

# Bar Light

Red light, 375 mm

## LBAR301

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 LBA 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 LBA 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	Red Light
Wavelength	630 nm
Beam angle	± 7 °
Red light output	850 W/m <sup>2</sup>
Measuring point distance	200 mm
Compatible with	Angle Changer
Environmental conditions	
Temperature Range	0...40 °C
Storage temperature	-20...60 °C
Atmospheric humidity	< 80%, non-condensing
Electrical Data	
Supply Voltage	21,6...26,4 V DC
Power	21,6 W
Peak power	86,4 W
Current Consumption Continuous Mode (U <sub>b</sub> = 24 V)	0,9 A
Current consumption flash mode overdrive (operating voltage = 24 V)	3,6 A
Flash Duration	30 ms
Duty Cycle	< 0,2
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	0...10 V ± 100...30%
Overdrive	yes
Mechanical Data	
Luminous Field Length (L)	375 mm
Housing Material	Aluminum, anodised
Housing Material	Plastic, ABS/GF
Degree of Protection	IP65
Optic Cover	Plastic, PMMA
Connection	M12 × 1; 5-pin
Max. cable length	150 m
Function	
Operating modes	Continuous, Strobe
Connection Diagram No.	007
Control Panel No.	T17
Suitable Mounting Technology No.	925

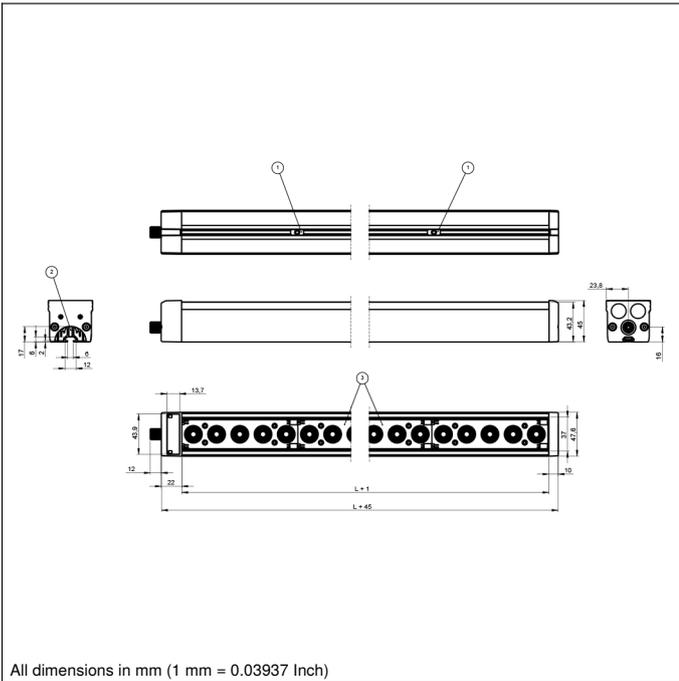
### Complementary Products

ZBAG angle changer
ZBAZ001 bar clamp
ZC4G003 connection cable
ZDCG004 connection cable
ZDCG005 connection cable

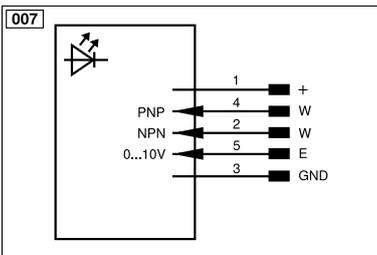
### Ctrl. Panel

**T17**


68 = supply voltage indicator  
 9b = Strobe Mode Indicator



All dimensions in mm (1 mm = 0.03937 Inch)



Legend			
+	Supply Voltage +	nc	Not connected
-	Supply Voltage 0 V	U	Test Input
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted
A	Switching Output (NO)	W	Trigger Input
Ā	Switching Output (NC)	W-	Ground for the Trigger Input
V	Contamination/Error Output (NO)	O	Analog Output
ȳ	Contamination/Error Output (NC)	O-	Ground for the Analog Output
E	Input (analog or digital)	BZ	Block Discharge
T	Teach Input	Amv	Valve Output
Z	Time Delay (activation)	a	Valve Control Output +
S	Shielding	b	Valve Control Output 0 V
RxD	Interface Receive Path	SY	Synchronization
TxD	Interface Send Path	SY-	Ground for the Synchronization
RDY	Ready	E+	Receiver-Line
GND	Ground	S+	Emitter-Line
CL	Clock	±	Grounding
E/A	Output/Input programmable	SnR	Switching Distance Reduction
⚡	IO-Link	Rx+/-	Ethernet Receive Path
PoE	power over Ethernet	Tx+/-	Ethernet Send Path
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)
OSSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
ENo RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contactor Monitoring
PT	Platinum measuring resistor	ENARs422	Encoder A/Ā (TTL)
			Encoder B/B̄ (TTL)
			Encoder A
			Encoder B
			Digital output MIN
			Digital output MAX
			Digital output OK
			Synchronization In
			Synchronization OUT
			Brightness output
			Maintenance
			Reserved
			Wire Colors according to DIN IEC 60757
			BK Black
			BN Brown
			RD Red
			OG Orange
			YE Yellow
			GN Green
			BU Blue
			VT Violet
			GY Grey
			WH White
			PK Pink
			GNYE Green/Yellow

