Bar Light Diffuse
Infrared, 375 mm

LBDI301
Part Number

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

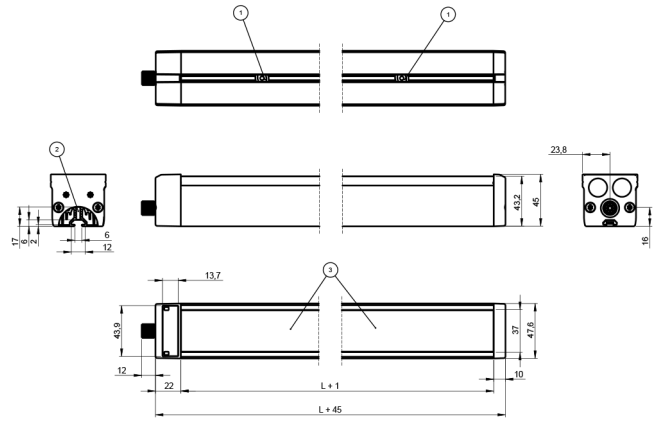
wenglor's LBD series bar lights are highly diffuse luminaires that are perfect for diffuse illumination at low angles of incidence, direct illumination at low working distances, and backlight illumination of specific features in the visual field. The LBD bar lights can be used in continuous mode or synchronized 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	Infrared Light
Wavelength	850 nm
Risk Group (EN 62471)	1
Beam angle	± 65 °
Infrared light output	178 W/m²
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	PNP/NPN
Temperature Range	-10...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	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
Degree of Protection	IP65
Optic Cover	Plastic, PMMA
Connection	M12 × 1; 5-pin
Max. cable lenght	60 m
Function	
Operating modes	Continuous, Strobe
Connection Diagram No.	007
Control Panel No.	T17
Suitable Mounting Technology No.	925

Complementary Products

ZBAZ001 Bar clamp
ZC4G003 connection cable
ZDCG004 connection cable
ZDCG005 connection cable



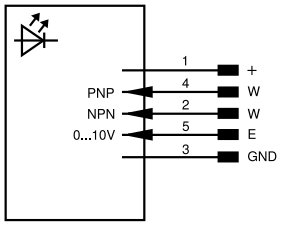
All dimensions in mm (1 mm = 0.03937 Inch)

Ctrl. Panel

T17

68 = supply voltage indicator
9b = Strobe Mode Indicator

007



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
V̄	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	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
EN0 RS422	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contactor Monitoring	GNYE	Green/Yellow
PT	Platinum measuring resistor	ENARS422	Encoder A/Ā (TTL)		