

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

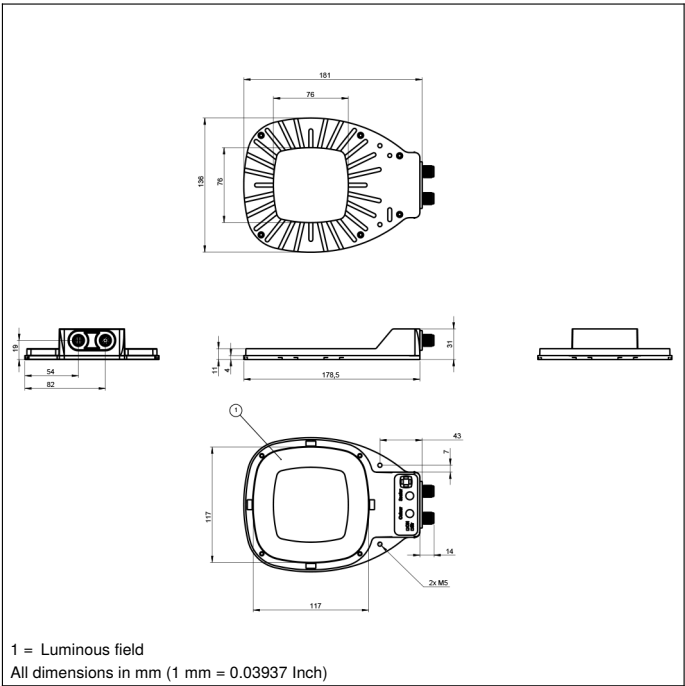
The modular ring lights of the LMRX series are suitable for many illumination forms on a smaller visual field < Ø 130 mm. Based on the diffuse ring light, the way the light is scattered and directed at the target can be changed by adding various attachments. Each ring light has two light colors: Red/Cyan 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 (Ub = 24 V)	0,38 A
Current consumption flash mode OverDrive (operating voltage = 24 V)	2,13 A
Flash duration (max.)	2 ms
Duty cycle (max.)	< 0,1
Rise time	15 µs
Fall time	10 µs
Input signal	NPN
Input signal	PNP
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
UL Enclosure Type	1
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
Suitable Mounting Technology No.	927

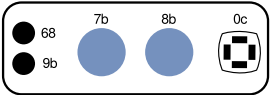
Complementary Products

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



Ctrl. Panel

T18



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



Legend			
+	Supply Voltage +	PT	Platinum measuring resistor
-	Supply Voltage 0 V	nc	Not connected
~	Supply Voltage (AC Voltage)	U	Test Input
A	Switching Output (NO)	Ū	Test Input inverted
Ā	Switching Output (NC)	W	Trigger Input
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input
Ū	Contamination/Error Output (NC)	O	Analog Output
E	Input (analog or digital)	O-	Ground for the Analog Output
T	Teach Input	BZ	Block Discharge
R	Reset 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(-)
QSSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
BL_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
ENo RS422	Encoder 0-pulse 0/1 (TTL)	EDM	Contact Monitoring
		ENARs422	Encoder A/Ā (TTL)
		ENBRs422	Encoder B/Ḃ (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