

# RING LIGHT WITH OPTICS

## RL-100-II

Direct, homogeneous illumination for most of the surfaces.

OPTIONAL LED OPTICS

HOMOGENEOUS LIGHT FIELD

COMPACT DESIGN

INTEGRATED TRIMMER



## 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 below.

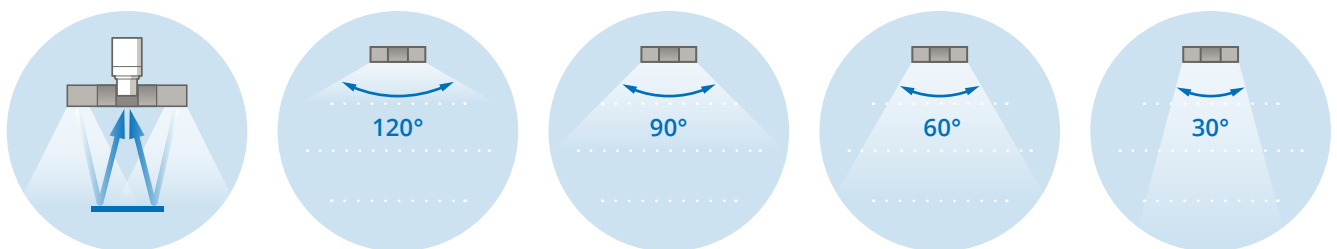
### LIGHT TRIGGERING MODE

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 below.

### LIGHT SOURCE INTENZITY REGULATION

The light intensity might be regulated by an internal trimmer, analogue voltage, PWM signal or an external controller. In case of using an analogue signal, the light intensity might be regulated in a linear way at a pin number 2 by the voltage span of 2.7 -10 V. Bringing a voltage of 10-24 V to the pin number 2, the light works at its maximum intensity. The maximum PWM frequency is  $\leq 40$  kHz.

## WAYS OF USE & LIGHT RADIATION ANGLES



## ORDERING CODE

Example of the ordering code

RL	-	100	B	30°	-	II
Ring Light	Ø of Active Area	Wavelength	LED Beam Angle	Type		

## CONFIGURATION

Model	Wavelength [nm]	LED Beam Angle [°]
RL-100W-II	CRI 5700 K	30   60   90   120
RL-100IR-II	850	30   60   90   120
RL-100R-II	625	30   60   90   120
RL-100G-II	528	30   60   90   120
RL-100B-II	470	30   60   90   120

## ELECTRIC PARAMETERS

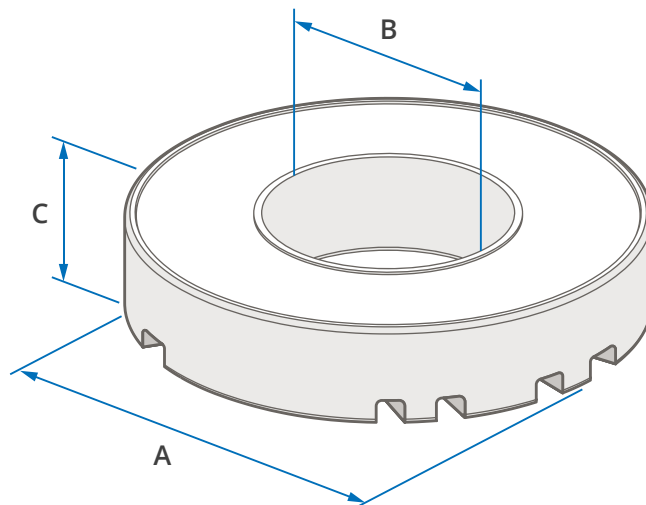
Model	RL-100W-II	RL-100IR-II	RL-100R-II	RL-100G-II	RL-100B-II
$U_n$ Voltage Span	22-28 V	22-28 V	22-28 V	22-28 V	22-28 V
$U_{jn}$ Nominal Voltage	24 V	24 V	24 V	24 V	24 V
$I_{jn}$ Nominal Current	400 mA	400 mA	400 mA	400 mA	400 mA
P Input	9.6 W	9.6 W	9.6 W	9.6 W	9.6 W
$U_{trig}$ Trigger Voltage	≥ 10 - 24 V <sup>2</sup>		$I_{trig}$ Trigger Current		5 mA <sup>2</sup>
$U_{EN}$ Analogue Dimming	≥ 2.7 .. ≤ 10 V <sup>3</sup>		$I_{EN}$ PWM Dimming		> 10 V .. ≤ 24 V <sup>1</sup>

<sup>1</sup> PWM maximal rate is ≤ 40 kHz   <sup>2</sup> EN (Enable) trigger signal values, M8 connector - pin number 4   <sup>3</sup> Driving voltage and current M8 connector - pin number 2

## DIMENSIONS & WEIGHT

<b>A</b> Outer Ø [mm]	100
<b>B</b> Inner Ø [mm]	48
<b>C</b> Height [mm]	26
<b>Weight [g]</b>	250

**i** For more details please see our 2D drawings.

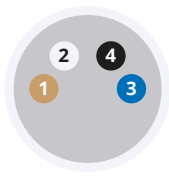


## TECHNICAL DATA

IP Category: <b>IP50</b>	Protection Category: <b>III</b>	Ambient Temperature: <b>-20 - +40 °C</b>	Isolation Resistance: <b>500 V</b>	Housing Material: <b>Aluminium alloy</b>
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## CONNECTOR M8-4PIN ASSIGNMENT

light connector front view



1	Brown	+	+24 V
2	White		EN
3	Blue	-	0 V
4	Black		EN

...

2

ENABLE

Light intensity regulation: analogue signal 2.7-10 V or PWM  $\leq$  40 kHz

...

4

ENABLE - permanent illumination  
or trigger signal (+24 V)

Light intensity regulation by an **internal trimmer\***

## ACCESSORIES

✓ Straight Cable M8-4PIN (5 m)

✓ Diffusion glass of **67-68%** and **48-50% transparency**

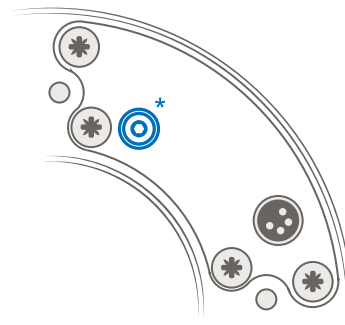
## OPTIONAL ACCESSORIES

+ Angular Cable M8-4PIN (5 m)

+ Diffusion glass of **36-38% transparency**

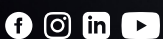
+ Polarizing Foil

## INTEGRATED TRIMMER



 SmartView

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