

Modular Ring Light

White infrared light, 130 mm

LMRX202

Part Number



- 4 sectors selectable
- Bicolor
- Highly modular illumination platform
- No external control required
- Overdrive
- Quick and easy replacement of accessories

The modular ring lights of the LMRX series are suitable for many illuminating forms on a smaller visual field $\varnothing 130\text{ mm}$. Based on the diffuse ring light, the way the light is scattered and directed at the target can be changed by adding a low angle attachment or a dome attachment. Each ring light has two light colors: Red/Cyan or White/IR. The lights can be operated in continuous mode or synchronized with the Machine Vision Camera in strobe mode or strobe mode with increased intensity (overdrive). Each ring light can be controlled via a lockable control panel and a standardized 5-pin M12 connector for power and strobe signals. The control panel can be disabled via the secondary connection, which can also be used to control individual sectors and to control the color remotely.

Technical Data

Optical Data	
Light Source	White-infrared light
Wavelength	860 nm
Risk Group (EN 62471)	1
Beam angle	$\pm 65^\circ$
White light output	54000 Lux
Infrared light output	36 W/m ²
Measuring point distance	100 mm

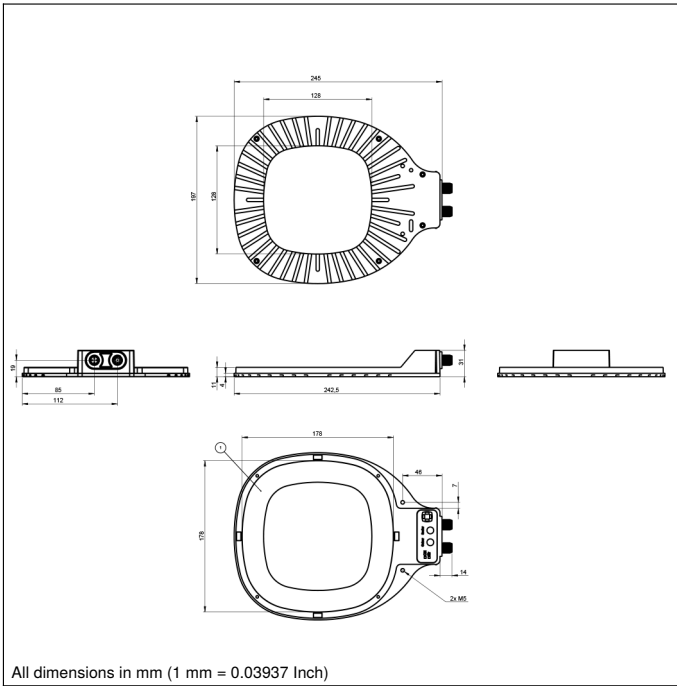
Electrical Data	
Supply Voltage	21,6...26,4 V DC
Power	12,96 W
Peak power	61,92 W
Current Consumption Continuous Mode (U _b = 24 V)	0,54 A
Current consumption strobe mode (U _b = 24 V)	2,58 A
Flash Duration	2 ms
Duty Cycle	< 0,1
Rise time	15 μ s
Fall time	10 μ s
Input signal	PNP/NPN
Temperature Range	-10...40 °C
Storage temperature	-20...60 °C
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Protection Class	III
Dimming	0...10 V \approx 100...30%
Overdrive	yes

Mechanical Data	
Housing Material	Aluminum, anodised
Housing Material	Plastic, ABS
Housing Material	Plastic, PMMA
Degree of Protection	IP65
Optic Cover	Plastic, PMMA
Connection	M12 \times 1; 5-pin
Max. cable length	40 m
Camera aperture inner diameter	130 mm

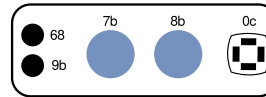
Function	
Operating modes	Continuous, Strobe Overdrive
Connection Diagram No.	007
Control Panel No.	T18
Suitable Mounting Technology No.	927

Complementary Products

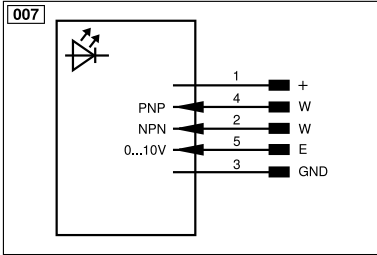
Dome accessory ZMRG002
Low angle accessory ZMRG004
ZC4G003 connection cable
ZDCG004 connection cable
ZDCG005 connection cable



Ctrl. Panel

T18


0c = sector selection indicator
 68 = supply voltage indicator
 7b = Color Selection Button
 8b = Sector Selection Button
 9b = Strobe Mode Indicator



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
Ā	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	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/Ā (TTL)
		ENBRs422	Encoder B/B̄ (TTL)
		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