

# Bar Light Diffuse

red light, 1000 mm

## LBDR901

Part Number



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

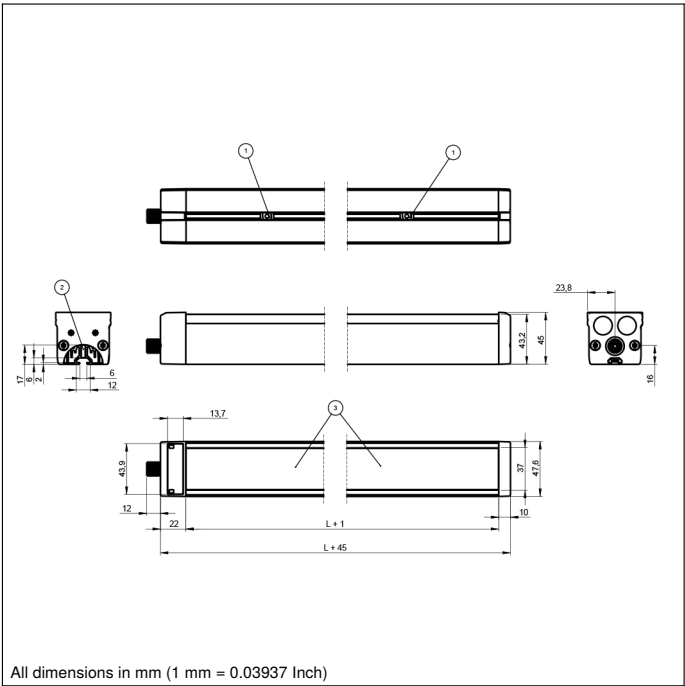
wenglor's LBD series bar lights are highly diffuse luminaires that are perfect for diffuse illumination at low angles of incidence, direct illumination at low working distances, and backlight illumination of specific features in the visual field. The LBD bar lights can be used in continuous mode or synchronized 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

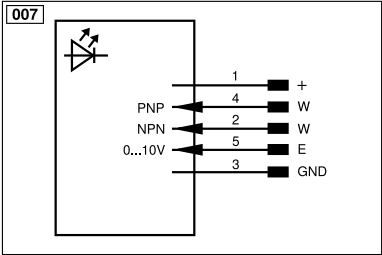
| Optical Data                                    |                      |
|-------------------------------------------------|----------------------|
| Light Source                                    | Red Light            |
| Wavelength                                      | 630 nm               |
| Beam angle                                      | ± 65 °               |
| Red light output                                | 230 W/m <sup>2</sup> |
| Electrical Data                                 |                      |
| Supply Voltage                                  | 21,6...26,4 V DC     |
| Power                                           | 76,8 W               |
| Current Consumption Continuous Mode (Ub = 24 V) | 3,2 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)                       | 1000 mm              |
| Luminous Field Width (W)                        | 31,5 mm              |
| Luminous Field                                  | 1000 × 31,5 mm       |
| Housing Material                                | Aluminum, anodised   |
| Degree of Protection                            | IP65                 |
| Optic Cover                                     | Plastic, PMMA        |
| Connection                                      | M12 × 1; 5-pin       |
| Max. cable length                               | 20 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)



| 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/Ů (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             |
|           |                                            | ACK                                    | 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                   |

**Ctrl. Panel**

**T17**



68 = supply voltage indicator  
9b = Strobe Mode Indicator