

# Bar Light IP69K

Red light, 250 mm

## LB9R201

Part Number



- Certified for wash-down environments (DIN 400 50 Part 9)
- Industry-leading performance of the LBA bar light
- Mounting bracket included in scope of delivery
- No external control required

wenglor's LB9 series bar lights are industrial IP69K lights with food-safe housing. Suitable for environments that require high-pressure/high-temperature cleaning with steam and cleaning chemicals. The homogeneous and intense luminous flux of the illumination device enables many types of applications with working distances in the near and far range. The LB9 bar lights can be used in continuous mode or synchronized with the machine vision camera in strobe mode via PNP or NPN inputs. The standard L-brackets enable 360° rotation for easy installation.

### Technical Data

#### Optical Data

|                          |                         |
|--------------------------|-------------------------|
| Light Source             | Red Light               |
| Wavelength               | 630 nm                  |
| Beam angle               | ± 17 °                  |
| Red light output         | 198,75 W/m <sup>2</sup> |
| Measuring point distance | 200 mm                  |

#### Environmental conditions

|                      |                       |
|----------------------|-----------------------|
| Temperature Range    | -20...40 °C           |
| Storage temperature  | -20...60 °C           |
| Atmospheric humidity | < 80%, non-condensing |

#### Electrical Data

|                                                             |                      |
|-------------------------------------------------------------|----------------------|
| Supply Voltage                                              | 21,6...26,4 V DC     |
| Power                                                       | 24,2 W               |
| Current Consumption Continuous Mode (U <sub>b</sub> = 24 V) | 1 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) | 250 mm                             |
| Housing Material          | Plastic, PMMA                      |
| Housing Material          | Stainless steel, V4A (1.4404/316L) |
| Degree of Protection      | IP69K                              |
| UL Enclosure Type         | 1                                  |
| Optic Cover               | Plastic, PMMA                      |
| Connection                | Cable; 5-wire                      |
| Cable length (L)          | 5 m                                |
| Cable Jacket Material     | Plastic, PUR                       |
| Max. cable length         | 90 m                               |
| Outer diameter (d)        | 5,4 mm                             |

#### Function

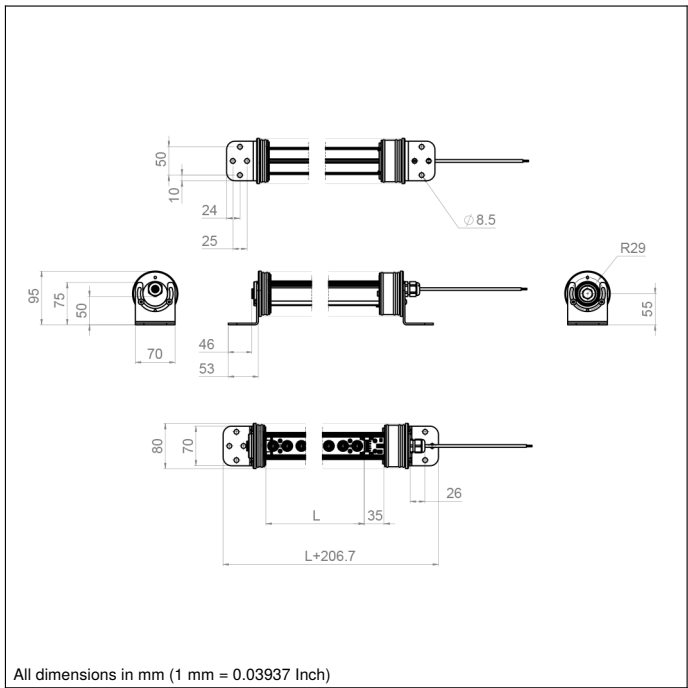
|                 |                    |
|-----------------|--------------------|
| Operating modes | Continuous, Strobe |
|-----------------|--------------------|

Connection Diagram No.

007

### Complementary Products

|                          |
|--------------------------|
| ZC4G003 connection cable |
| ZDCG004 connection cable |
| ZDCG005 connection cable |



All dimensions in mm (1 mm = 0.03937 Inch)



| Legend    |                                            |       |                                |                                        |                     |
|-----------|--------------------------------------------|-------|--------------------------------|----------------------------------------|---------------------|
| +         | Supply Voltage +                           | PT    | Platinum measuring resistor    | ENAR5422                               | Encoder A/Ä (TTL)   |
| -         | Supply Voltage 0 V                         | nc    | Not connected                  | ENBR5422                               | Encoder B/ß (TTL)   |
| ~         | Supply Voltage (AC Voltage)                | U     | Test Input                     | ENa                                    | Encoder A           |
| A         | Switching Output (NO)                      | Ü     | Test Input inverted            | ENb                                    | Encoder B           |
| Ä         | 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  |
| Û         | 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                                    | 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                |
| BL_D+/-   | Ethernet Gigabit bidirect. data line (A-D) | RES   | Input confirmation             | WH                                     | White               |
| ENo RS422 | Encoder 0-pulse 0/0 (TTL)                  | EDM   | Contact Monitoring             | PK                                     | Pink                |
|           |                                            |       |                                | GNYE                                   | Green/Yellow        |