

# LTCLCR120-G | DATASHEET

# **Telecentric CORE illuminator, beam dimension** ⊘=156.0, x=130.0 mm, green



#### **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)	⊘=156.0, x=130.0
Working distance	(mm)	220 - 440
Light color, peak wavelength <sup>2</sup>		green, 525 nm
Spectral FWHM	(nm)	40
Spectral FWHM	(nm)	40

### **Electrical specifications**

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Supply voltage <sup>3</sup>	(V)	12-24
Max power consumption	(W)	2.5
Led forward voltage typical (max) <sup>4</sup>	(V)	3.3 (4.0)
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)	181.4
В	(mm)	220.0
C <sup>7</sup>	(mm)	230.6
Mass	(g)	9020

#### **Environment**

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

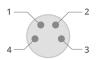
#### **Eye safety**

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Risk group (CFI FN 62471·2010)	Risk group 1

- <sup>1</sup> Beam shape is not circular.
- Opto Engineering recommends green light for high precision measurements application
- $^{3}$  Tolerance  $\pm 10\%$
- $^{4}\,$  At max forward current. Tolerance is  $\pm 0.06 \text{V}$  on forward voltage measurements
- <sup>5</sup> In continuous mode (not pulsed)
- $^6$  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 (+12/24 V)	Brown

Device side

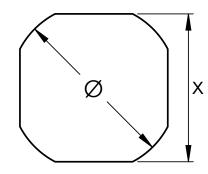
## **COMPATIBLE PRODUCTS**

Full list of compatible products available here.

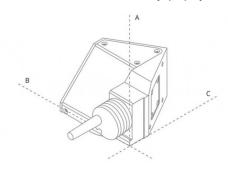


A wide selection of innovative machine vision components.

## **BEAM SHAPE**



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



# 

500

400

**LED** color spectrum

600

Wavelength [nm]

700

800

## **Forward Current Characteristics**

