# Bar Light Infrared, 250 mm

# LBLI201

Part Number



- Create patented curve effect to reduce LED hot spots
- Daisy chain
- Flexibility: expand the beam angle with an Angle Changer
- No external control required

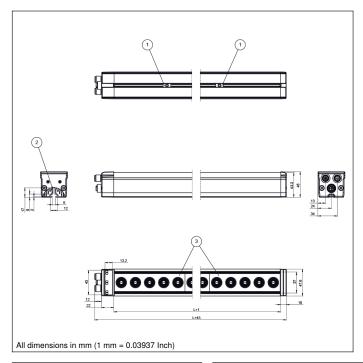
wenglor bar lights from the LBL series are suitable for both small and large working distances. The direct lights can create lighting effects like bright field, low angle of incidence, dark field and dome lighting. Some line scanning applications are also possible. The LBL bar lights can be synchronized in continuous mode or in strobe mode with the machine vision camera and other LBL lights and operated without an additional power supply. In combination with the ZBAG angle changers, the beam angle can be enlarged and designed flexibly.

#### **Technical Data**

Light Source   Infrared Light   Wavelength   850 nm   Risk Group (EN 62471)   1   1   1   1   1   1   1   1   1	Optical Data			
Wavelength         850 nm           Risk Group (EN 62471)         1           Beam angle         ± 7 °           Infrared light output         95,75 W/m²           Measuring point distance         200 mm           Compatible with         Angle Changer           Environmental conditions         -2060 °C           Storage temperature Range         040 °C           Storage temperature         -2060 °C           Atmospheric humidity         80%, non-condensing           Electrical Data         -2060 °C           Supply Voltage         21,626,4 V DC           Power         19,2 W           Current Consumption Continuous Mode (Ub = 24 V)         0,8 A           Rise time         15 μs           Fall time         10 μs           Input signal         PNP/NPN           Short Circuit Protection         yes           Reverse Polarity Protection         yes           Overload Protection         yes           Protection Class         III           Dimming         010 V ≜ 10030%           Overdrive         no           Mechanical Data           Luminous Field Length (L)         250 mm           Luminous Field Width (W)	•	Infrared Light		
Risk Group (EN 62471)  Beam angle  Infrared light output  Measuring point distance  Compatible with  Angle Changer  Environmental conditions  Temperature Range  Storage temperature  Atmospheric humidity  Electrical Data  Supply Voltage  Power  Current Consumption Continuous Mode (Ub = 24 V)  Rise time  Fall time  Input signal  Short Circuit Protection  Protection Class  Dimming  Overdrive  Mechanical Data  Luminous Field Length (L)  Luminous Field Length (W)  Luminous Field Max. cable lenght  Plastic, PMMA  Connection  Max. cable lenght  May Conmettion, Plastic, PMMA  Connection  Max. cable lenght  May Command  200 mm  Angle Changer  ± 7 °  17 °  18 7 °  18 7 °  19 0, mm  47 °  100 mm  Angle Changer  200 mm  21,626,4 V DC  22,626,4 V DC  23,626,4 V DC  24,026  24,026  24,026  24,026  24,026  25,026  24,026  24,026  25,026  24,026  24,026  25,026  24,026  24,026  24,026  25,026  26,026  26,026  26,026  27,626  28,0%, non-condensing  21,626,4 V DC  21,626  21,626,4 V DC  20,60 °C  21,626  24,0 °C  24,0 °C				
Beam angle         ± 7 °           Infrared light output         95,75 W/m²           Measuring point distance         200 mm           Compatible with         Angle Changer           Environmental conditions         -2060 °C           Storage temperature         -2060 °C           Atmospheric humidity         < 80%, non-condensing	•			
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Compatible with       Angle Changer         Environmental conditions         Temperature Range       040 °C         Storage temperature       -2060 °C         Atmospheric humidity       < 80%, non-condensing	· .			
Environmental conditions  Temperature Range  Storage temperature  -2060 °C -2060 °C -80%, non-condensing  Electrical Data  Supply Voltage  21,626,4 V DC  Power  19,2 W  Current Consumption Continuous Mode (Ub = 24 V)  Rise time  15 μs Fall time  10 μs  Input signal  PNP/NPN  Short Circuit Protection  yes  Reverse Polarity Protection  yes  Protection Class  III  Dimming  010 V ≜ 10030%  Overdrive  mo  Mechanical Data  Luminous Field Length (L)  Luminous Field Width (W)  Luminous Field Width (W)  Luminous Field Width (W)  Luming Material  Housing Material  Housing Material  Housing Material  Plastic, ABS  Plastic, PC  Degree of Protection  Plastic, PMMA  Connection  3 × M12 × 1; 5-pin  Max. cable lenght  90 m				
