

RING LIGHT

RL-50-M30.5

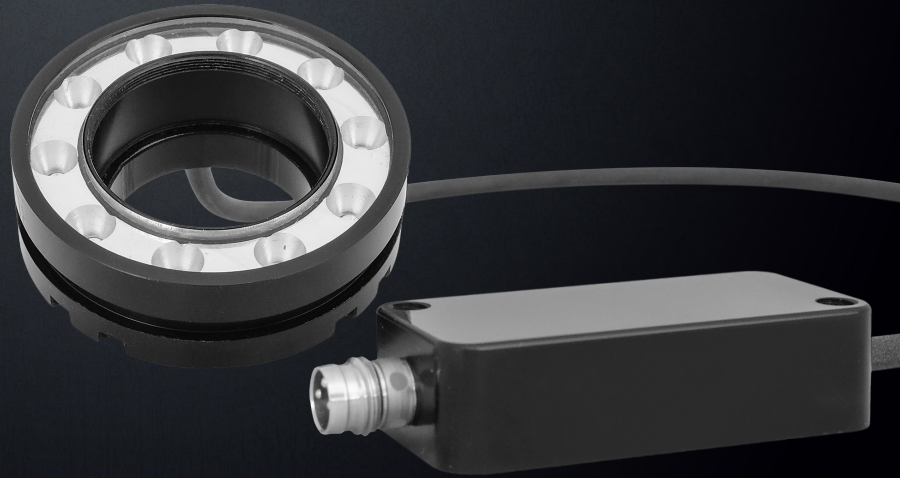
Direct lighting for most surfaces. The light is equipped with an integrated internal thread for easy and quick mounting on most lenses.

COMPACT DESIGN

HOMOGENEOUS LIGHTING

INTERNAL THREAD FOR EASY MOUNTING

INTERNAL LIGHT INTENSITY REGULATION



LIGHT OPERATING MODES

PERMANENT ILLUMINATION MODE

This light is designed for both the permanent and light-triggering mode. For permanent illumination bring the voltage of 10-24 V to the pin number 4 (black wire). The light is ON during the time when the 24 V EN signal is activated. Use a PCL, camera or another binary signal source. For the light intensity control, please see the text bellow.

LIGHT TRIGGERING MODE

Light triggering mode saves energy and extends the lifetime of the light. Trigger operation mode is recommended when a parallel operation of 2 or more lights might affect the quality of the acquired image. To start using a triggering mode, bring the pin number 4 (black wire) to a 10-24 V signal. The light is ON when a voltage signal is present at pin number 4 then. Use a PCL, camera, or another binary signal source for triggering. For the light intensity control, please see the text bellow.

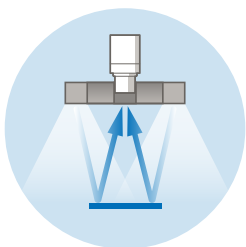
STROBE MODE

Strobe function significantly multiplies the maximum intensity of the light. The strobing function saves energy, extends the light lifetime and in many cases improves the stability of the entire inspections system. Pin number 2 (white wire) of the M8 connector is used to activate the strobe function. The maximum strobe pulse time is 470 ms, while the light idle time must be at least 3 times longer. Please do not use a trigger mode during strobing function, do not bring a voltage to the pin number 4.

LIGHT SOURCE INTENSITY REGULATION

The light intensity can be regulated with an integrated trimmer or an external controller.

WAYS OF USE



*Applies for devices with wavelength UV405, UV385 and UV365. This type of a light has a source of ultra violet radiation. Avoid direct exposure of eyes and unprotected parts of skin. Install the light in a safe way to avoid accidental or deliberate damage of unprotected human skin by UV light radiation. Mark room/area of use with a warning sign.

