Bar Light
Infrared, 125 mm

OPT2404
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**

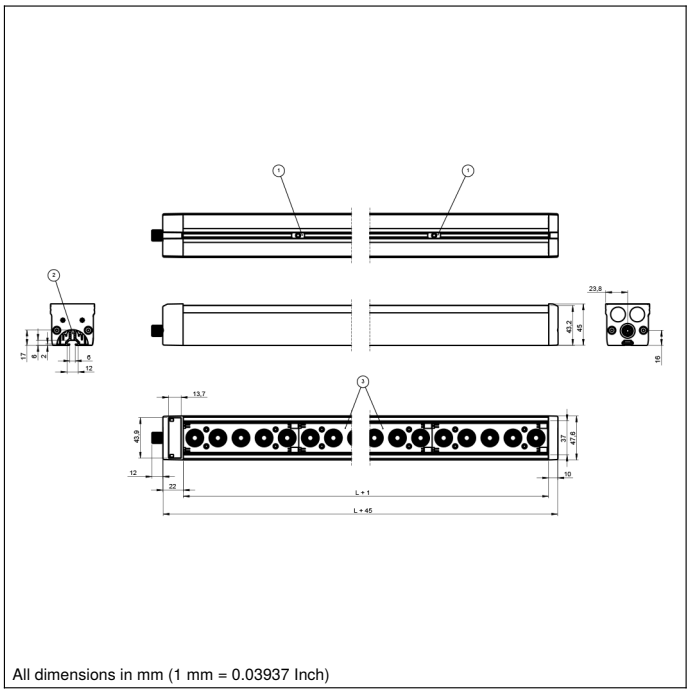
wenglor bar lights can be configured for almost any application. The direct lights provide a perfect balance between brightness and even light distribution, so the luminaires can be used at both small and large working distances. The bar light can be positioned around the product to create lighting effects such as bright field, low angle of incidence, dark field and dome lighting. It can also be used for some line scan applications. The 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 bar lights are combined with the 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 °
Light output	≤ 87000 Lux
Compatible with	Angle Changer
Electrical Data	
Supply Voltage	21,6...30 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
Duty cycle	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, fiberglass-reinforced ABS
Degree of Protection	IP65
Optic Cover	PMMA (high clarity)
Material Control Panel	PC
Connection	M12 × 1; 5-pin
Max. cable lenght	150 m
Weight	< 300 g
Function	
Operating modes	Continuous, Strobe
Connection Diagram No.	007
Control Panel No.	T17
Suitable Mounting Technology No.	925

Complementary Products

Angle Changer OPT2408 – OPT2417-4
Swivel Mount OPT2432



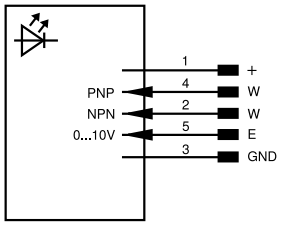
All dimensions in mm (1 mm = 0.03937 Inch)

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)		