

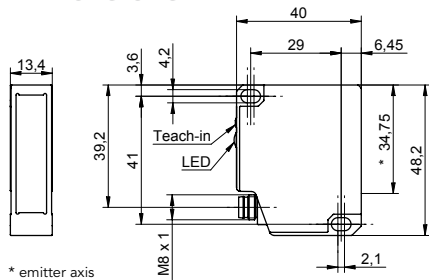
Laser distance sensors in the OWLSB series



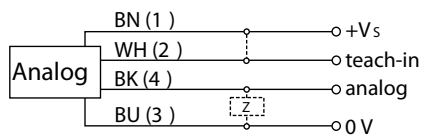
OWLSB series

Laser distance sensors in the OWLSB series were designed to carry out measurements on extremely light-absorbing and shiny surfaces. These sensors now make it possible to carry out such demanding tasks as taking measurements on black rubber or very shiny plastic components. Sensors in the OWLSB series are able to deal with reflection levels of up to 0.5%. And the optimized software increases extraneous light reliability to 100 kLux; so that reliable measurements can be carried out under any kind of ambient condition. The series convinces with its compact IP67-compliant metal casing and a measuring range that moves between 50 and 200 mm.

Dimensions



Connection



WELOTEC

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Welotec is using a ISO 9001:2008 certified quality management system • All specifications are subject to change

General data						
Ordercode	OWLSB 4001 AA S2	OWLSB 4001 AE S2	OWLSB 4010 AA S2	OWLSB 4010 AE S2	OWLSB 4020 AA S2	OWLSB 4020 AE S2
Measuring distance Sd	50 ~ 60 mm		60 ~ 100 mm		100 ~ 200 mm	
Teach-in range min.	> 1 mm		> 4 mm		> 5 mm	
Resolution	< 0,015 mm		0,015 ~ 0,038 mm		0,039 ~ 0,150 mm	
Linearity error	< 0,045 mm		0,047 ~ 0,118 mm		0,123 ~ 0,457 mm	
Object reflectivity	> 0,5 %		> 0,8 %		> 2 %	
Adjustment	Teach-in: button / external					
Frequency	500 Hz					
Power on indication	LED green					
Soiled lens indicator	LED red					
Light source	pulsed red laser diode					
Wave length	650 nm					
Laser class	1					
Beam type	Line					
Interference suppression	< 30 ms					
Temperature drift	< 0,07 % Sde/K					
Electrical data						
Response time / release time	< 2 ms					
Voltage supply range	12 ~ 28 V DC					
Current consumption max	80 mA	100 mA	80 mA	100 mA	80 mA	100 mA
Output circuit	analog					
Output signal	0 ~ 10 V DC	4 ~ 20 mA	0 ~ 10 V DC	4 ~ 20 mA	0 ~ 10 V DC	4 ~ 20 mA
Load resistance	> 100 Ω	< (+Vs - 6 V) / 0,02 A	> 100 Ω	< (+Vs - 6 V) / 0,02 A	> 100 Ω	< (+Vs - 6 V) / 0,02 Aw
Short circuit protection	Yes					
Reverse polarity protection	Yes, Vs to GND					
Mechanical data						
Dimensions	13,4 x 48,2 x 40 mm					
Type	Rectangular					
Housing material	Aluminium					
Front (optics)	Glass					
Connection types	Connector M8 4 pin					
Ambient conditions						
Ambient light immunity	> 100 kLux					
Operating temperature	0 ~ +50 °C					
Proection	IP67					