BALLUFF

Red Light Distance Sensor BOD 66M

two in one –
measuring and detecting
in one unit



Optoelectronic Sensors

BOD 66M
Red Light Distance Sensor

Series	BOD 66M	BOD 66M
Working range, analog output	**100...600 mm**	**100...600 mm**
Analog output	**voltage 1...10 V**	**current 4...20 mA**
Working range, switching output	**100...600 mm**	**100...600 mm**

Red Light Distance Sensor

Monitoring and distance measurement is becoming increasingly important in today's industry. Both maximum range and high resolution are demanded. Balluff achieves this using triangulation techniques and modern CCD technology.

But the **BOD 66M-R_01** can do even more. It has an analog voltage or current output plus a switching output. This means it can be used simultaneously for measuring or monitoring distance and for object detection in the diffuse sensor configuration with background suppression (HGA).

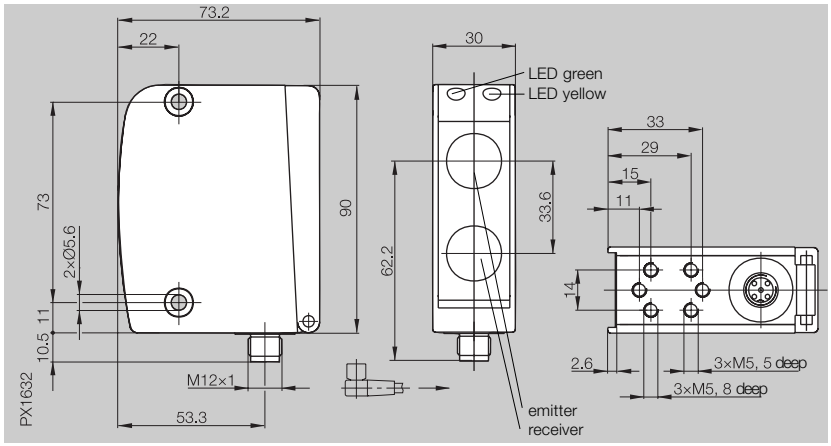
The **BOD 66M-R_01** works with red light over a measuring range of 100...600 mm, achieving a resolution of 0.5 mm.

Features

- Extremely color-neutral, insensitive to ambient light
- Working range 100...600 mm
- Resolution 0.5 mm
- Analog output with voltage (1...10 V) or current (4...20 mA)
- Switching output teachable
- Rugged metal housing
- Scratch-resistant glass optics

Applications

- Level monitoring
- Positioning
- Sensing winding diameter
- Profile measurement
- Slack control

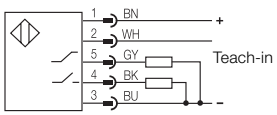


Diffuse

Ordering code	BOD 66M-RA01-S92-C	BOD 66M-RB01-S92-C
Supply voltage U_B	18...30 V DC	18...30 V DC
Voltage drop U_d at I_e	≤ 2 V	≤ 2 V
Rated isolation voltage U_i	250 V AC	250 V AC
Rated operational current I_e	≤ 250 mA	≤ 250 mA
No-load supply current I_0 max.	≤ 150 mA	≤ 150 mA
Protected against polarity reversal	yes	yes
Short circuit protected	yes	yes
On/off delay	≤ 100 ms	≤ 100 ms
Frequency of operating cycles f	20...100 Hz*	20...100 Hz*
Switching output	PNP	PNP
Output function	O	O
Permissible ambient light	5000 lux	5000 lux
Range setting	teach-in	teach-in
Function indicator (receiver sees light)	LED yellow	LED yellow
Power indicator	LED green	LED green
Ambient temperature range T_a	–20...+50 °C	–20...+50 °C
Degree of protection per IEC 60529	IP 65	IP 65
Insulation class	⧈	⧈
Housing material	Al	Al
Material of sensing face	glass	glass
Connection	connector	connector
Recommended connector	BKS-S134-17	BKS-S134-17
Weight	250 g	250 g
Emitter type	red 660 nm	red 660 nm
Light spot diameter	approx. 10 mm	approx. 10 mm
Gray value shift (90 %/6 %)	< 1 %	< 1 %
Repeatability (same target ≥ 50×50 mm)	±0.5 %	±0.5 %
Resolution	≤ 0.5 mm	≤ 0.5 mm
Temperature drift	compensated	compensated

O/● = Light-on/dark-on

*depending on object reflectivity



Values referenced to Kodak gray card, 6...90 % reflection, ≥ 50×50 mm.

Connector orientation

For more sensors see main catalog "The Sensor Program" on CD-ROM or online!



Balluff GmbH
Schurwaldstrasse 9
73765 Neuhausen a.d.F.
Germany
Phone +49 (0) 71 58/1 73-0
Fax +49 (0) 71 58/50 10
E-Mail: balluff@balluff.de
http://www.balluff.de

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