

# Bar Light

infrared, 1250 mm

## LBAI913

Part Number



- Create patented curve effect to reduce LED hot spots
- Flexibility: expand the beam angle with an Angle Changer
- No external control required

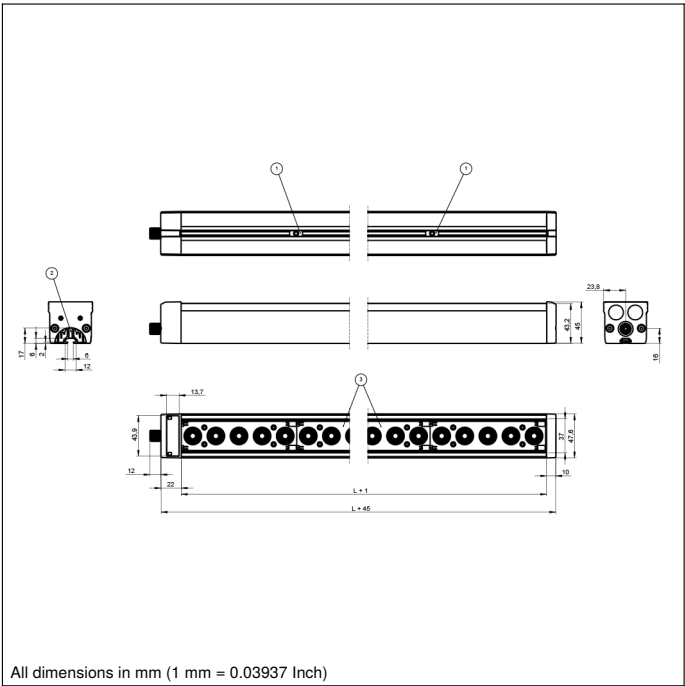
wenglor bar lights from the LBA series are suitable for both small and large working distances. The direct lights can create lighting effects like bright field, low angle of incidence, dark field and dome lighting. Some line scanning applications are also possible. The LBA bar lights can be operated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

### Technical Data

| Optical Data                                    |                             |
|-------------------------------------------------|-----------------------------|
| Light Source                                    | Infrared Light              |
| Wavelength                                      | 850 nm                      |
| Risk Group (EN 62471)                           | 1                           |
| Beam angle                                      | $\pm 7^\circ$               |
| Infrared light output                           | 95,75 W/m <sup>2</sup>      |
| Measuring point distance                        | 200 mm                      |
| Compatible with                                 | Angle Changer               |
| 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                                           | 96 W                        |
| Current Consumption Continuous Mode (Ub = 24 V) | 4 A                         |
| Rise time                                       | 15 $\mu$ s                  |
| Fall time                                       | 10 $\mu$ s                  |
| Input signal                                    | PNP/NPN                     |
| Short Circuit Protection                        | yes                         |
| Reverse Polarity Protection                     | yes                         |
| Overload Protection                             | yes                         |
| Protection Class                                | III                         |
| Dimming                                         | 0...10 V $\Delta$ 100...30% |
| Overdrive                                       | no                          |
| Mechanical Data                                 |                             |
| Luminous Field Length (L)                       | 1250 mm                     |
| Luminous Field Width (W)                        | 31,5 mm                     |
| Luminous Field                                  | 1250 $\times$ 31,5 mm       |
| Housing Material                                | Aluminum, anodised          |
| Housing Material                                | Plastic, ABS                |
| Degree of Protection                            | IP65                        |
| Optic Cover                                     | Plastic, PMMA               |
| Connection                                      | M12 $\times$ 1; 5-pin       |
| Max. cable length                               | 15 m                        |
| Function                                        |                             |
| Operating modes                                 | Continuous, Strobe          |
| Connection Diagram No.                          | 007                         |
| Control Panel No.                               | T17                         |
| Suitable Mounting Technology No.                | 925                         |

### Complementary Products

|                          |
|--------------------------|
| ZBAG angle changer       |
| ZBAZ001 bar clamp        |
| ZC4G003 connection cable |
| ZDCG004 connection cable |
| ZDCG005 connection cable |



