

Bar Light

Infrared, 125 mm

LBAI101

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 can be configured for almost any application. The direct lights provide a perfect balance between brightness and even light distribution, so the luminaires can be used at both small and large working distances. The bar light can be positioned around the product to create lighting effects such as bright field, low angle of incidence, dark field and dome lighting. It can also be used for some line scan applications. 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). When the LBA bar lights are combined with the ZBAG angle changers, the beam angle can then be increased and the lighting can be designed flexibly and controlled via the visual field.

Technical Data

Optical Data	
Light Source	Infrared Light
Wavelength	850 nm
Risk Group (EN 62471)	1
Beam angle	± 7 °
Infrared light output	288 W/m ²
Measuring point distance	200 mm
Compatible with	Angle Changer

Electrical Data	
Supply Voltage	21,6...26,4 V DC
Power	7,2 W
Peak power	28,8 W
Current Consumption Continuous Mode (Ub = 24 V)	0,3 A
Current consumption strobe mode (Ub = 24 V)	1,2 A
Flash Duration	30 ms
Duty Cycle	< 0,2
Rise time	15 μs
Fall time	10 μs
Input signal	PNP/NPN
Temperature Range	0...40 °C
Storage temperature	-20...60 °C
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)	125 mm
Housing Material	Aluminum, anodised
Degree of Protection	IP65
Optic Cover	Plastic, PMMA
Connection	M12 × 1; 5-pin
Max. cable length	150 m

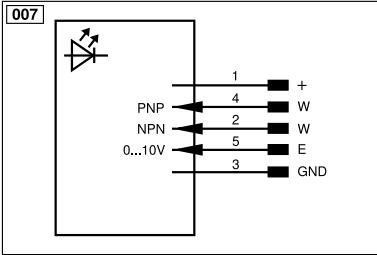
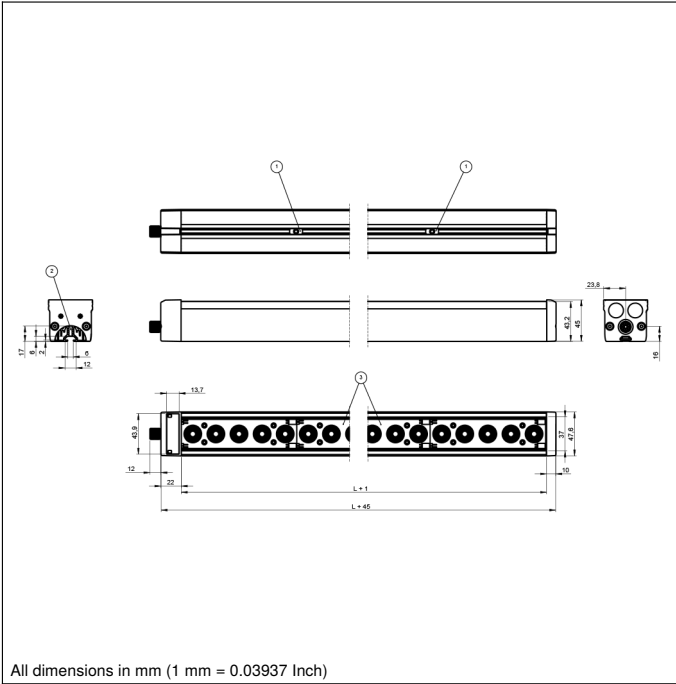
Function	
Operating modes	Continuous, Strobe
Connection Diagram No.	007
Control Panel No.	T17
Suitable Mounting Technology No.	925

Complementary Products

Angle changer ZBAG
ZBAZ001 Bar clamp
ZC4G003 connection cable
ZDCG004 connection cable
ZDCG005 connection cable

Ctrl. Panel

T17

 68 = supply voltage indicator
 9b = Strobe Mode Indicator


Legend					
+	Supply Voltage +	nc	Not connected	ENBRS422	Encoder B/B̄ (TTL)
-	Supply Voltage 0 V	U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	ENb	Encoder B
A	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)	O	Analog Output	Aok	Digital output OK
ȳ	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	Amv	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	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
IO-Link	IO-Link	Rx+/-	Ethernet Receive Path	GN	Green
PoE	Power 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 0/0̄ (TTL)	EDM	Contactors Monitoring	GNYE	Green/Yellow
PT	Platinum measuring resistor	ENARS422	Encoder A/Ā (TTL)		