Temperature Range 040 °C  Storage temperature -2060 °C  Atmospheric humidity <a href="#">&lt;</a>	·	Angle Changer		
Storage temperature -2060 °C Atmospheric humidity -80%, non-condensing Electrical Data Supply Voltage 21,626,4 V DC Power 19,2 W Current Consumption Continuous Mode (Ub = 24 V) 0,8 A Rise time 15 $\mu$ s Fall time 10 $\mu$ s Input signal PNP/NPN Short Circuit Protection yes Reverse Polarity Protection yes Overload Protection yes Protection Class III Dimming 010 V $\triangleq$ 10030% Overdrive no Mechanical Data Luminous Field Length (L) 250 mm Luminous Field Width (W) 31,5 mm Luminous Field Width (W) 31,5 mm Housing Material Plastic, ABS Housing Material Plastic, ABS Housing Material Plastic, PC Degree of Protection IP65 Optic Cover Plastic, PMMA Connection 3 × M12 × 1; 5-pin Max. cable length 90 m		0.40.00		
Atmospheric humidity< 80%, non-condensingElectrical Data21,626,4 ∨ DCSupply Voltage21,626,4 ∨ DCPower19,2 WCurrent Consumption Continuous Mode (Ub = 24 V)0,8 ARise time15 μsFall time10 μsInput signalPNP/NPNShort Circuit ProtectionyesReverse Polarity ProtectionyesOverload Protection ClassIIIDimming010 ∨ ≜ 10030%OverdrivenoMechanical Data250 mmLuminous Field Length (L)250 mmLuminous Field Width (W)31,5 mmLuminous Field250 × 31,5 mmHousing MaterialAluminum, anodisedHousing MaterialPlastic, ABSHousing MaterialPlastic, PCDegree of ProtectionIP65Optic CoverPlastic, PMMAConnection3 × M12 × 1; 5-pinMax. cable lenght90 m				
Electrical Data         Supply Voltage       21,626,4 ∨ DC         Power       19,2 W         Current Consumption Continuous Mode (Ub = 24 V)       0,8 A         Rise time       15 $\mu$ s         Fall time       10 $\mu$ s         Input signal       PNP/NPN         Short Circuit Protection       yes         Reverse Polarity Protection       yes         Overload Protection       yes         Protection Class       III         Dimming       010 V ≜ 10030%         Overdrive       no         Mechanical Data       Luminous Field Length (L)         Luminous Field Width (W)       31,5 mm         Luminous Field Width (W)       31,5 mm         Housing Material       Plastic, ABS         Housing Material       Plastic, PC         Degree of Protection       IP65         Optic Cover       Plastic, PMMA         Connection       3 × M12 × 1; 5-pin         Max. cable lenght       90 m				
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Power       19,2 W         Current Consumption Continuous Mode (Ub = 24 V)       0,8 A         Rise time       15 μs         Fall time       10 μs         Input signal       PNP/NPN         Short Circuit Protection       yes         Reverse Polarity Protection       yes         Overload Protection       yes         Protection Class       III         Dimming       010 V $\triangleq$ 10030%         Overdrive       no         Mechanical Data         Luminous Field Length (L)       250 mm         Luminous Field Width (W)       31,5 mm         Luminous Field       250 × 31,5 mm         Housing Material       Aluminum, anodised         Housing Material       Plastic, ABS         Housing Material       Plastic, PC         Degree of Protection       IP65         Optic Cover       Plastic, PMMA         Connection       3 × M12 × 1; 5-pin         Max. cable lenght       90 m		01.0.00.4.\/.D0		
Current Consumption Continuous Mode (Ub = 24 V)  Rise time  Fall time  10 $\mu$ s  Input signal  PNP/NPN  Short Circuit Protection  Reverse Polarity Protection  yes  Overload Protection  yes  Protection Class  III  Dimming  010 V $\triangleq$ 10030%  no  Mechanical Data  Luminous Field Length (L)  Luminous Field Width (W)  11,5 mm  Luminous Field  Housing Material  Housing Material  Housing Material  Housing Material  Plastic, ABS  Housing Material  Plastic, PC  Degree of Protection  Optic Cover  Plastic, PMMA  Connection  3 × M12 × 1; 5-pin  Max. cable lenght				
Rise time 15 $\mu$ s Fall time 10 $\mu$ s Input signal PNP/NPN Short Circuit Protection yes Reverse Polarity Protection yes Overload Protection yes III Dimming 010 V $\triangleq$ 10030% no Mechanical Data Luminous Field Length (L) 250 mm Luminous Field Width (W) 31,5 mm Luminous Field Width (W) 31,5 mm Housing Material Aluminum, anodised Housing Material Plastic, ABS Housing Material Plastic, PC Degree of Protection 1P65 Optic Cover Plastic, PMMA Connection 3 × M12 × 1; 5-pin Max. cable lenght 90 m		,		
