Bar Light infrared, 625 mm

LBOI601

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

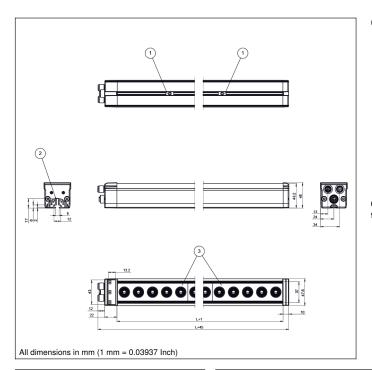
wenglor bar lights from the LBO series are suitable for both small and large working distances. The direct lights can create lighting effects like bright field, low angle of incidence, dark field and dome lighting. Some line scanning applications are also possible. The LBO bar lights can be operated in continuous mode with high intensity or synchronized with the machine vision camera in strobe mode with increased luminosity (overdrive). In combination with the ZBAG angle changers, the beam angle can be enlarged and designed flexibly.

Technical Data

| recillical Data | | | | | | |
|-----------------------------------------------------------------------------------------------------|----------------------|--|--|--|--|--|
| Optical Data | | | | | | |
| Light Source | Infrared Light | | | | | |
| Wavelength | 850 nm | | | | | |
| Risk Group (EN 62471) | 1 | | | | | |
| Beam angle | ±7° | | | | | |
| Infrared light output | 383 W/m ² | | | | | |
| Measuring point distance | 200 mm | | | | | |
| Compatible with | Angle Changer | | | | | |
| Environmental conditions | 3 - 2 - 3 - 3 - | | | | | |
| Temperature Range | -1040 °C | | | | | |
| Storage temperature | -2060 °C | | | | | |
| Atmospheric humidity | < 80%, non- | | | | | |
| Electrical Data | | | | | | |
| Supply Voltage | 21,626,4 V DC | | | | | |
| Power | 55,5 W | | | | | |
| | | | | | | |
| Peak power | 240 W | | | | | |
| Current Consumption Continuous Mode (Ub = 24 V) Current consumption flash mode overdrive (operating | 2,3 A | | | | | |
| voltage = 24 V) | 10 A | | | | | |
| Flash Duration | 2 ms | | | | | |
| Duty Cycle | 5 % | | | | | |
| Rise time | 15 <i>μ</i> s | | | | | |
| Fall time | 10 <i>μ</i> s | | | | | |
| Input signal | PNP/NPN | | | | | |
| Short Circuit Protection | yes | | | | | |
| Reverse Polarity Protection | yes | | | | | |
| Overload Protection | yes | | | | | |
| Protection Class | III | | | | | |
| Dimming | 010 V ≜ 10030% | | | | | |
| Overdrive | yes | | | | | |
| Mechanical Data | | | | | | |
| Luminous Field Length (L) | 625 mm | | | | | |
| Luminous Field Width (W) | 31,5 mm | | | | | |
| Luminous Field | 625 × 31,5 mm | | | | | |
| Housing Material | Aluminum, anodised | | | | | |
| Housing Material | Plastic, ABS | | | | | |
| Housing Material | Plastic, PC | | | | | |
| Degree of Protection | IP65 | | | | | |
| Optic Cover | Plastic, PMMA | | | | | |
| Connection | M12 × 1; 4/5-pin | | | | | |
| Max. cable lenght | 138 m | | | | | |
| Function | | | | | | |
| Operating modes | Continuous, Strobe | | | | | |
| Connection Diagram No. | 007 | | | | | |
| Control Panel No. | T17 | | | | | |
| | | | | | | |
| Suitable Mounting Technology No. | 925 | | | | | |

Complementary Products

| (| Connection cables |
|-----|--------------------|
| - 2 | ZBAG angle changer |
| | ZBAZ001 bar clamp |



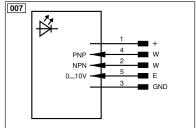
Ctrl. Panel

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 | ENв | Encoder B | |
| Α | 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) | 0 | Analog Output | Аок | Digital output OK | |
| $\overline{\vee}$ | 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 | |
| Τ | Teach Input | Amv | 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 Colo | 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) | | • | |





