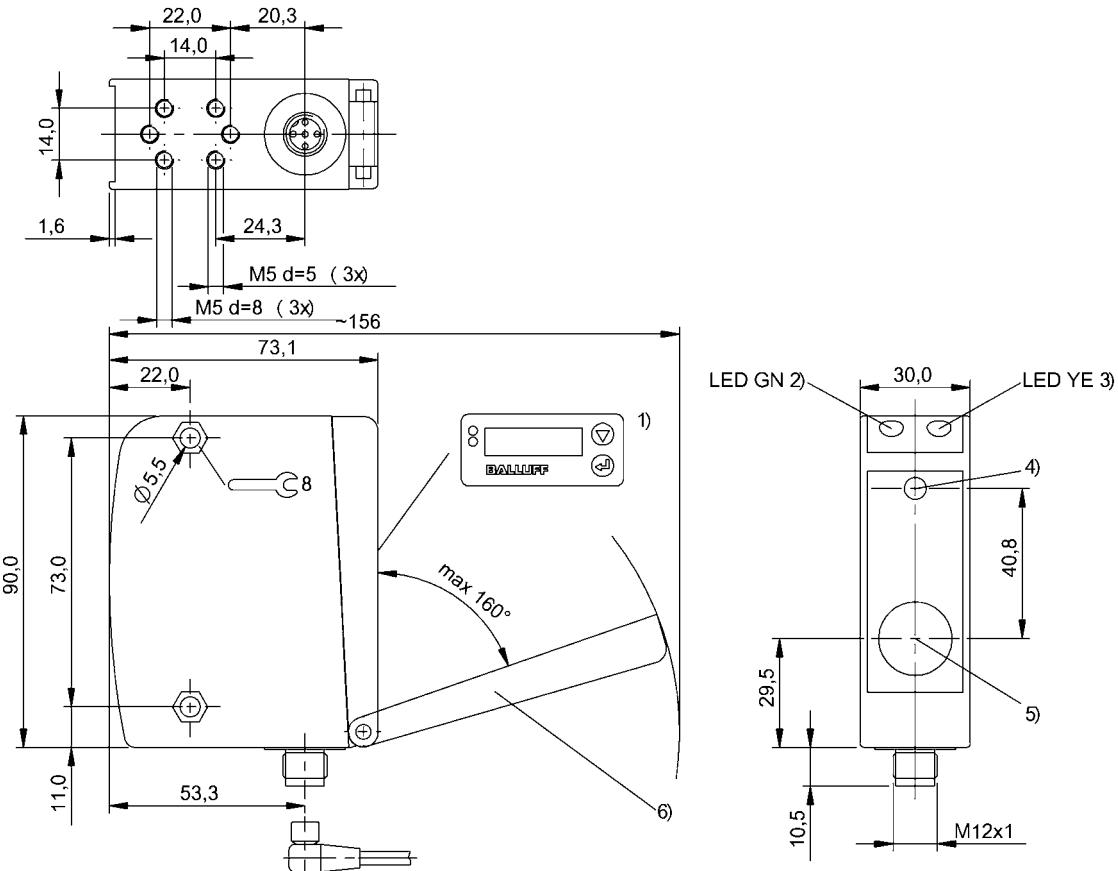


Photoelectric Sensors
BOD 66M-LA14-S92
Order Code: BOD001E

BALLUFF



1) Display and keypad, 2) Operating voltage, 3) Output function, 4) Optical axis emitter, 5) Optical axis receiver, 6) Removable cover



Basic features

Application	Distance measurement
Approval/Conformity	CE WEEE
Basic standard	IEC 60947-5-2, IEC 60947-5-7
Principle of operation	Photoelectric distance sensor
Series	66M
Style	Square Connection 90°

Display/Operation

Adjuster	Key (2x)
Display	Output function- LED yellow Ready - LED green Teach mode - LED yellow, flashing Error - LED green, flashing
Setting	Output curve rising / falling Working range Factory setting (Reset) Light-on/dark-on Rated switching distance (Sn)

Electrical connection

Connection	Connector, M12x1-Male, 5-pin
Contact, surface protection	Gold plated
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

Input function	Emitter on/off
Load resistance RL min. (Analog V)	2 kOhm
No-load current Io max. at Ue	150 mA
Operating voltage Ub	18...30 VDC
Protection class	III
Rated operating current Ie	100 mA
Rated operating voltage Ue DC	24 V
Ready delay tv max.	300 ms
Switching frequency	1000 Hz
Turn-off delay toff max.	5 ms
Turn-on delay ton max.	5 ms
Voltage drop Ud max. at Ie	2 V

Environmental conditions

Ambient temperature	-20...50 °C
IP rating	IP65

Functional safety

MTTF (40 °C)	49 a
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Interface

Analog output	Analog, voltage 1...10 V
Output characteristic	linear rising/falling
Switching output	PNP/NPN NO/NC push-pull

Material

Housing material	Zinc, Die casting, Painted
Material sensing surface	Glass
Surface protection	Painted

Mechanical data

Dimension	30 x 100.5 x 73.2 mm
Mounting part	Screw M5

Optical features

Ambient light max.	5000 Lux
Average power Po max.	1 mW
Beam characteristic	Divergent
Laser class per IEC 60825-1	2
Light spot size	2 x 6 mm at 2 m
Light type	Laser red light
Principle of optical operation	Triangulation
Switching function, optical	Light/dark switching
Wave length	655 nm

Range/Distance

Accuracy	±1.5 % FS
Distance deviation 18 % max. (% of Sr)	1 %
Range	150...2000 mm
Rated operating distance Sn	2 m Adjustable
Repeat accuracy	0.5 %FS
Repeat accuracy max. (% of Sr)	1.0 %
Reproducibility	±0.5 % FS
Resolution	1...3 mm

Remarks

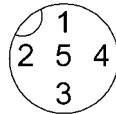
Order accessories separately.

For additional information, refer to user's guide.

For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

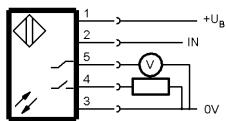
Connector Drawings



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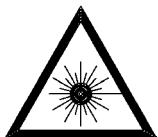
Wiring Diagrams



Opto Symbols



Warning Symbols



LASER BEAM - DO NOT STARE INTO THE LIGHT BEAM!

LASER CLASS 2 per IEC60825-1: 2003-10