

# Flat Light

white light, 68 × 68 mm

## ZVZF300

Part Number

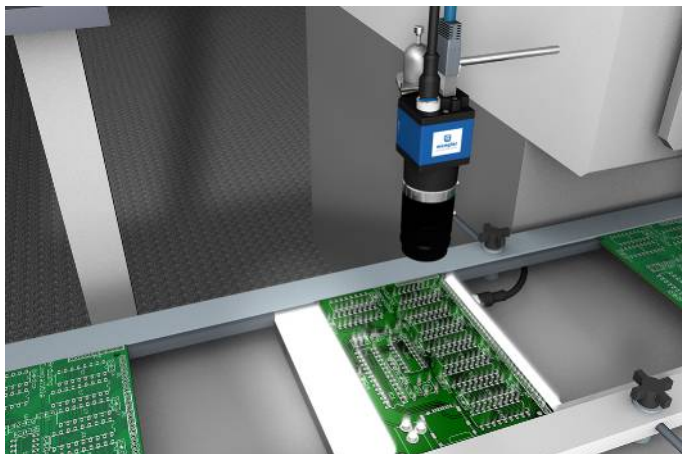


- Continuous mode or strobe mode synchronized with the camera
- Diffuse light for transmitted light and incident light applications
- Rugged housing (IP67) with minimal thickness and narrow edge

### Technical Data

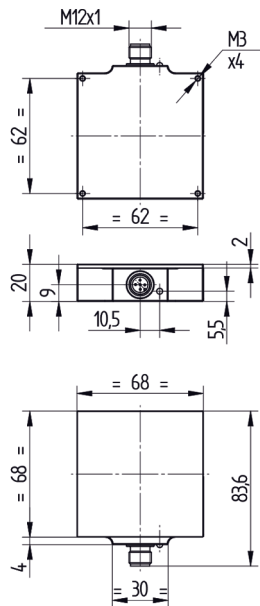
| Optical Data                                                        |                       |
|---------------------------------------------------------------------|-----------------------|
| Light Source                                                        | White Light           |
| Color temperature                                                   | 5000 K                |
| Service Life (T = +25 °C)                                           | 100000 h              |
| Luminance (Continuous Mode)                                         | 7400 cd/m²            |
| Luminance (Flash Mode)                                              | 31000 cd/m²           |
| Environmental conditions                                            |                       |
| Atmospheric humidity                                                | < 80%, non-condensing |
| Electrical Data                                                     |                       |
| Supply Voltage                                                      | 18...30 V DC          |
| Current consumption flash mode overdrive (operating voltage = 24 V) | < 710 mA              |
| Current Consumption Continuous Mode (U <sub>b</sub> = 24 V)         | < 120 mA              |
| Flash Duration (max.)                                               | 17...30000 µs         |
| Duty Cycle (max.)                                                   | < 0,2                 |
| Short Circuit Protection                                            | yes                   |
| Reverse Polarity Protection                                         | yes                   |
| Overload Protection                                                 | yes                   |
| Protection Class                                                    | III                   |
| Mechanical Data                                                     |                       |
| Luminous Field                                                      | 60 × 60 mm            |
| Housing Material                                                    | Aluminum, anodised    |
| Optic Cover                                                         | Plastic, PMMA         |
| Degree of Protection                                                | IP67                  |
| UL Enclosure Type                                                   | 1                     |
| Connection                                                          | M12 × 1; 4/5-pin      |
| Safety-relevant Data                                                |                       |
| MTTFd (EN ISO 13849-1)                                              | 678,63 a              |
| Connection Diagram No.                                              | 181                   |
| Suitable Connection Equipment No.                                   | 37                    |

wenglor backlights are ideally suited for vision applications in which large areas need to be illuminated. They can be operated in continuous mode, or synchronized to the Machine Vision Camera in flash mode. Thanks to their diffuse light, the backlights are ideal for applications with transmitted light or incident light. Above all in systems where space is limited, users profit from the rugged housing (IP67) with minimal thickness and narrow framing, and at the same time from the large illuminated surface area.



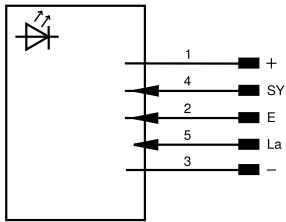
### Complementary Products

|                          |
|--------------------------|
| ZC4G002 connection cable |
| ZDCG004 connection cable |
| ZDCG005 connection cable |



All dimensions in mm (1 mm = 0.03937 Inch)

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Legend

|           |                                            |           |                                |                                        |                     |
|-----------|--------------------------------------------|-----------|--------------------------------|----------------------------------------|---------------------|
| +         | Supply Voltage +                           | nc        | Not connected                  | ENBRS422                               | Encoder B/B (TTL)   |
| -         | Supply Voltage 0 V                         | U         | Test Input                     | ENA                                    | Encoder A           |
| ~         | Supply Voltage (AC Voltage)                | Ü         | Test Input inverted            | ENB                                    | Encoder B           |
| A         | Switching Output (NO)                      | W         | Trigger Input                  | AMIN                                   | Digital output MIN  |
| Ä         | Switching Output (NC)                      | W-        | Ground for the Trigger Input   | AMAX                                   | Digital output MAX  |
| V         | Contamination/Error Output (NO)            | O         | Analog Output                  | AOK                                    | Digital output OK   |
| Ÿ         | Contamination/Error Output (NC)            | O-        | Ground for the Analog Output   | SY In                                  | Synchronization In  |
| E         | Input (analog or digital)                  | BZ        | Block Discharge                | SY OUT                                 | Synchronization OUT |
| T         | Teach 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   | 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              |
| OSSD      | 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                |
| ENo RS422 | Encoder 0-pulse 0/Ü (TTL)                  | EDM       | Contact Monitoring             | GNYE                                   | Green/Yellow        |
| PT        | Platinum measuring resistor                | ENARIS422 | Encoder A/A (TTL)              |                                        |                     |

