

# Bar Light

white light, 1250 mm

## LBO903

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	White Light
Color temperature	6500 K
Beam angle	± 7 °
White light output	316000 Lux
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	111 W
Peak power	480 W
Current Consumption Continuous Mode (U <sub>b</sub> = 24 V)	4,6 A
Current consumption flash mode overdrive (operating voltage = 24 V)	20 A
Flash Duration	2 ms
Duty Cycle	5 %
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)	1250 mm
Luminous Field Width (W)	31,5 mm
Luminous Field	1250 × 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 × 1; 4/5-pin
Max. cable length	59 m

Function	
Operating modes	Continuous, Strobe
Connection Diagram No.	007
Control Panel No.	T17
Suitable Mounting Technology No.	925

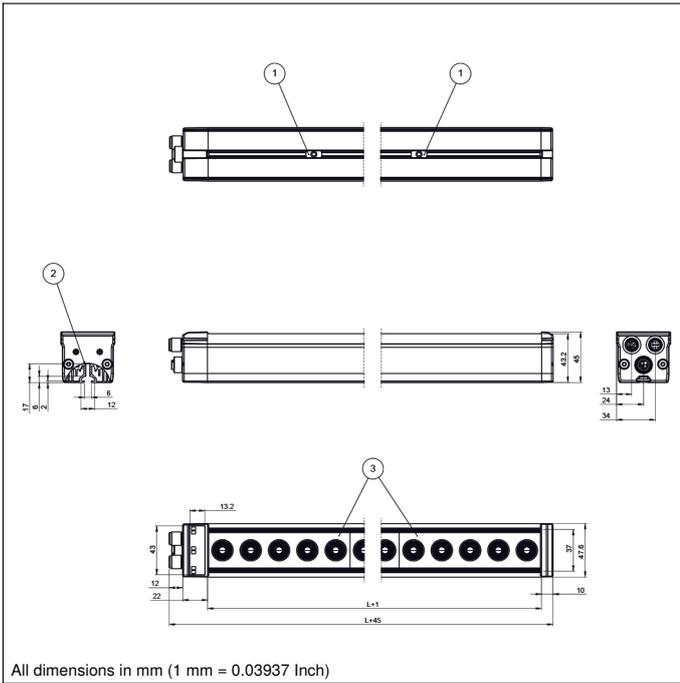
### Complementary Products

Connection cables	
ZBAG angle changer	
ZBAZ001 bar clamp	

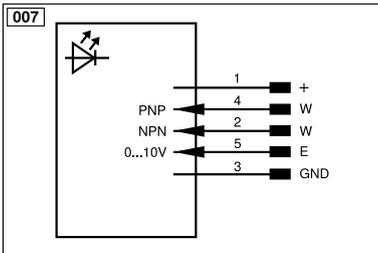
### Ctrl. Panel

**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)	Ü	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	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
Bl_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)
		ENBRS422	Encoder B/Ĕ (TTL)
		ENA	Encoder A
		ENb	Encoder B
		AMIN	Digital output MIN
		AMAX	Digital output MAX
		Aok	Digital output OK
		SY In	Synchronization In
		SY OUT	Synchronization OUT
		OLT	Brightness output
		M	Maintenance
		rsv	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