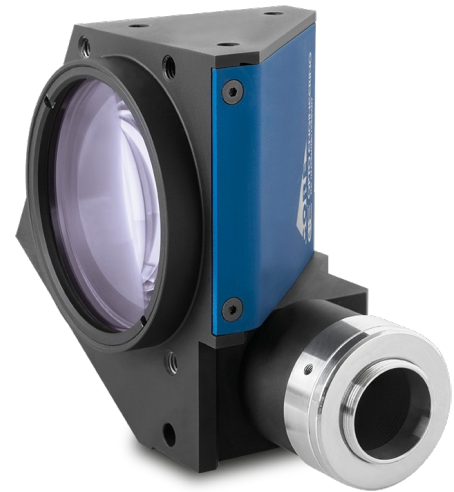


# TCCR23048

Bi-telecentric CORE lens for 2/3" detectors, magnification 0.184 x, C-mount

## SPECIFICATIONS

Magnification	(x)	0.184
Image circle Ø	(mm)	11.0
Object field of view (6)		
with 1/3" detector (4.8 x 3.6 mm)	(mm × mm)	26.1 x 19.6
with 1/2.5" detector (5.70 x 4.28 mm)	(mm × mm)	31.0 x 23.3
with 1/2" detector (6.4 x 4.8 mm)	(mm × mm)	34.8 x 26.1
with 1/1.8" detector (7.13 x 5.37 mm)	(mm × mm)	38.8 x 29.2
with 2/3" - 5 MP detector (8.45 x 7.07 mm)	(mm × mm)	46.0 x 38.4
Optical specifications		
Working distance (1)	(mm)	132.9
wF/# (2)		8
Telecentricity typical (max) (3)	(deg)	< 0.08 (0.10)
Distortion typical (max) (4)	(%)	< 0.05 (0.10)
Field depth (5)	(mm)	20
CTF @ 70 lp/mm	(%)	> 40
Dimensions		
Mount		C
A	(mm)	77
B	(mm)	106
C	(mm)	135
Mass	(g)	1129



## NOTES

1. Working distance: distance between the front end of the mechanics and the object. Set this distance within +/- 3% of the nominal value for maximum resolution and minimum distortion.
2. Working F-number (wF/#): the real F-number of a lens when used as a macro. Lenses with smaller apertures can be supplied on request.
3. Maximum slope of chief rays inside the lens: when converted to millirad, it gives the maximum measurement error for any millimeter of object displacement. Typical (average production) values and maximum (guaranteed) values are listed.
4. Percent deviation of the real image compared to an ideal, undistorted image: typical (average production) values and maximum (guaranteed) values are listed.
5. At the borders of the field depth the image can be still used for measurement but, to get a perfectly sharp image, only half of the nominal field depth should be considered. Pixel size used for calculation is 5.5 µm.
6. For the fields with the indication "Ø =", the image of a circular object of such diameter is fully inscribed into the detector.

## COMPATIBLE PRODUCTS



LTCLHP series  
High-performance telecentric illuminators

LTCLHP048-R	Telecentric HP illuminator, beam diameter 60 mm, red
LTCLHP048-G	Telecentric HP illuminator, beam diameter 60 mm, green
LTCLHP048-B	Telecentric HP illuminator, beam diameter 60 mm, blue
LTCLHP048-W	Telecentric HP illuminator, beam diameter 60 mm, white



LTCLCR CORE series  
Ultra compact telecentric illuminators

LTCLCR048-R	Telecentric CORE illuminator, beam diameter 45 mm, red
LTCLCR048-G	Telecentric CORE illuminator, beam diameter 45 mm, green

LTCLCR048-W Telecentric CORE illuminator, beam diameter 45 mm, white

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CMHOCR series  
Clamping mechanics CORE series

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CMHOCR048 Clamping mechanics for CORE telecentric lenses and illuminators Ø 48mm

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CMPTCR series  
Mounting plates CORE series

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CMPTCR048 Mechanical components designed for CORE telecentric lenses and illuminators Ø 48mm

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