# Spotlight
**white light**

# ZVZF200
Part Number



- **Compact M18 standard design with IP67 degree of protection**
- **Continuous mode or strobe mode synchronized with the camera**
- **Homogeneous illumination of small areas**

## Technical Data

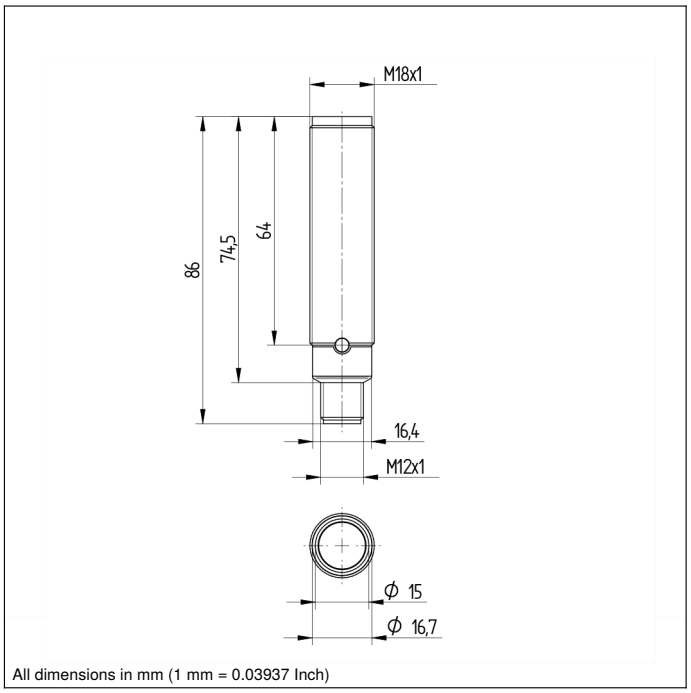
| | |
|---|---|
| **Optical Data** | |
| Light Source | White Light |
| Color temperature | 5000 K |
| Service Life (T = +25 °C) | 100000 h |
| Risk Group (EN 62471) | 2 |
| Opening Angle | 30 ° |
| **Environmental conditions** | |
| Temperature Range | -30...50 °C |
| Storage temperature | -30...60 °C |
| Atmospheric humidity | < 80%, non-condensing |
| **Electrical Data** | |
| Supply Voltage | 18...30 V DC |
| Current consumption flash mode overdrive (operating voltage = 24 V) | < 250 mA |
| Current Consumption Continuous Mode (Ub = 24 V) | < 100 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** | |
| Housing Material | Brass, nickel-plated |
| Optic Cover | Glass |
| Degree of Protection | IP67 |
| UL Enclosure Type | 1 |
| Connection | M12 × 1; 4/5-pin |
| **Safety-relevant Data** | |
| MTTFd (EN ISO 13849-1) | 2494,3 a |
| Connection Diagram No. | 181 |
| Suitable Connection Equipment No. | 2, 35, 37 |
| Suitable Mounting Technology No. | 150 |

wenglor spot lights are ideally suited for vision applications in which only small areas need to be homogeneously illuminated. They can be operated in continuous mode or synchronized to the camera in strobe mode. Above all in applications where space is limited, users profit from the compact M18 format.

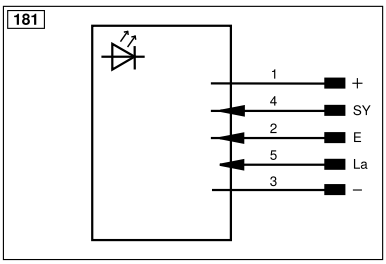


## Complementary Products

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




All dimensions in mm (1 mm = 0.03937 Inch)

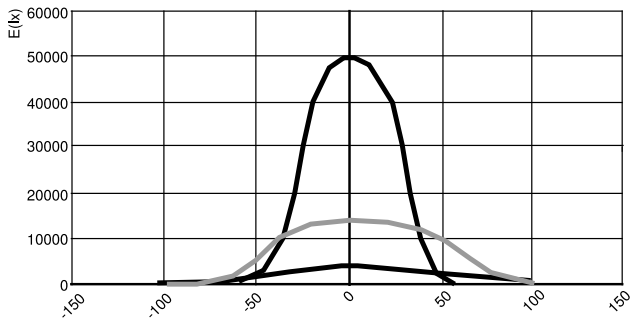



| Legend | | | | | |
|---|---|---|---|---|---|
| + | Supply Voltage + | nc | Not connected | ENBRS422 | Encoder B/B̄ (TTL) |
| – | Supply Voltage 0 V | U | Test Input | ENA | Encoder A |
| ~ | Supply Voltage (AC Voltage) | Ū | Test Input inverted | ENB | Encoder B |
| A | Switching Output (NO) | W |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

## Light distribution diagram

Flash mode, referring to different working distances

ZVZF200




r = distance to central axis

E = Illuminance

100 mm

200 mm

400 mm

Specifications are subject to change without notice V1 - 24.02.2025