ORDERING CODE

example of the ordering code

RL	-	50	B	-	M30.5
Ring Light		Ø of Active Area	Wavelength		Thread Ø

CONFIGURATION

Model	Wavelength [nm]	Thread Ø [mm]
RL-50W	White	30.5
RL-50HIR	940	30.5
RL-50IR	850	30.5
RL-50FR	730	30.5
RL-50HR	660	30.5
RL-50SR	630	30.5
RL-50R	625	30.5
RL-50G	528	30.5
RL-50DB	470	30.5
RL-50B	450	30.5
RL-50UV	405 385 365	30.5

ELECTRIC PARAMETERS

Model	RL-50W	RL-50HIR	RL-50IR	RL-50FR	RL-50HR	RL-50SR	RL-50R
U_n Voltage Span	12-28 V	12-28 V	12-28 V	12-28 V	12-28 V	12-28 V	12-28 V
U_{jm} Nominal Voltage	24 V	24 V	24 V	24 V	24 V	24 V	24 V
I_{jm} Nominal Current	200 mA	200 mA	200 mA	200 mA	200 mA	200 mA	210 mA
P Input	4.8 W	4.8 W	4.8 W	4.8 W	4.8 W	4.8 W	4.8 W

Model	RL-50IR	RL-50HR	RL-50R	RL-50UV		
U_n Voltage Span	12-28 V	12-28 V	12-28 V	12-28 V	U_{trig} Trigger Voltage	≥ 10 - 24 V ¹
U_{jm} Nominal Voltage	24 V	24 V	24 V	24 V	I_{trig} Trigger Current	2.3 mA ¹
I_{jm} Nominal Current	200 mA	200 mA	200 mA	200 mA	U_{str} Strobe Voltage	3 - 24 V ²
P Input	4.8 W	4.8 W	4.8 W	4.8 W	I_{str} Strobe Current	5 mA ²


¹ EN (Enable) trigger signal values, M8 connector - pin number 4

² Driving voltage and current M8 connector - pin number 2

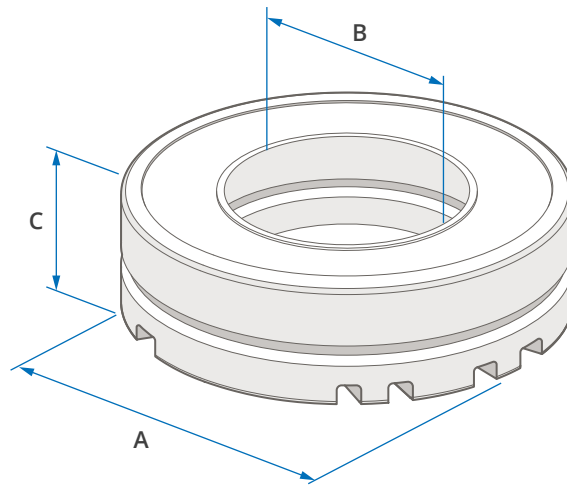
TECHNICAL DATA

IP Category: IP50	Protection Category: III	Ambient Temperature: -20 - +40 °C	Isolation Resistance: 500 V	Housing Material: Aluminium alloy
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DIMENSIONS & WEIGHT

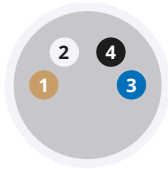
A	Outer Ø [mm]	50
B	Inner Ø [mm]	26
C	Height [mm]	18.6
	Weight [g]	79

i For more details please see our 2D drawings.



CONNECTOR M8-4PIN ASSIGNMENT

light connector front view



1	Brown	+	+24 V	...	2	ENABLE - strobe mode (+24 V)
2	White		EN	...	4	ENABLE permanent lighting or trigger signal (10-24 V)
3	Blue	-	0 V			
4	Black		EN			

ACCESSORIES

- ✓ Straight Cable M8-4PIN (5 m)
- ✓ Diffusion Glass **67-68% & 48-50% transparency**

OPTIONAL ACCESSORIES

- + Angular Cable M8-4PIN (5 m)
- + Diffusion Glass **36-38% transparency**
- + Polarizing Filter
- + Controller **Smart Light CT-SL4D**
- + Controller **CM-01**
- + Reduced Ring **M30.5-M27**
- + Reduced Ring **M30.5-25.5**

 SmartView

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