

# LTCLCR056-W | DATASHEET

# Telecentric CORE illuminator, beam dimension ⊘=74.0, x=66.0 mm, white



#### **KEY ADVANTAGES**

#### **Deliver excellent performances**

LTCLHP CORE telecentric illuminators deliver exactly the same excellent optical performances as other Opto Engineering® telecentric illuminators.

#### **Downsize your vision system**

LTCLHP CORE telecentric illuminators are up to 60% smaller than other telecentric illuminators on the market.

#### **Easy retrofitting into existing systems**

LTCLHP CORE illuminators can be mounted in different directions in your machine.

#### Improve your system performances

LTCLHP CORE illuminators may be used instead of flat backlights to improve your system.

#### **Cut costs and sell more**

A smaller system means less expenses and less space and is preferred by the industry.

Homogeneity test report with measured values

The LTCLHP CORE Series offers ultra compact telecentric illuminators. They are up to 60% more compact than other collimated illuminators on the market.









#### **SPECIFICATIONS**

## **Lighting specifications**

| Beam dimension <sup>1</sup>               | (mm) | ⊘=74.0, x=66.0 |
|---|------|----------------|
| Working distance                          | (mm) | 100 - 200      |
| Light color, peak wavelength <sup>2</sup> |      | white, 6000 K  |
| Spectral FWHM                             | (nm) | -              |

#### **Electrical specifications**

| Supply voltage <sup>3</sup>                    | (V)  | 12-24      |
|--|------|------------|
| Max power consumption                          | (W)  | 2.5        |
| Led forward voltage typical (max) <sup>4</sup> | (V)  | 2.8 (-)    |
| Max led forward current <sup>5</sup>           | (mA) | 350        |
| Max pulse current <sup>6</sup>                 | (mA) | 2000       |
| Connector                                      |      | M8         |
| Included cable                                 |      | CB244P1500 |

#### **Mechanical specifications**

| =              |      |       |
|----------------|------|-------|
| A              | (mm) | 93.6  |
| В              | (mm) | 110.0 |
| C <sup>7</sup> | (mm) | 130.1 |
| Mass           | (g)  | 1469  |

#### **Environment**

| Operating temperature       | (°C) | 0-40                  |
|-----------------------------|------|-----------------------|
| Storage temperature         | (°C) | 0-50                  |
| Operating relative humidity | (%)  | 20-85, non condensing |
| Installation                |      | Indoor use only       |

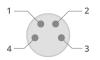
#### **Eve safety**

|           | -                     |              |
|-----------|-----------------------|--------------|
| Risk grou | p (CEI EN 62471:2010) | Risk group 2 |

- <sup>1</sup> Beam shape is not circular.
- <sup>2</sup> Opto Engineering recommends green light for high precision measurements application
- $^{3}$  Tolerance  $\pm 10\%$
- <sup>4</sup> At max forward current. Tolerance is  $\pm 0.06$ V on forward voltage measurements
- <sup>5</sup> In continuous mode (not pulsed)
- <sup>6</sup> At pulse with  $\leq$  10ms and duty cycle  $\leq$ 10%. Built in electronics board must be bypassed.
- <sup>7</sup> Nominal value, with no spacers in place.



## **M8 CONNECTOR PINOUT**



| Pin | Function                   | Cable color  |
|-----|----------------------------|--------------|
| 1   | Earth                      | Yellow/Green |
| 2   | Ground                     | Black        |
| 3   | Anode                      | Blue         |
| 4   | Power supply<br>(+12/24 V) | Brown        |

Device side

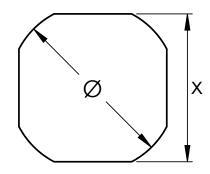
## **COMPATIBLE PRODUCTS**

Full list of compatible products available here.

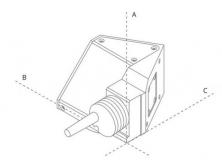


A wide selection of innovative machine vision components.

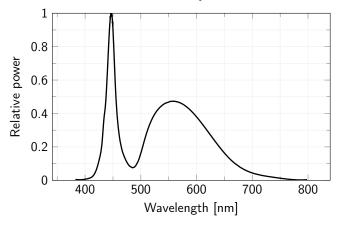
## **BEAM SHAPE**



# LTCLHP CORE illuminator dimensions (A, B, C)



# **LED** color spectrum



## **Forward Current Characteristics**

