

Bar Light Diffuse

White light, 375 mm

LBDW301

Part Number



- No external control required
- No LED hot spots
- Very diffuse light

wenglor's LBD series bar lights are highly diffuse luminaires that are perfect for diffuse illumination at low angles of incidence, direct illumination at low working distances, and backlight illumination of specific features in the visual field. The LBD bar lights can be used in continuous mode or synchronized with the Machine Vision Camera in strobe mode via PNP or NPN inputs. The integrated power control and flexible mounting options make the illumination very easy to install and perfect for a wide range of applications in industrial image processing and identification.

Technical Data

Optical Data

Light Source	White Light
Color temperature	6500 K
Beam angle	± 65 °
White light output	78000 Lux

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	28,8 W
Current Consumption Continuous Mode (Ub = 24 V)	1,2 A
Rise time	15 µs
Fall time	10 µs
Input signal	NPN
Input signal	PNP
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Protection Class	III
Dimming	0...10 V ± 100...30%
OverDrive	no

Mechanical Data

Luminous Field Length (L)	375 mm
Luminous Field Width (W)	31,5 mm
Luminous Field	375 × 31,5 mm
Housing Material	Aluminum, anodised
Housing Material	Plastic, ABS-GF
Degree of Protection	IP65
UL Enclosure Type	1
Optic Cover	Plastic, PMMA
Connection	M12 × 1; 5-pin
Max. cable length	60 m

Function

Operating modes	Continuous, Strobe
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Connection Diagram No.

007

Suitable Mounting Technology No.

925

Complementary Products

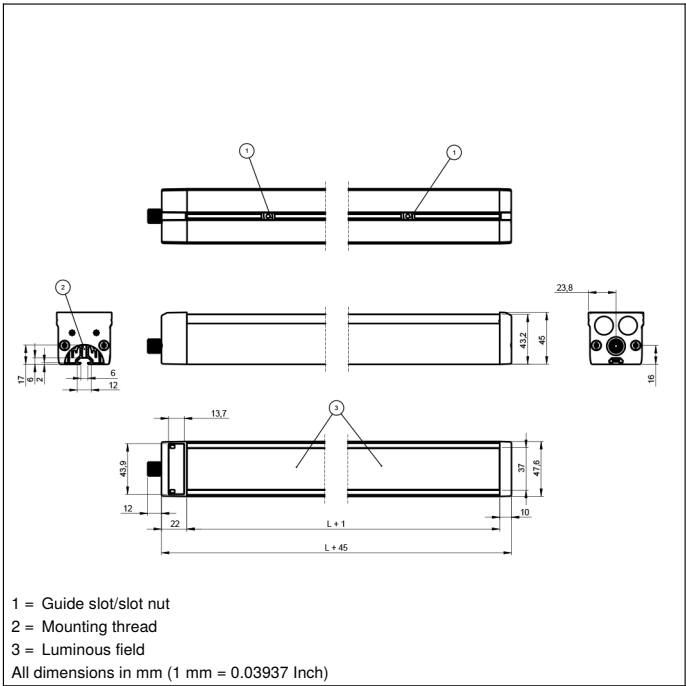
ZBAZ001 bar clamp
ZC4G003 connection cable
ZDCG004 connection cable
ZDCG005 connection cable

Ctrl. Panel

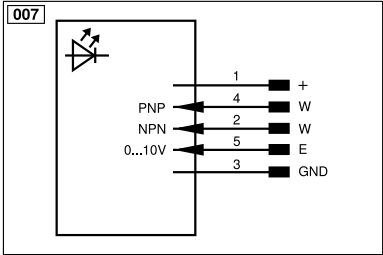
T17



68 = Power LED
9b = Strobe Mode Indicator



1 = Guide slot/slot nut
2 = Mounting thread
3 = Luminous field
All dimensions in mm (1 mm = 0.03937 Inch)



Legend					
+	Supply Voltage +	PT	Platinum measuring resistor	ENAR5422	Encoder A/Ā (TTL)
-	Supply Voltage 0 V	nc	Not connected	ENBR5422	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	ENa	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	ENb	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	AMIN	Digital output MIN
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input	AMAX	Digital output MAX
Ū	Contamination/Error Output (NC)	O	Analog Output	AOK	Digital output OK
E	Input (analog or digital)	O-	Ground for the Analog Output	SY In	Synchronization In
T	Teach Input	BZ	Block Discharge	SY OUT	Synchronization OUT
R	Reset 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		
RDY	Ready	E+	Receiver-Line	BK	Black
GND	Ground	S+	Emitter-Line	BN	Brown
CL	Clock	≡	Grounding	RD	Red
E/A	Output/Input programmable	SnR	Switching Distance Reduction	OG	Orange
IO-Link	IO-Link	Rx+/-	Ethernet Receive Path	YE	Yellow
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path	GN	Green
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)	BU	Blue
QSSD	Safety Output	La	Emitted Light disengageable	VT	Violet
Signal	Signal Output	Mag	Magnet activation	GY	Grey
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	WH	White
ENo RS422	Encoder 0-pulse 0/1 (TTL)	EDM	Contact Monitoring	PK	Pink
				GNYE	Green/Yellow