Bar Light Infrared, 375 mm

LBAI301

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

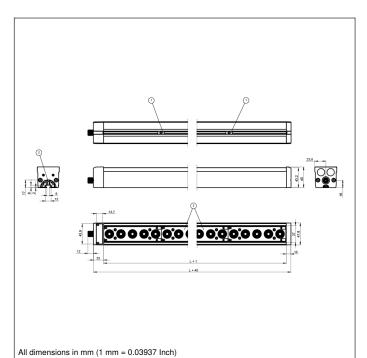
wenglor bar lights from the LBA series can be configured for almost any application. The direct lights provide a perfect balance between brightness and even light distribution, so the luminaires can be used at both small and large working distances. The bar light can be positioned around the product 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 340 W/m² Measuring point distance 200 mm Compatible with Angle Changer Electrical Data 340 W/m² Supply Voltage 21,626,4 V DC Power 21,6 W Peak power 86,4 W Current Consumption Continuous Mode (Ub = 24 V) 9,9 A Current consumption strobe mode (Ub = 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 Temperature Range 040 °C Storage temperature -2060 °C Short Circuit Protection yes Reverse Polarity Protection yes Overload Protection Protection yes Protection Class III Dimming 010 V ≜ 10030%	Technical Data							
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Infrared light output 340 W/m² Measuring point distance 200 mm Compatible with Angle Changer Electrical Data 21,626,4 V DC Supply Voltage 21,626,4 V DC Power 21,6 W Peak power 86,4 W Current Consumption Continuous Mode (Ub = 24 V) 0,9 A Current consumption strobe mode (Ub = 24 V) 3,6 A Flash Duration 30 ms Duty Cycle < 0,2	Risk Group (EN 62471)	1						
Measuring point distance 200 mm Compatible with Angle Changer Electrical Data 21,626,4 V DC Power 21,6 W Peak power 86,4 W Current Consumption Continuous Mode (Ub = 24 V) 0,9 A Current consumption strobe mode (Ub = 24 V) 3,6 A Flash Duration 30 ms Duty Cycle < 0,2	Beam angle	±7°						
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Power								
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Duty Cycle < 0,2	Current consumption strobe mode (Ub = 24 V)	3,6 A						
Rise time 15 μ s Fall time 10 μ s Input signal PNP/NPN 040 °C Storage temperature Range 040 °C Storage temperature -2060 °C Short Circuit Protection yes Reverse Polarity Protection yes Overload Protection yes III Dimming 010 V \triangleq 10030% Overdrive yes Mechanical Data Luminous Field Length (L) 375 mm Aluminum, anodised Degree of Protection IP65 Optic Cover Plastic, PMMA Connection M12 × 1; 5-pin Max. cable length 150 m Function Operating modes Connection Diagram No. 007	Flash Duration	30 ms						
Fall time $10 \mu s$ Input signal PNP/NPN Temperature Range $040 ^{\circ}C$ Storage temperature $-2060 ^{\circ}C$ Short Circuit Protection yes Reverse Polarity Protection yes Overload Protection yes Protection Class III Dimming $010 V \triangleq 10030\%$ Overdrive yes Mechanical Data Luminous Field Length (L) 375 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. O07 Control Panel No.	Duty Cycle	< 0,2						
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Storage temperature Short Circuit Protection Reverse Polarity Protection Overload Protection Protection Class III Dimming O10 V ≜ 10030% Overdrive yes Mechanical Data Luminous Field Length (L) Housing Material Degree of Protection Optic Cover Plastic, PMMA Connection M12 × 1; 5-pin Max. cable lenght Function Operating modes Control Panel No. Oo7 Control Panel No.	Input signal	PNP/NPN						
Short Circuit Protection Reverse Polarity Protection Overload Protection Protection Class Protection Class III Dimming O10 V ≜ 10030% Overdrive yes Mechanical Data Luminous Field Length (L) Housing Material Degree of Protection Optic Cover Plastic, PMMA Connection M12 × 1; 5-pin Max. cable length Function Operating modes Continuous, Strobe Connection Diagram No. Control Panel No.	Temperature Range	040 °C						
