

Bar Light Flash

white light, 1250 mm

LBFW903

Part Number



- **Extremely short rise time**
- **Flexibility: expand the beam angle with an Angle Changer**
- **High power OverDrive**
- **No external control required**

The bar lights from the LBF series achieve a light output of up to 2.5 million lux and are suitable for small to large working distances. As direct lights, they enable lighting concepts such as brightfield, darkfield, dome illumination and low-angle illumination. With a rise time of up to 800 ns, they support very short exposure times of vision systems, which minimizes motion blur in high-speed applications. They can be triggered directly via the camera; a separate timing controller is not required. Direct synchronization is possible in the powerful flash mode OverDrive. Angle changers allow flexible adjustment of the beam angle and polarization of the light.

Technical Data

| Optical Data | |
|---|-----------------------|
| Light Source | White Light |
| Color temperature | 6500 K |
| Beam angle | ± 7 ° |
| White light output | 2,5e+006 Lux |
| 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 | 84 W |
| Peak power | 120 W |
| Current Consumption Continuous Mode (Ub = 24 V) | 3,5 A |
| Current consumption flash mode OverDrive (operating voltage = 24 V) | 5 A |
| Flash duration (max.) | 2,5 ms |
| Duty cycle (max.) | 3,5 % |
| Rise time | 0,8 μs |
| Fall time | 0,25 μs |
| Input signal | PNP |
| Short Circuit Protection | yes |
| Reverse Polarity Protection | yes |
| Overload Protection | yes |
| Protection Class | III |
| Dimming | 0...10 V ± 100...30% |
| OverDrive | yes |
| Mechanical Data | |
| Luminous Field Length (L) | 1250 mm |
| Luminous Field Width (W) | 31,5 mm |
| Luminous Field | 1250 × 31,5 mm |
| Housing Material | Aluminum, anodised |
| Housing Material | Plastic, ABS |
| Housing Material | Plastic, PC |
| Degree of Protection | IP65 |
| UL Enclosure Type | 1 |
| Optic Cover | Plastic, PMMA |
| Connection | M12 × 1; 4-pin |
| Max. cable length | 15 m |
| Function | |
| Operating modes | Flash mode OverDrive |
| Connection Diagram No. | 010 |
| Suitable Mounting Technology No. | 925 |

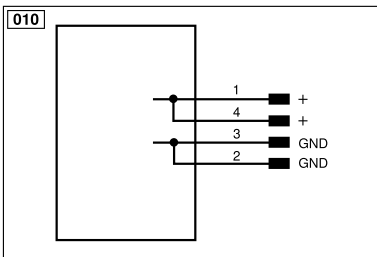
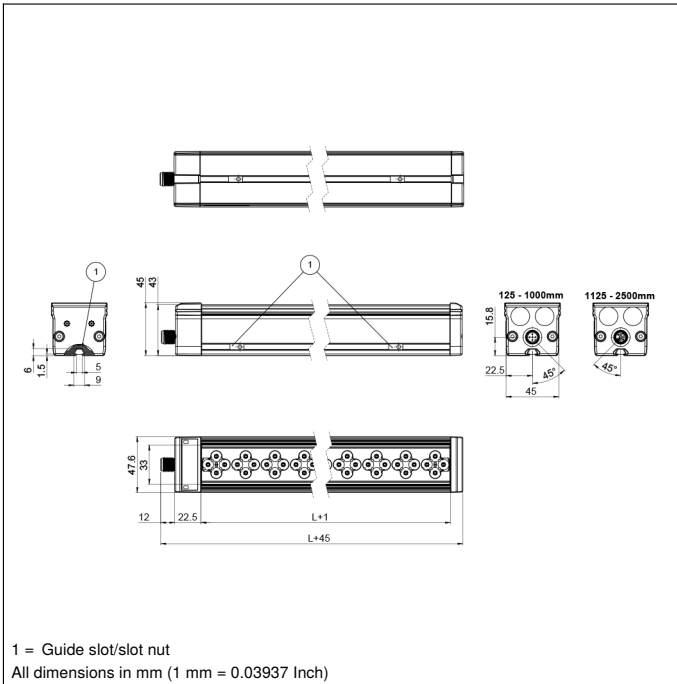
Complementary Products

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

Ctrl. Panel

T17


68 = Power LED
 9b = Strobe Mode Indicator



| Legend | | | | | |
|---------------------|--|-------|--------------------------------|--|---------------------|
| + | Supply Voltage + | PT | Platinum measuring resistor | ENAR _{RS422} | Encoder A/Ā (TTL) |
| - | Supply Voltage 0 V | nc | Not connected | ENBR _{RS422} | 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 | Power over Ethernet | Tx+/- | Ethernet Send Path | BU | Blue |
| IN | Safety Input | Bus | Interfaces-Bus A(+)/B(-) | VT | Violet |
| QSSD | Safety Output | La | Emitted Light disengageable | GY | Grey |
| Signal | Signal Output | Mag | Magnet activation | WH | White |
| Bl_D+/- | Ethernet Gigabit bidirect. data line (A-D) | RES | Input confirmation | PK | Pink |
| EN _{RS422} | Encoder 0-pulse 0/0 (TTL) | EDM | Contacting Monitoring | GNYE | Green/Yellow |

