Ring Illuminator

ZVZF100

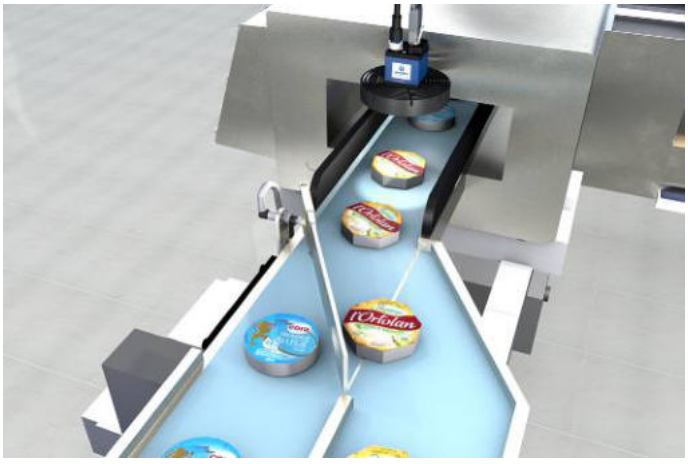
Part Number

- **Can be mounted together with a Smart Camera or a digital camera**
- **Continuous mode or flash mode synchronized with the camera**
- **Homogenous and very bright illumination without shadows**

Technical Data

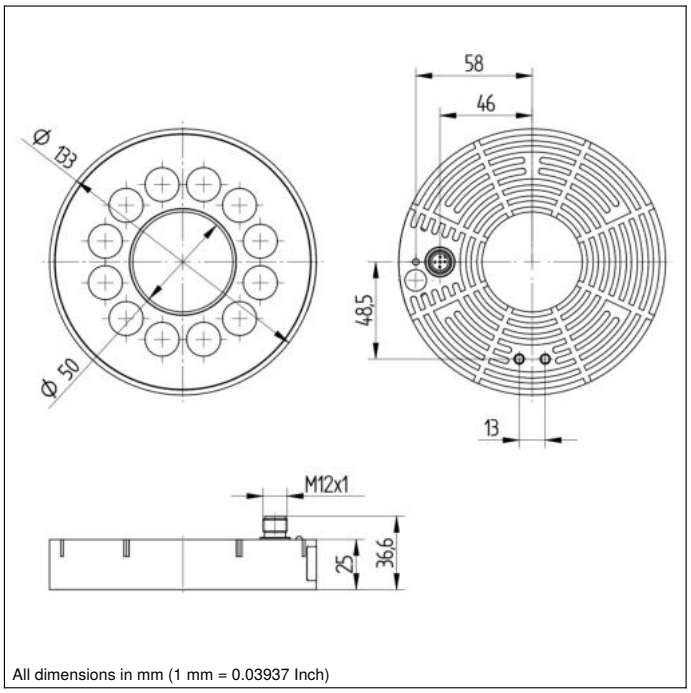
Optical Data	
Light Source	White Light
Color temperature	5000 K
Service Life (T = +25 °C)	100000 h
Risk Group (EN 62471)	2
Opening Angle	33 °
Electrical Data	
Supply Voltage	18...30 V DC
Current Consumption Continuous Mode (Ub = 24 V)	< 700 mA
Current Consumption Flash Mode (Ub = 24 V)	< 4200 mA
Flash 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	
Housing Material	Aluminum, anodised
Degree of Protection	IP67
Optic Cover	PMMA
Connection	M12 × 1; 4/5-pin
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	1557,35 a
Connection Diagram No.	181
Connection Table No.	60
Suitable Connection Equipment No.	37
Suitable Mounting Technology No.	470 480

wenglor ring lights are ideally suited for uniform illumination. Thanks to 360° annular floodlighting, shadows can be reduced and image quality can thus be improved. They can be operated in the continuous mode, or synchronized to the camera in the flash mode. The rugged housing with IP67 protection and common mounting together with Smart Cameras or digital cameras simplify integration into existing systems and generate lots of elbowroom for new system concepts.

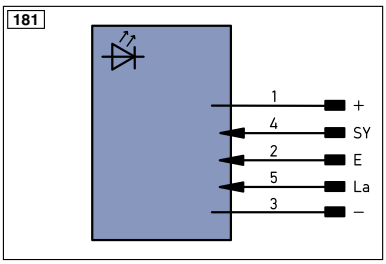


Complementary Products

Connection Cable ZC4G001



All dimensions in mm (1 mm = 0.03937 Inch)



Legend

+	Supply Voltage +
–	Supply Voltage 0 V
~	Supply Voltage (AC Voltage)
A	Switching Output (NO)
Ā	Switching Output (NC)
V	Contamination/Error Output (NO)
V̄	Contamination/Error Output (NC)
E	Input (analog or digital)
T	Teach Input
Z	Time Delay (activation)
S	Shielding
RxD	Interface Receive Path
TxD	Interface Send Path
RDY	Ready
GND	Ground
CL	Clock
E/A	Output/Input programmable
	IO-Link
PoE	Power over Ethernet
IN	Safety Input
OSSD	Safety Output
Signal	Signal Output
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)
EN0 RS422	Encoder 0-pulse 0-0̄ (TTL)
PT	Platinum measuring resistor
nc	not connected
U	Test Input
Ū	Test Input inverted
W	Trigger Input
W–	Ground for the Trigger Input
O	Analog Output
O–	Ground for the Analog Output
BZ	Block Discharge
AW	Valve Output
a	Valve Control Output +
b	Valve Control Output 0 V
SY	Synchronization
SY–	Ground for the Synchronization
E+	Receiver-Line
S+	Emitter-Line
⏚	Grounding
SnR	Switching Distance Reduction
Rx+/–	Ethernet Receive Path
Tx+/–	Ethernet Send Path
Bus	Interfaces-Bus A(+)/B(–)
La	Emitted Light disengageable
Mag	Magnet activation
RES	Input confirmation
EDM	Contactor Monitoring
ENA RS422	Encoder A/Ā (TTL)
ENB RS422	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

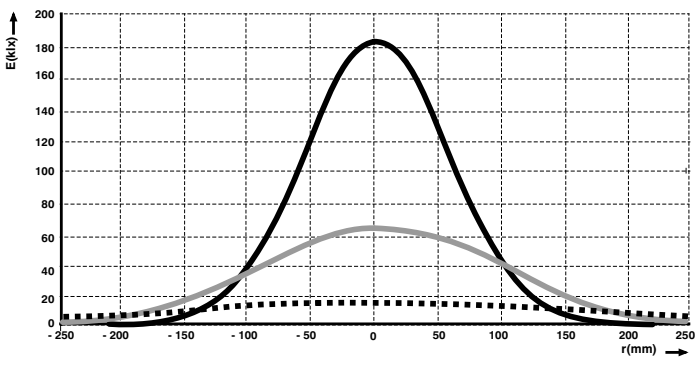
Wire Colors according to IEC 60757

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

Light Distribution Diagram

Flash mode, referring to different working distances

ZVZF100



r = Distance to Center Line

E = Illuminance

100 mm

200 mm

400 mm

Specifications are subject to change without notice