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Overload Protection yes Protection Class III Dimming 010 V ≜ 10030% Overdrive yes Mechanical Data Luminous Field Length (L) 375 mm Housing Material Aluminum, anodised Degree of Protection IP65 Optic Cover Plastic, PMMA Connection M12 × 1; 5-pin Max. cable lenght 150 m Function Operating modes Continuous, Strobe Connection Diagram No. 007 Control Panel No. 117	Short Circuit Protection	yes						
Protection Class Dimming Dimming O10 V ≜ 10030% Overdrive Mechanical Data Luminous Field Length (L) Housing Material Degree of Protection Optic Cover Plastic, PMMA Connection M12 × 1; 5-pin Max. cable length Tom Function Operating modes Continuous, Strobe Connection Diagram No. Optic Cover Optic Cover Plastic, PMMA M12 × 1; 5-pin Max. cable length Tom Function Operating modes Continuous, Strobe Connection Diagram No. Optic Cover Tif	Reverse Polarity Protection	yes						
Dimming 010 V ≜ 10030% Overdrive yes Mechanical Data	Overload Protection	yes						
Overdrive yes Mechanical Data Luminous Field Length (L) 375 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. Oo7 Control Panel No.	Protection Class	III						
Mechanical Data Luminous Field Length (L) 375 mm Housing Material Aluminum, anodised Degree of Protection IP65 Optic Cover Plastic, PMMA Connection M12 × 1; 5-pin Max. cable lenght 150 m Function Operating modes Continuous, Strobe Connection Diagram No. Oo7 Control Panel No.	Dimming	010 V ≜ 10030%						
Luminous Field Length (L) Housing Material Degree of Protection Optic Cover Optic Cover Plastic, PMMA Connection M12 × 1; 5-pin Max. cable lenght Function Operating modes Continuous, Strobe Connection Diagram No. Optic Cover Optic Cover Optic Cover Control Panel No.	Overdrive	yes						
Housing Material Degree of Protection Degree of Protection Optic Cover Plastic, PMMA Connection M12 × 1; 5-pin Max. cable lenght 150 m Function Operating modes Continuous, Strobe Connection Diagram No. Ontrol Panel No.	Mechanical Data							
Degree of Protection IP65 Optic Cover Plastic, PMMA Connection M12 × 1; 5-pin Max. cable lenght 150 m Function Operating modes Continuous, Strobe Connection Diagram No. Control Panel No.	Luminous Field Length (L)	375 mm						
Optic Cover Plastic, PMMA Connection M12 × 1; 5-pin Max. cable lenght 150 m Function Operating modes Continuous, Strobe Connection Diagram No. 007 Control Panel No. 117	Housing Material	Aluminum, anodised						
Connection M12 × 1; 5-pin Max. cable lenght 150 m Function Operating modes Continuous, Strobe Connection Diagram No. 007 Control Panel No. 117	Degree of Protection	IP65						
Max. cable lenght 150 m Function Operating modes Continuous, Strobe Connection Diagram No. 007 Control Panel No. 117	Optic Cover	Plastic, PMMA						
Function Operating modes Connection Diagram No. Control Panel No. T17	Connection	M12 × 1; 5-pin						
Operating modes Continuous, Strobe Connection Diagram No. 007 Control Panel No. T17	Max. cable lenght	150 m						
Connection Diagram No. 007 Control Panel No. T17	Function							
Control Panel No.	Operating modes	Continuous, Strobe						
Control Panel No.	Connection Diagram No.	007						
Suitable Mounting Technology No. 925	-	T17						
	925							

Complementary Products

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



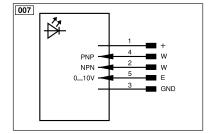
Ctrl. Panel

T17



68 = supply voltage indicator

9b = Strobe Mode Indicator



Legend					
+	Supply Voltage +	nc	Not connected	ENBRS422	Encoder B/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	Амах	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
Т	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 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
②	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)		









