

# Bar Light

infrared, 750 mm

## LBOI701

Part Number



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

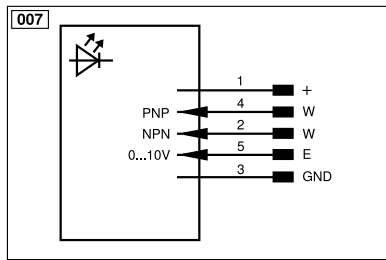
wenglor bar lights from the LBO series are suitable for both small and large working distances. The direct lights can create lighting effects like bright field, low angle of incidence, dark field and dome lighting. Some line scanning applications are also possible. The LBO bar lights can be operated in continuous mode with high intensity or synchronized with the machine vision camera in strobe mode with increased luminosity (overdrive). In combination with the ZBAG angle changers, the beam angle can be enlarged and designed flexibly.

### Technical Data

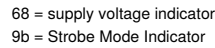
Optical Data	
Light Source	Infrared Light
Wavelength	850 nm
Risk Group (EN 62471)	1
Beam angle	$\pm 7^\circ$
Infrared light output	383 W/m <sup>2</sup>
Measuring point distance	200 mm
Compatible with	Angle Changer
Environmental conditions	
Temperature Range	-10...40 °C
Storage temperature	-20...60 °C
Atmospheric humidity	< 80%, non-condensing
Electrical Data	
Supply Voltage	21,6...26,4 V DC
Power	66,6 W
Peak power	288 W
Current Consumption Continuous Mode (U <sub>b</sub> = 24 V)	2,8 A
Current consumption flash mode overdrive (operating voltage = 24 V)	12 A
Flash Duration	2 ms
Duty Cycle	5 %
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	0...10 V $\pm$ 100...30%
Overdrive	yes
Mechanical Data	
Luminous Field Length (L)	750 mm
Luminous Field Width (W)	31,5 mm
Luminous Field	750 x 31,5 mm
Housing Material	Aluminum, anodised
Housing Material	Plastic, ABS
Housing Material	Plastic, PC
Degree of Protection	IP65
Optic Cover	Plastic, PMMA
Connection	M12 x 1; 4/5-pin
Max. cable length	112 m
Function	
Operating modes	Continuous, Strobe
Connection Diagram No.	007
Control Panel No.	T17
Suitable Mounting Technology No.	925


### Complementary Products

Connection cables
ZBAG angle changer
ZBAZ001 bar clamp



## T17



Legend					
+	Supply Voltage +	nc	Not connected	EN <sub>BRG422</sub>	Encoder B/B̄ (TTL)
–	Supply Voltage 0 V	U	Test Input	EN <sub>A</sub>	Encoder A
~	Supply Voltage (AC Voltage)	Ü	Test Input inverted	EN <sub>B</sub>	Encoder B
A	Switching Output (NO)	W	Trigger Input	AM <sub>IN</sub>	Digital output MIN
Ä	Switching Output (NC)	W–	Ground for the Trigger Input	AM <sub>AX</sub>	Digital output MAX
V	Contamination/Error Output (NO)	O	Analog Output	AOK	Digital output OK
Ů	Contamination/Error Output (NC)	O–	Ground for the Analog Output	SY In	Synchronization In
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT
T	Teach Input	AM <sub>v</sub>	Valve Output	OLT	Brightness output
Z	Time Delay (activation)	a	Valve Control Output +	M	Maintenance
S	Shielding	b	Valve Control Output 0 V	rsv	Reserved
RxD	Interface Receive Path	SY	Synchronization	Wire Colors according to DIN IEC 60757	
TxD	Interface Send Path	SY–	Ground for the Synchronization		
RDY	Ready	E+	Receiver-Line	BK	Black
GND	Ground	S+	Emitter-Line	BN	Brown
CL	Clock	±	Grounding	RD	Red
E/A	Output/Input programmable	±	Grounding	OG	Orange
	IO-Link	SnR	Switching Distance Reduction	YE	Yellow
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path	GN	Green
IN	Safety Input	Tx+/-	Ethernet Send Path	BU	Blue
QSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
Signal	Signal Output	La	Emitted Light disengageable	GY	Grey
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN <sub>0 RS422</sub>	Encoder 0-pulse 0/Ü (TTL)	RES	Input confirmation	PK	Pink
PT	Platinum measuring resistor	EDM	Contacting Monitoring	GNYE	Green/Yellow
		EN <sub>ARIS422</sub>	Encoder A/Ä (TTL)		