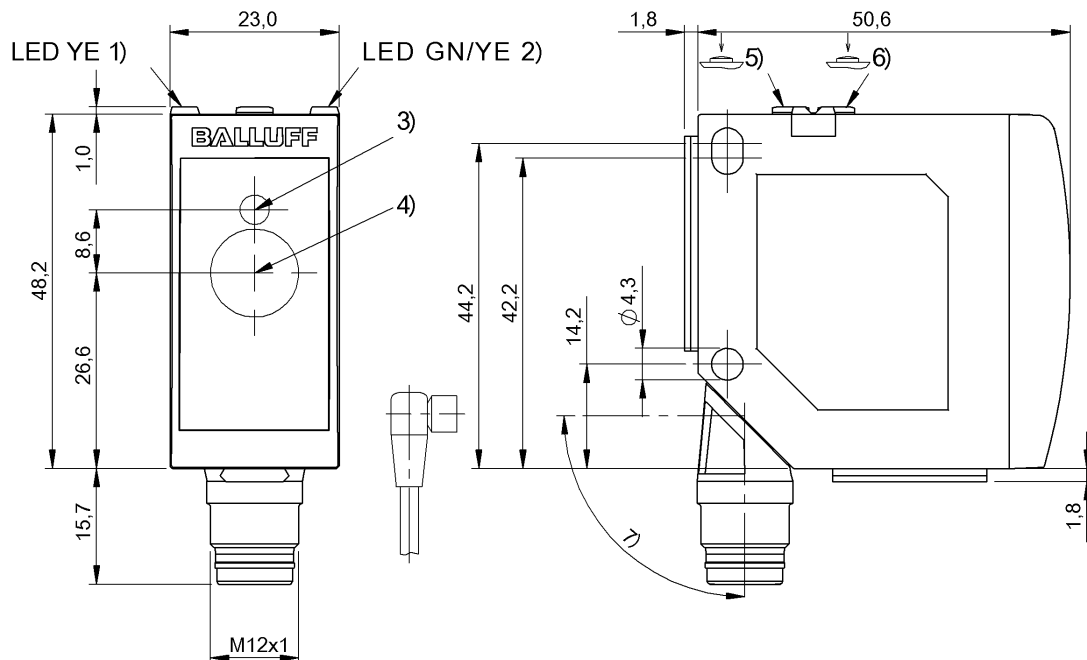
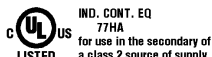




1) Output function 2) Power/Analog output 3) Optical axis emitter 4) Optical axis receiver 5) Teach-In switching output 6) Teach-In Analog output 7) rotatable 270°



Display/Operation

Adjuster	Key (2x)
Setting	Measuring range QA Key disable on/off Output curve rising / falling Switching output Q

Rated operating voltage Ue DC	24 V
Ripple max. (% of Ue)	10 %
Switching frequency	250 Hz
Turn-off delay toff max.	1.2 ms
Turn-on delay ton max.	1.2 ms
Voltage drop Ud max. at Ie	2 V

Electrical connection

Connection	M12x1-Male
Short-circuit protection	yes

Environmental conditions

Ambient temperature	-40...60 °C
IP rating per DIN 40050	IP69K
IP rating per IEC 60529	IP67

Electrical data

Hysteresis H max. (% of Sr)	0.3 %
Load capacitance max. at Ue	0.1 µF
Load resistance RL min. (Analog V)	4 kOhm
No-load current Io max. at Ue	60 mA
Operating voltage Ub	18...30 VDC
Output characteristic	linear rising/falling
Polarity reversal protected	yes
Protection class	II
Pulse duration t max.	0.008 µs
Rated operating current Ie	100 mA

Functional safety

MTTF (40 °C)	156 a
--------------	-------

General data

Application	Distance measurement
Approval/Conformity	CE cULus Ecolab
Basic standard	IEC 60947-5-2, IEC 60947-5-7
Series	23K

Style Square
 Connection can be rotated

Material

Housing material ABS
 Material sensing surface PMMA

Mechanical data

Dimension 51 x 23 x 52.4 mm
 Fastening detail Screw M4
 Tightening torque max. 1.5 Nm

Optical data

Ambient light max. 5000 Lux
 Laser class per IEC 60825-1 1
 Light spot size 5.5 x 7 mm at 5 m
 Light type Laser Red light
 Principle of optical operation Light time-of-flight
 Wave length 655 nm

Output/Interface

Analog output Analog, voltage, 0...10 V
 Switching output PNP/NPN/Auto-Detect Normally open/Normally closed (NO/NC)

Range/Distance

Accuracy $\pm 0.6\%$ FS
 Measuring range 100...5000 mm
 Range 100...5000 mm
 Rated operating distance S_n 5 m, Adjustable
 Resolution ≤ 5.0 mm

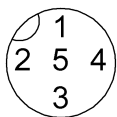
Remarks

For additional information, refer to users guide.
 Order accessories separately.

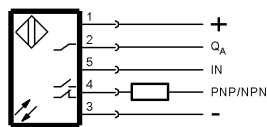
For further information on MTTF/B10d, please refer to the MTTF / B10d Certificate.

Specification of the MTTF value and the B10d value do not represent any binding quality and/or life expectancy guarantees.

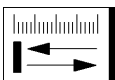
Connector view



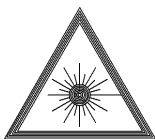
Wiring Diagram



Symbols for Optoelectronic Sensors



Warning Symbols



LASER CLASS 1 per IEC 60825-1