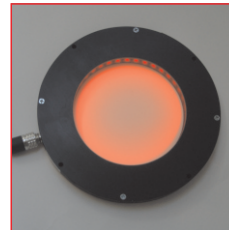


ARCUS-M

Darkfield illumination

- >> high light intensity
- >> high homogeneity
- >> well-priced and compact design
- >> optional diffuser insert
- >> for continuous, switched and pulsed operation
(depending on type)



ARCUS-M red



ARCUS-M red

Technical specifications



| | |
|---------------------------------|--|
| Housing | Aluminium, black or natural anodised |
| Diffuser (optional)* | Acrylic |
| Total weight | approx. 100g |
| Operating / ambient temperature | max. 50°C recommended |
| IP protection class | depending on the version |
| Connector | M8 plug (4-pin)** |
| Supply voltage*** | 24VDC type or 12VDC type: 24VDC resp. 12VDC SC type: For use in conjunction with a controller |
| Number of LEDs | 40 (white) / 48 (red/IR/blue) |
| 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 Technical information LED lifetime . |

* more information and further diffusers 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 ²] |
| red | 615nm | 120° | 100 | 0,6 | 7 |
| white | 6500K | 120° | 140 | | 8 |
| IR | 850nm | 120° | 150 | 2,4 | 36 |
| blue | 470nm | 120° | 200 | 1,5 | 40 |

* 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 16mm



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.

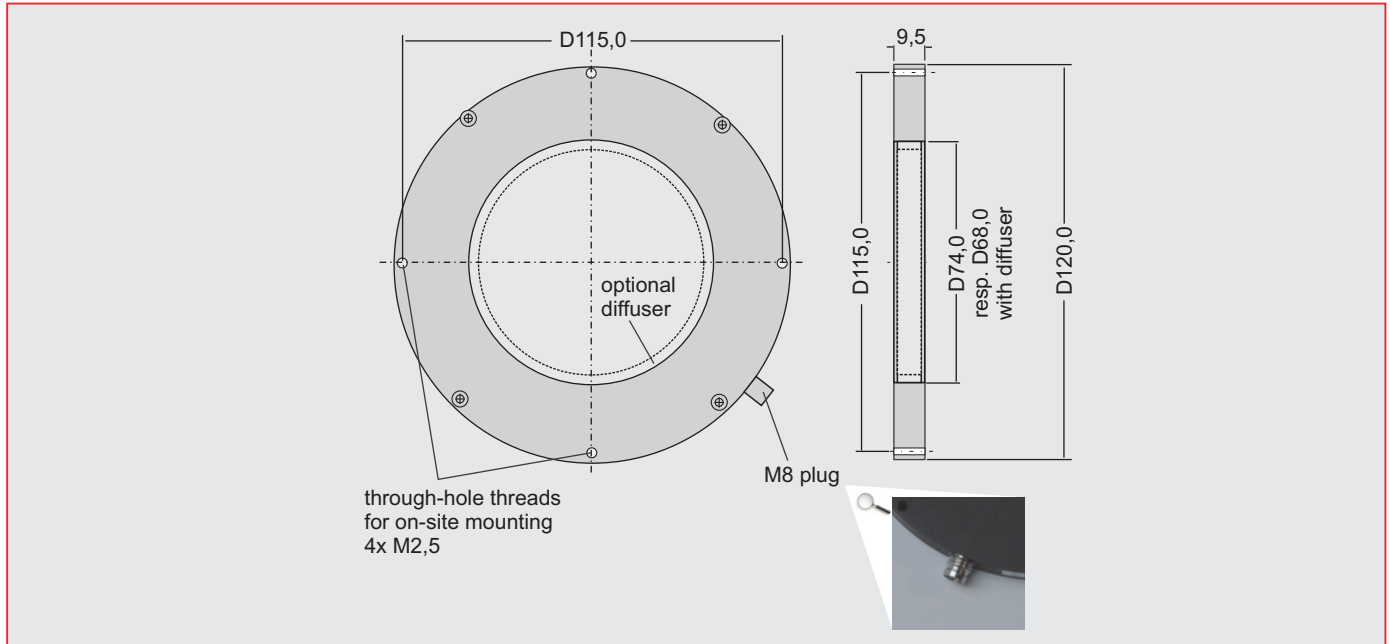
The following operating modes are possible:

- 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

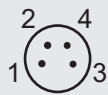
For pulsed, switched or brightness-controlled operation, the lights are also available as optimized SC versions. They can be used in combination with our controllers of the GS and SC series and provide optimized and maximum current flow, especially in pulsed operation. We will assist you in selecting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

Dimensions



PIN assignment connector

M8 plug 4-pin
(Front view on housing)



24VDC type

| PIN | Colour | Function |
|-----|--------|----------|
| 1 | brown | + 24V |
| 3 | blue | - |

12VDC type

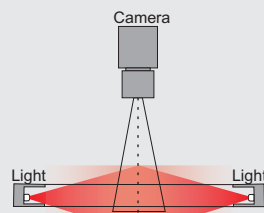
| PIN | Colour | Function |
|-----|--------|----------|
| 2 | white | + 12V |
| 3 | blue | - |

SC type

| PIN | Colour | Function |
|-----|--------|----------|
| 4 | black | + |
| 3 | blue | - |

Application notes

Darkfield application

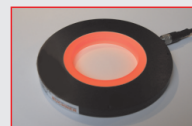
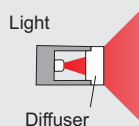


Note!

The optical axis of the LEDs is not centered in the housing. This results in slightly different lighting properties on both sides of the lamp, which can be used accordingly. Therefore, pay attention to the installation position.

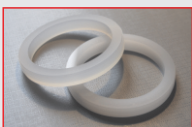
Use of diffusers

Diffuser with flat radiating surface
for more diffuse and smoother light with increased homogeneity



Accessories

Diffuser insert



Through the use of the diffuser insert, the optical characteristics of the light can be changed to make the emitted light smoother and more homogeneous. More information can be found in the **Technical information Front materials**.