

Modular Ring Light

White infrared light, 80 mm

LMRX102

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 $\varnothing 130\text{ mm}$. Based on the diffuse ring light, the way the light is scattered and directed at the target can be changed by adding 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	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

Environmental conditions	
Temperature Range	-10...40 °C
Storage temperature	-20...60 °C
Atmospheric humidity	< 80%, non-condensing

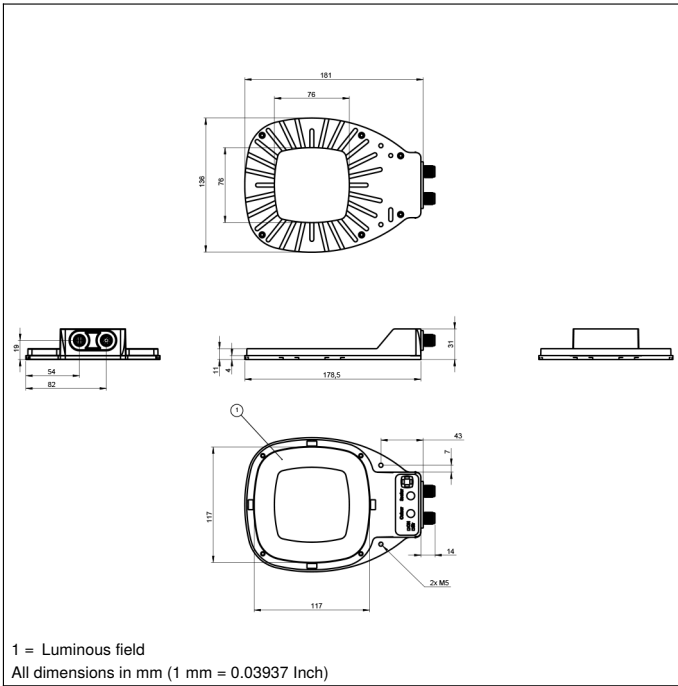
Electrical Data	
Supply Voltage	21,6...26,4 V DC
Power	10,08 W
Peak power	42 W
Current Consumption Continuous Mode (U _b = 24 V)	0,42 A
Current consumption flash mode overdrive (operating voltage = 24 V)	1,75 A
Flash duration (max.)	2 ms
Duty cycle (max.)	< 0,1
Rise time	15 μ s
Fall time	10 μ s
Input signal	PNP/NPN
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
UL Enclosure Type	1
Optic Cover	Plastic, PMMA
Connection	M12 \times 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

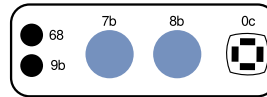
Complementary Products

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

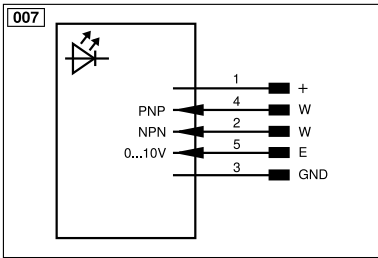


Ctrl. Panel

T18



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



Legend					
+	Supply Voltage +	nc	Not connected	EN _{RS422}	Encoder B/B̄ (TTL)
-	Supply Voltage 0 V	U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	EN _b	Encoder B
A	Switching Output (NO)	W	Trigger Input	AMIN	Digital output MIN
Ā	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
V̄	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
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink
EN _{o RS422}	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contactor Monitoring	GNYE	Green/Yellow
PT	Platinum measuring resistor	EN _{AR5422}	Encoder A/Ā (TTL)		