

Flat Light

infrared, 188 × 188 mm

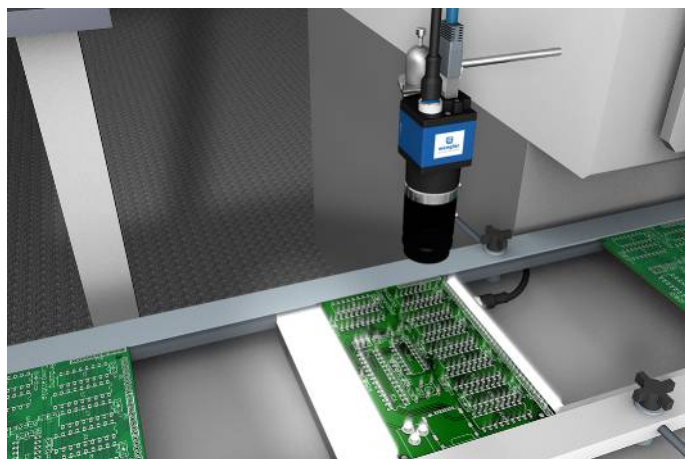
ZVZF402

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

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.



Technical Data

Optical Data

Light Source	Infrared Light
Wavelength	850 nm
Service Life (T = +25 °C)	100000 h
Luminance (Continuous Mode)	~ 1,32 W/m ² sr
Luminance (Flash Mode)	~ 7,7 W/m ² sr

Electrical Data

Supply Voltage	18...30 V DC
Current consumption strobe mode (Ub = 24 V)	< 4800 mA
Current Consumption Continuous Mode (Ub = 24 V)	< 940 mA
Flash Duration	17...30000 µs
Duty Cycle	< 0,2
Temperature Range	-30...50 °C
Storage temperature	-30...60 °C
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Protection Class	III

Mechanical Data

Luminous Field	180 × 180 mm
Housing Material	Aluminum, anodised
Optic Cover	PMMA
Degree of Protection	IP67
Connection	M12 × 1; 4/5-pin
Weight	< 800 g

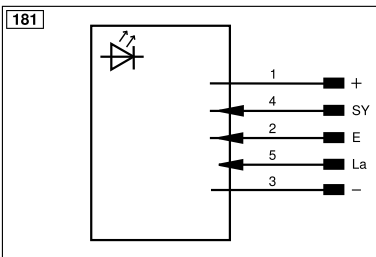
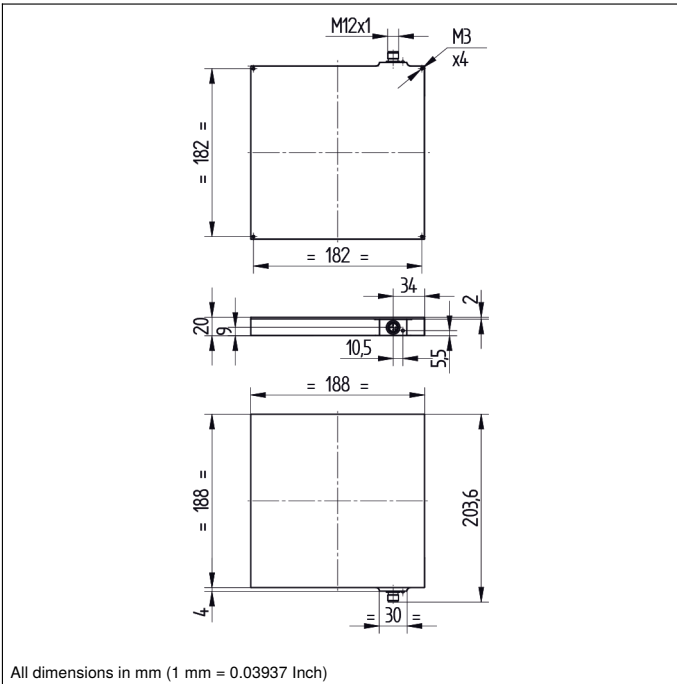
Safety-relevant Data

MTTFd (EN ISO 13849-1)	102,74 a
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Connection Diagram No.	181
Connection Table No.	60
Suitable Connection Equipment No.	37

Complementary Products

Connection cable ZDCG005
ZC4G002 connection cable
ZDCG004 connection cable



Legend			
+	Supply Voltage +	nc	Not connected
-	Supply Voltage 0 V	U	Test Input
~	Supply Voltage (AC Voltage)	Ü	Test Input inverted
A	Switching Output (NO)	W	Trigger Input
Ä	Switching Output (NC)	W-	Ground for the Trigger Input
V	Contamination/Error Output (NO)	O	Analog Output
Ȳ	Contamination/Error Output (NC)	O-	Ground for the Analog Output
E	Input (analog or digital)	BZ	Block Discharge
T	Teach Input	Amv	Valve Output
Z	Time Delay (activation)	a	Valve Control Output +
S	Shielding	b	Valve Control Output 0 V
RxD	Interface Receive Path	SY	Synchronization
TxD	Interface Send Path	SY-	Ground for the Synchronization
RDY	Ready	E+	Receiver-Line
GND	Ground	S+	Emitter-Line
CL	Clock	±	Grounding
E/A	Output/Input programmable	SnR	Switching Distance Reduction
IO-Link		Rx+/-	Ethernet Receive Path
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)
OSSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
ENo RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contactor Monitoring
PT	Platinum measuring resistor	ENARs422	Encoder A/Ä (TTL)
		ENBRs422	Encoder B/B̄ (TTL)
		ENa	Encoder A
		ENb	Encoder B
		AMIN	Digital output MIN
		AMAX	Digital output MAX
		Aok	Digital output OK
		SY In	Synchronization In
		SY OUT	Synchronization OUT
		OLT	Brightness output
		M	Maintenance
		rsv	Reserved
		Wire Colors according to DIN IEC 60757	
		BK	Black
		BN	Brown
		RD	Red
		OG	Orange
		YE	Yellow
		GN	Green
		BU	Blue
		VT	Violet
		GY	Grey
		WH	White
		PK	Pink
		GNYE	Green/Yellow