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Short Circuit Protection  Reverse Polarity Protection  Overload Protection  Protection Class  III  Dimming  Overdrive  no  Mechanical Data  Luminous Field Length (L)  Luminous Field Width (W)  Luminous Field  Housing Material  Housing Material  Housing Material  Housing Material  Plastic, ABS  Housing Material  Plastic, PC  Degree of Protection  Optic Cover  Plastic, PMMA  Connection  3 × M12 × 1; 5-pin  Max. cable lenght		•		
Reverse Polarity Protection  Overload Protection  Protection Class  III  Dimming  O10 V ≜ 10030%  Overdrive  no  Mechanical Data  Luminous Field Length (L)  Luminous Field Width (W)  Luminous Field  4 250 × 31,5 mm  Luminous Field  Housing Material  Housing Material  Housing Material  Plastic, ABS  Housing Material  Plastic, PC  Degree of Protection  Optic Cover  Plastic, PMMA  Connection  3 × M12 × 1; 5-pin  Max. cable lenght		PNP/NPN		
Overload Protection       yes         Protection Class       III         Dimming       010 V ≜ 10030%         Overdrive       no         Mechanical Data         Luminous Field Length (L)       250 mm         Luminous Field Width (W)       31,5 mm         Luminous Field       250 × 31,5 mm         Housing Material       Aluminum, anodised         Housing Material       Plastic, ABS         Housing Material       Plastic, PC         Degree of Protection       IP65         Optic Cover       Plastic, PMMA         Connection       3 × M12 × 1; 5-pin         Max. cable lenght       90 m		_		
Protection Class  Dimming  O10 V ≜ 10030%  Overdrive  no  Mechanical Data  Luminous Field Length (L)  Luminous Field Width (W)  Jan,5 mm  Luminous Field  250 × 31,5 mm  Housing Material  Housing Material  Housing Material  Plastic, ABS  Housing Material  Plastic, PC  Degree of Protection  Optic Cover  Plastic, PMMA  Connection  3 × M12 × 1; 5-pin  Max. cable lenght	,	yes		
Dimming       010 V ≜ 10030%         Overdrive       no         Mechanical Data         Luminous Field Length (L)       250 mm         Luminous Field Width (W)       31,5 mm         Luminous Field       250 × 31,5 mm         Housing Material       Aluminum, anodised         Housing Material       Plastic, ABS         Housing Material       Plastic, PC         Degree of Protection       IP65         Optic Cover       Plastic, PMMA         Connection       3 × M12 × 1; 5-pin         Max. cable lenght       90 m		•		
Overdrive     no       Mechanical Data       Luminous Field Length (L)     250 mm       Luminous Field Width (W)     31,5 mm       Luminous Field     250 × 31,5 mm       Housing Material     Aluminum, anodised       Housing Material     Plastic, ABS       Housing Material     Plastic, PC       Degree of Protection     IP65       Optic Cover     Plastic, PMMA       Connection     3 × M12 × 1; 5-pin       Max. cable lenght     90 m				
Mechanical DataLuminous Field Length (L)250 mmLuminous Field Width (W)31,5 mmLuminous Field250 × 31,5 mmHousing MaterialAluminum, anodisedHousing MaterialPlastic, ABSHousing MaterialPlastic, PCDegree of ProtectionIP65Optic CoverPlastic, PMMAConnection3 × M12 × 1; 5-pinMax. cable lenght90 m	-			
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Housing Material Plastic, ABS Housing Material Plastic, PC Degree of Protection IP65 Optic Cover Plastic, PMMA Connection 3 × M12 × 1; 5-pin Max. cable lenght 90 m	Luminous Field	250 × 31,5 mm		
Housing Material Plastic, PC  Degree of Protection IP65  Optic Cover Plastic, PMMA  Connection 3 × M12 × 1; 5-pin  Max. cable lenght 90 m		Aluminum, anodised		
Degree of Protection         IP65           Optic Cover         Plastic, PMMA           Connection         3 × M12 × 1; 5-pin           Max. cable lenght         90 m	Housing Material	Plastic, ABS		
Optic Cover         Plastic, PMMA           Connection         3 × M12 × 1; 5-pin           Max. cable lenght         90 m	Housing Material	Plastic, PC		
Connection $3 \times M12 \times 1$ ; 5-pinMax. cable lenght90 m	Degree of Protection			
Max. cable lenght 90 m	Optic Cover	,		
	Connection			
Function	Max. cable lenght	90 m		
	Function			
Operating modes Continuous, Strobe	Operating modes	Continuous, Strobe		
Connection Diagram No. 007	Connection Diagram No.	007		
Control Panel No.	Control Panel No.	T17		
Suitable Mounting Technology No. 925	Suitable Mounting Technology No.	925		

