

## HELIOS-M

## Ring light

- >> high power
- >> high homogeneity
- >> optimized thermal design
- >> combinable with HELIOS-L ring light
- >> easy mounting directly on the lens
- >> for continuous, switched and pulsed operation  
(depending on type)



HELIOS-M white



HELIOS-M combined with HELIOS-L

### Technical specifications



Housing	Aluminium, matt shot-peened, natural anodised
Filterthread-connection	M40,5 x 0,5
Front cover (within the scope of supply)*	Acrylic clear, one-sided satinised 3mm
Total weight	approx. 230g
Operating / ambient temperature	max. 50°C recommended
IP protection class	depending on the version
Connector	M8 plug (4-pin)**
Supply voltage***	<b>24VDC type or 12VDC type:</b> 24VDC resp. 12VDC <b>SC type:</b> For use in conjunction with a controller
Number of LEDs	6 (white) / 8 (red/IR)
LED lifetime	The LED lifetime of our lights is very high, but depends on many different factors such as ambient temperature, current load, and so on. Further information is available in the <b>Technical information LED lifetime</b> .

\* more information and further front covers see section Accessories

\*\* Cable not included in the scope of supply

\*\*\* more information see section Operating modes

### Characteristics

Colour *	LED characteristics		typical characteristics per light		
	Wavelength (approx.)	Viewing angle	Current demand (24V type) ** / constant current max. (SC type) [mA]	Pulse current max. (SC type) *** [A]	Intensity **** [W/m <sup>2</sup> ]
red	617nm	120°	260	1,7	17
white	6500K	120°	260	1,9	18
IR	850nm	120°		2,4	

\* other colours and types from UV to infrared on request

\*\* stated current values of the 24V types should be considered approximate values

\*\*\* depending on the strobe conditions, recommended maximum values for a flash time of 1ms

\*\*\*\* approximately data measured in DC mode; Measuring distance 150mm



#### Safety note!

LED light systems can produce very intense radiation, which may possibly damage the eyes on improper use. Do not look directly into the light beam with unprotected eyes! Use eye protection!

### Operating modes

#### 24VDC type / 12VDC type

The lights are designed depending on the version for continuous operation at 24VDC or 12VDC.

The following operating modes are possible:

- DC operation at an appropriate power supply with 24VDC or 12VDC
- Switched operation with a matching power supply e.g. via PLC, opto-relay or controller (GS or SC series)
- Brightness-controlled operation via controller (GS or SC series) in conjunction with suitable power supply
- Pulsed mode via controller (GS or SC series) in conjunction with suitable power supply. The LED current can be increased in pulse mode up to a factor of 2 to 3.

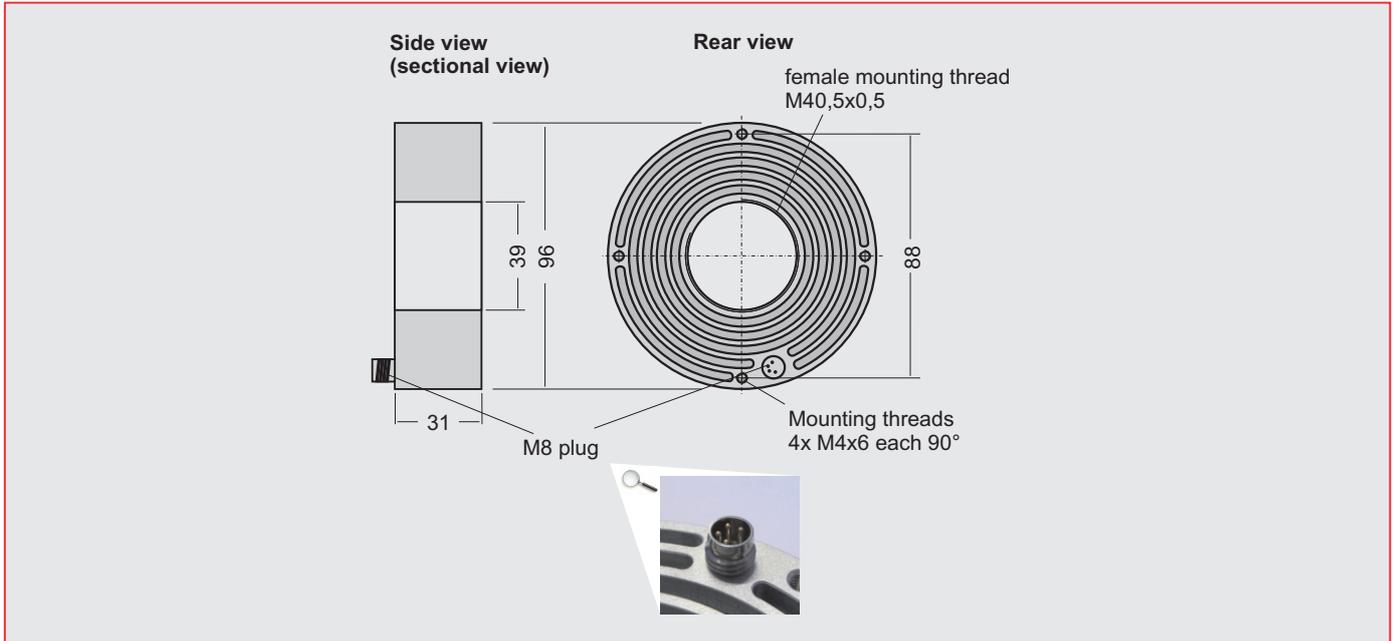
#### SC type

For pulsed, switched or brightness-controlled operation, the lights are also available as optimized SC versions. They can be used in combination with our controllers of the GS and SC series and provide optimized and maximum current flow, especially in pulsed operation. We will assist you in selecting the right components.

# HELIOS-M

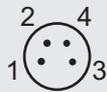
## Ring light

### Dimensions



### PIN assignment connector

M8 plug 4-pin  
(Front view on housing)



#### 24VDC type

PIN	Colour	Function
1	brown	+ 24V
3	blue	-

#### 12VDC type

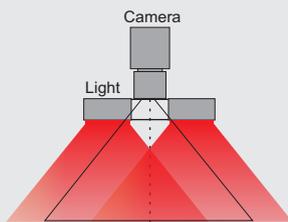
PIN	Colour	Function
2	white	+ 12V
3	blue	-

#### SC type

PIN	Colour	Function
4	black	+
3	blue	-

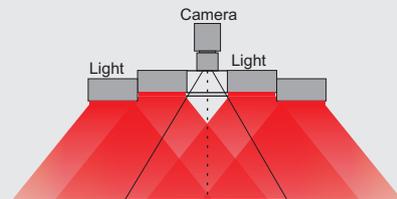
### Application notes

#### Diffuse ring light

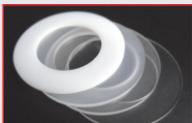


#### Combination possibility

The housing of the HELIOS-M is designed so that it can be combined with the smaller HELIOS-L to one lamp. With the optional mounting ring, both lights are bolted together, thus forming a solid unit. Also a combination of the two lamps in different levels is possible.



### Accessories



#### Front covers / diffusers

Through the use of different diffuse front covers, the optical characteristics of the illumination can be changed. More information can be found in the **Technical information Front materials**.



#### Mounting ring HELIOS-M + HELIOS-L

The mounting ring allows easy combination of the HELIOS-M with an additional HELIOS-L light.