

TCCR4M080-C

Telecentric CORE lens for 4/3" detectors, magnification 0.221 x, C-mount



SPECIFICATIONS

Part number	TCCR4M080-C	
Magnification	(x)	0.221
Image shape dimension (8)	(Ø, x mm)	Ø=22.3, x=19.0
Phase adjustment (7)	Yes	

Object field of view 7

with KAI-2020 14.8 mm diagonal w x h 11.84 x 8.88	(mm x mm)	53.7 x 40.3
with KAI-04050 16 mm diagonal w x h 12.8 x 9.6	(mm x mm)	58.0 x 43.5
with KAI-4022/4021 21.5 mm diagonal w x h 15.2 x 15.2	(mm x mm)	68.9 x 68.9
with KAI-08050 22.6 mm diagonal w x h 18.1 x 13.6	(mm x mm)	82.0 x 61.7

Optical specifications

Working distance (1)	(mm)	226.76
wF/# (2)	16	
Telecentricity typical (max) (3)	(deg)	< 0.05 (0.10)
Distortion typical (max) (4)	(%)	< 0.04 (0.10)
Field depth (5)	(mm)	24.4
CTF@ 50 lp/mm	(%)	> 40

Mechanical specifications

Mount (6)	C	
A	(mm)	119
B	(mm)	146
C	(mm)	228
Mass	(g)	3148

Compatibility

LTCLCR080-x, CMHOCR080, CMPTCR080, LTCLHP080-x

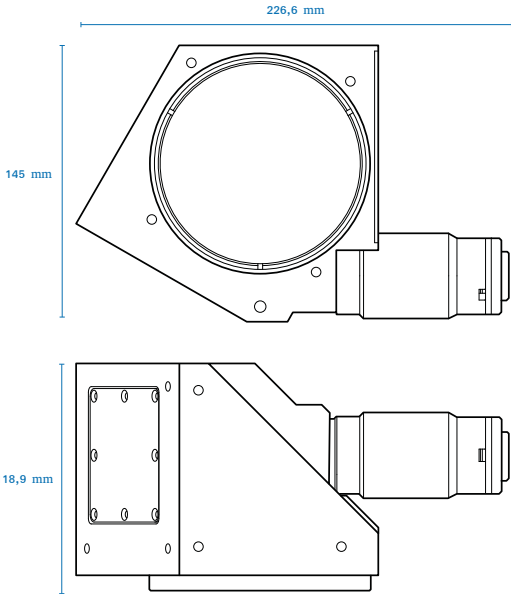
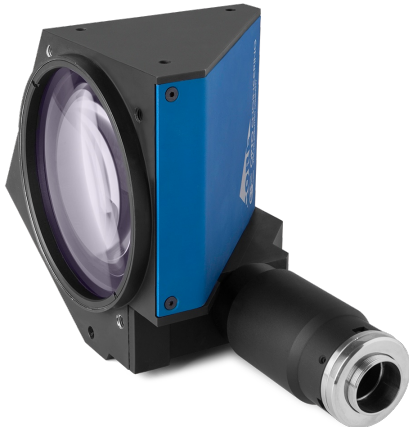
NOTES

- 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.
- 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.
- Maximum slope of chief rays inside the lens: when converted to milliradians, it gives the maximum measurement error for any millimeter of object displacement. Typical (average production) values and maximum (guaranteed) values are listed.
- Percent deviation of the real image compared to an ideal, undistorted image: typical (average production) values and maximum (guaranteed) values are listed.
- 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.
- In case the of vignetting, FOV dimensions are indicated with "Ø = , x = ", where "Ø =" stands for diameter and "x=" indicates the nominal FOV height and length (see [Tech Info](#) for related drawing).
- Indicates the availability of an integrated camera phase adjustment feature.
- Indicates the dimensions and shape of image, where "Ø =" stands for diameter and "x=" indicates the nominal image height and length (see [Tech Info](#) for related drawing)

COMPATIBLE PRODUCTS



LTCLHP080-R	Telecentric HP illuminator, beam diameter 100 mm, red
LTCLHP080-G	Telecentric HP illuminator, beam diameter 100 mm, green
LTCLHP080-B	Telecentric HP illuminator, beam diameter 100 mm, blue
LTCLHP080-W	Telecentric HP illuminator, beam diameter 100 mm, white





LTCLCR080-R	Telecentric CORE illuminator, beam dimensions Ø = 98; x = 90, red
LTCLCR080-G	Telecentric CORE illuminator, beam dimensions Ø = 98; x = 90, green
LTCLCR080-W	Telecentric CORE illuminator, beam dimensions Ø = 98; x = 90, white



CMHOCR080	Clamping mechanics for CORE telecentric lenses and illuminators TCCRxx80 and LTCLCR080-x
------------------	--



CMPTCR080	Mechanical components designed for CORE telecentric lenses and illuminators Ø 80mm
------------------	--