## **Complementary Products**

Connection cables
ZBAG angle changer
ZBAZ001 bar clamp

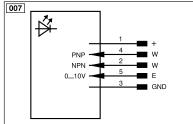


## Ctrl. Panel

### **T17**



68 = supply voltage indicator 9b = Strobe Mode Indicator



Legena						
+	Supply Voltage +	nc	Not connected	ENBRS422	Encoder B/B (TTL)	
-	Supply Voltage 0 V	U	Test Input	ENA	Encoder A	
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	ENB	Encoder B	
Α	Switching Output (NO)	W	Trigger Input	Amin	Digital output MIN	
Ā	Switching Output (NC)	W-	Ground for the Trigger Input	AMAX	Digital output MAX	
V	Contamination/Error Output (NO)	0	Analog Output	Аок	Digital output OK	
⊽	Contamination/Error Output (NC)	0-	Ground for the Analog Output	SY In	Synchronization In	
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT	
T	Teach Input	Аму	Valve Output	OLT	Brightness output	
Z	Time Delay (activation)	а	Valve Control Output +	M	Maintenance	
S	Shielding	b	Valve Control Output 0 V	rsv	Reserved	
RxD	Interface Receive Path	SY	Synchronization	Wire Colo	rs according to DIN IEC 60757	
TxD	Interface Send Path	SY-	Ground for the Synchronization	BK	Black	
RDY	Ready	E+	Receiver-Line	BN	Brown	
GND	Ground	S+	Emitter-Line	RD	Red	
CL	Clock	±	Grounding	OG	Orange	
E/A	Output/Input programmable	SnR	Switching Distance Reduction	YE	Yellow	
0	IO-Link	Rx+/-	Ethernet Receive Path	GN	Green	
PoE	ower over Ethernet	Tx+/-	Ethernet Send Path	BU	Blue	
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet	
OSSD	Safety Output	La	Emitted Light disengageable	GY	Grey	
Signal	Signal Output	Mag	Magnet activation	WH	White	
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink	
ENo RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contactor Monitoring	GNYE	Green/Yellow	
PT	Platinum measuring resistor	ENARS422	Encoder A/Ā (TTL)		•	





