# Flat Light
**white light, 900 × 900 mm**

# LBBW901
Part Number



- **Easy and flexible installation**
- **High homogeneity**
- **High performance: high intensity even in continuous mode**
- **No external control required**

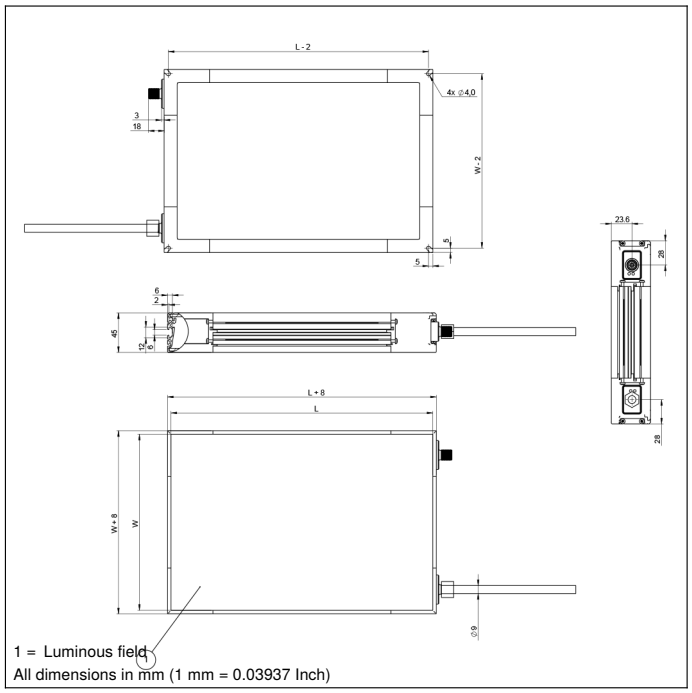
wenglor LBB backlights are ideally suited for Vision applications (e.g. silhouette lighting) in areas from 200 × 200 mm. They can be used in continuous mode or synchronized with the Machine Vision Camera in strobe mode via PNP or NPN inputs. Thanks to their diffused light, the backlights are ideal for applications with transmitted light or incident light. The illumination is extremely homogeneous with very small edges (4°mm), so the usable surface is very large and integration is very easy – thanks, among other things, to the T-slot mounting and anchor point on the entire housing of the illumination.

## Technical Data

| | |
|---|---|
| **Optical Data** | |
| Light Source | White Light |
| Color temperature | 6500 K |
| White light output | 44300 Lux |
| **Environmental conditions** | |
| Temperature Range | -10...40 °C |
| Storage temperature | -20...60 °C |
| **Electrical Data** | |
| Supply Voltage | 21,6...26,4 V DC |
| Power | 436,8 W |
| Current Consumption Continuous Mode (Ub = 24 V) | 18,2 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) | 900 mm |
| Luminous Field Width (W) | 900 mm |
| Luminous Field | 900 × 900 mm |
| Housing Material | Aluminum, anodised |
| Housing Material | Plastic, ABS-GF |
| Degree of Protection | IP50 |
| UL Enclosure Type | 1 |
| Optic Cover | Plastic, PMMA |
| Connection | M12 × 1; 5-pin |
| Max. cable lenght | 10 m |
| **Function** | |
| Operating modes | Continuous, Strobe |
| Connection Diagram No. | 007 |
| Suitable Mounting Technology No. | 926 |

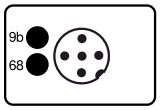
## Complementary Products

ZBBX001 Mounting bracket

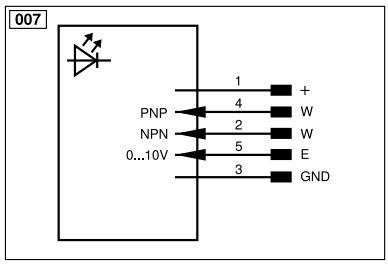



## Ctrl. Panel

T16




68 = Power LED
9b = Strobe Mode Indicator




| Legend | | | | | |
|---|---|---|---|---|---|
| + | Supply Voltage + | PT | Platinum measuring resistor | ENARS422 | Encoder A/Ā (TTL) |
| – | Supply Voltage 0 V | nc | Not connected | ENBRS422 | Encoder B/B̄ (TTL) |
| ~ | Supply Voltage (AC Voltage) | U | Test Input | ENA | Encoder A |
| A | Switching Output (NO) | Ū | Test Input inverted | ENB | Encoder B |
| Ā | 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 |
| V̄ | 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 | 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/Ō (TTL) | EDM | Contactor Monitoring | GNYE | Green/Yellow |

Specifications are subject to change without notice V1-14.07.2026