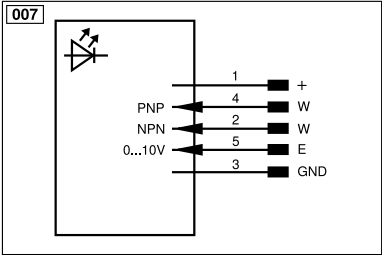
All dimensions in mm (1 mm = 0.03937 Inch)

### Ctrl. Panel

**T17**



68 = supply voltage indicator  
9b = Strobe Mode Indicator



| Legend                                 |                                            |           |                                |
|----------------------------------------|--------------------------------------------|-----------|--------------------------------|
| +                                      | Supply Voltage +                           | nc        | Not connected                  |
| -                                      | Supply Voltage 0 V                         | U         | Test Input                     |
| ~                                      | Supply Voltage (AC Voltage)                | Ů         | Test Input inverted            |
| A                                      | Switching Output (NO)                      | W         | Trigger Input                  |
| Ā                                      | Switching Output (NC)                      | W-        | Ground for the Trigger Input   |
| V                                      | Contamination/Error Output (NO)            | O         | Analog Output                  |
| Ȳ                                      | Contamination/Error Output (NC)            | O-        | Ground for the Analog Output   |
| E                                      | Input (analog or digital)                  | BZ        | Block Discharge                |
| T                                      | Teach Input                                | Amv       | Valve Output                   |
| Z                                      | Time Delay (activation)                    | a         | Valve Control Output +         |
| S                                      | Shielding                                  | b         | Valve Control Output 0 V       |
| RxD                                    | Interface Receive Path                     | SY        | Synchronization                |
| TxD                                    | Interface Send Path                        | SY-       | Ground for the Synchronization |
| RDY                                    | Ready                                      | E+        | Receiver-Line                  |
| GND                                    | Ground                                     | S+        | Emitter-Line                   |
| CL                                     | Clock                                      | ⊥         | Grounding                      |
| E/A                                    | Output/Input programmable                  | SnR       | Switching Distance Reduction   |
| IO-Link                                | IO-Link                                    | Rx+/-     | Ethernet Receive Path          |
| PoE                                    | Power over Ethernet                        | Tx+/-     | Ethernet Send Path             |
| IN                                     | Safety Input                               | Bus       | Interfaces-Bus A(+)/B(-)       |
| OSSD                                   | Safety Output                              | La        | Emitted Light disengageable    |
| Signal                                 | Signal Output                              | Mag       | Magnet activation              |
| BL_D+/-                                | Ethernet Gigabit bidirect. data line (A-D) | RES       | Input confirmation             |
| ENo RS422                              | Encoder 0-pulse 0/0 (TTL)                  | EDM       | Contact Monitoring             |
| PT                                     | Platinum measuring resistor                | ENARIS422 | Encoder A/Ā (TTL)              |
|                                        |                                            | ENBRIS422 | Encoder B/Ĕ (TTL)              |
|                                        |                                            | ENA       | Encoder A                      |
|                                        |                                            | ENb       | Encoder B                      |
|                                        |                                            | AMIN      | Digital output MIN             |
|                                        |                                            | AMAX      | Digital output MAX             |
|                                        |                                            | AOK       | Digital output OK              |
|                                        |                                            | SY In     | Synchronization In             |
|                                        |                                            | SY OUT    | Synchronization OUT            |
|                                        |                                            | OLt       | Brightness output              |
|                                        |                                            | M         | Maintenance                    |
|                                        |                                            | rsv       | Reserved                       |
| Wire Colors according to DIN IEC 60757 |                                            |           |                                |
|                                        |                                            | BK        | Black                          |
|                                        |                                            | BN        | Brown                          |
|                                        |                                            | RD        | Red                            |
|                                        |                                            | OG        | Orange                         |
|                                        |                                            | YE        | Yellow                         |
|                                        |                                            | GN        | Green                          |
|                                        |                                            | BU        | Blue                           |
|                                        |                                            | VT        | Violet                         |
|                                        |                                            | GY        | Grey                           |
|                                        |                                            | WH        | White                          |
|                                        |                                            | PK        | Pink                           |
|                                        |                                            | GNYE      | Green/Yellow                   |