Spotlight
infrared

ZVZF202
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

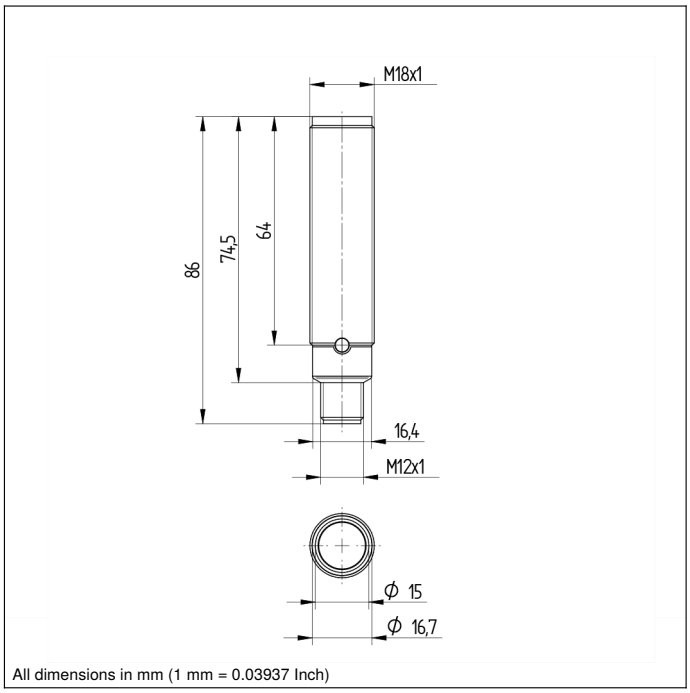
Optical Data	
Light Source	Infrared Light
Wavelength	850 nm
Service Life (T = +25 °C)	100000 h
Risk Group (EN 62471)	2
Opening Angle	30 °
Environmental conditions	
Temperature Range	-30...50 °C
Storage temperature	-30...60 °C
Atmospheric humidity	< 80%, non-condensing
Electrical Data	
Supply Voltage	18...30 V DC
Current consumption flash mode overdrive (operating voltage = 24 V)	< 350 mA
Current Consumption Continuous Mode (Ub = 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	
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)	2518,85 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.

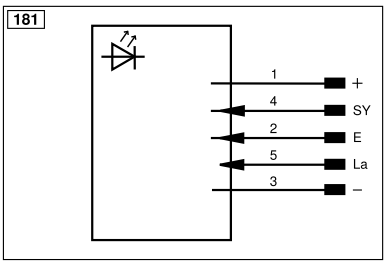


Complementary Products

ZC4G002 connection cable
ZDCG004 connection cable
ZDCG005 connection cable



All dimensions in mm (1 mm = 0.03937 Inch)

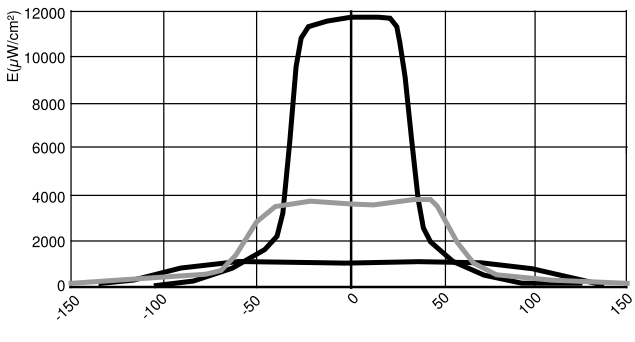


Legend					
+	Supply Voltage +	nc	Not connected	ENBRS422	Encoder B/B̄ (TTL)
–	Supply Voltage 0 V	U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	ENB	Encoder B
A	Switching Output (NO)	W	Trigger Input	AMIN	Digital output MIN
Ā	Switching Output (NC)	W–	Ground for the Trigger 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

ZVZF202



r = distance to central axis

E = Irradiance

100 mm

200 mm

400 mm

Specifications are subject to change without notice V1 - 24.02.2025