

# Modular Ring Light

Red-cyan light, 80 mm

## LMRX101

Part Number



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

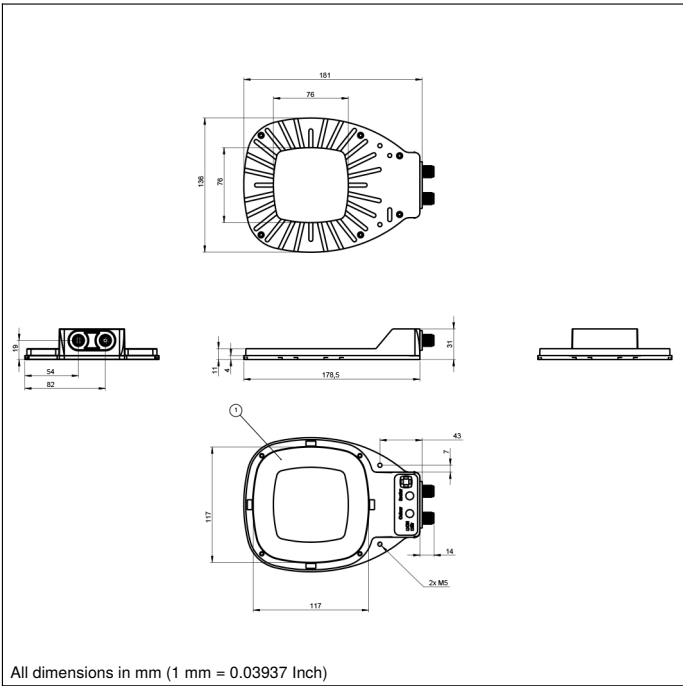
The modular ring lights of the LMRX series are suitable for many illumination forms on a smaller visual field < Ø 130 mm. Based on the diffuse ring light, the way the light is scattered and directed at the target can be changed by adding various attachments. Each ring light has two light colors: Red/Cyan 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).

### Technical Data

Optical Data	
Light Source	Red-cyan light
Wavelength	625...505 nm
Beam angle	± 65 °
Red light output	73 W/m²
Cyan light output	44 W/m²
Measuring point distance	100 mm
Environmental conditions	
Temperature Range	-10...40 °C
Storage temperature	-20...60 °C
Atmospheric humidity	< 80%, non-condensing
Electrical Data	
Supply Voltage	21,6...26,4 V DC
Power	9,12 W
Peak power	51,12 W
Current Consumption Continuous Mode (U <sub>b</sub> = 24 V)	0,38 A
Current consumption flash mode overdrive (operating voltage = 24 V)	2,13 A
Flash Duration	2 ms
Duty Cycle	< 0,1
Rise time	15 µs
Fall time	10 µs
Input signal	PNP/NPN
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Protection Class	III
Dimming	0...10 V ± 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 × 1; 5-pin
Max. cable length	40 m
Camera aperture inner diameter	80 mm
Function	
Operating modes	Continuous, Strobe Overdrive
Connection Diagram No.	007
Control Panel No.	T18
Suitable Mounting Technology No.	927

### Complementary Products

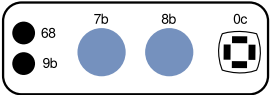
Dome accessory ZMRG001
Low angle accessory ZMRG003
ZC4G003 connection cable
ZDCG004 connection cable
ZDCG005 connection cable



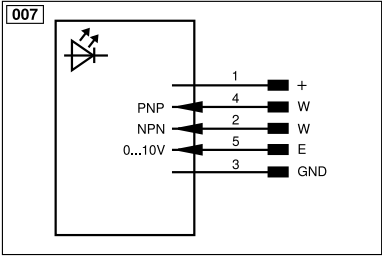
All dimensions in mm (1 mm = 0.03937 Inch)

### 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	ENBRS422	Encoder B/B (TTL)
-	Supply Voltage 0 V	U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)	Ü	Test Input inverted	ENb	Encoder B
A	Switching Output (NO)	W	Trigger Input	AMIN	Digital output MIN
Ä	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
Ÿ	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	IO-Link	Rx+/-	Ethernet Receive Path	GN	Green
PoE	Power 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
BL_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink
ENo RS422	Encoder 0-pulse 0/Ü (TTL)	EDM	Contact Monitoring	GNYE	Green/Yellow
PT	Platinum measuring resistor	ENARs422	Encoder A/A (TTL)		