TCCR2M120-C

Telecentric CORE lens for 1" detectors, magnification 0.104 x, C

SPECIFICATIONS

Part number		TCCR2M120-C
Magnification	(x)	0.104
Image shape dimension (8)	(Ø, x mm)	Ø=16.4, x=13.4
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)	113.8 x 85.4
with KAI-04050 16 mm diagonal w x h 12.8 x 9.6	(mm x mm)	123.1 x 92.3
with KAI-4022/4021 21.5 mm diagonal w x h 15.2 x 15.2	(mm x mm)	Ø= 158, x=129
with KAI-08050 22.6 mm diagonal w x h 18.1 x 13.6	(mm x mm)	Ø= 158, x=129

Optical specifications

Working distance (1)	(mm)	334.6
wF/# (2)		16
Telecentricity typical (max) (3)	(deg)	< 0.06 (0.10)
Distortion typical (max) (4)	(%)	< 0.08 (0.10)
Field depth (5)	(mm)	110
CTF@ 50 lp/mm	(%)	> 40

Mechanical specifications

Mount (6)		C
A	(mm)	182
B	(mm)	220
C	(mm)	258
Mass	(g)	9226

Compatibility

LTCLCR120-x, LTCLHP120-x

In case of use with sensors larger than 1" please check the exact FOV dimensions with our sales engineers

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 milliradians, 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. 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).
7. Indicates the availability of an integrated camera phase adjustment feature.
8. 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

LTCLHP120-R	Telecentric HP illuminator, beam diameter 150 mm, red
LTCLHP120-G	Telecentric HP illuminator, beam diameter 150 mm, green

LTCLHP120-W	Telecentric HP illuminator, beam diameter 150 mm, white

LTCLCR120-R	Telecentric CORE illuminator, beam dimensions Ø = 156, x = 130, red, 630 nm
LTCLCR120-G	Telecentric CORE illuminator, beam dimensions Ø = 156, x = 130, green, 520 nm
LTCLCR120-W	Telecentric CORE illuminator, beam dimensions Ø = 156, x = 130, white