



TC4K090-N

Telecentric lens for 4k linescan cameras, magnification 0.319x, mount M42X1 FD=10.56

SPECIFICATIONS

Magnification	(x)	0.319
Image width	(mm)	28.7

Object field of view

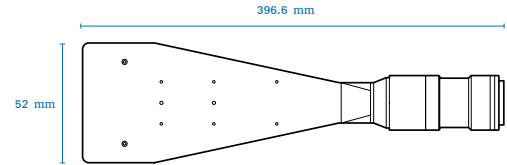
with 2k x 10 µm detector 20.48	(mm)	64.3
with 4k x 7 µm detector 28.67	(mm)	90.0

Optical specifications

Working distance (1)	(mm)	174.0
wF/# (2)		16
Telecentricity typical (max) (3)	(deg)	0.05 (0.10)
Distortion typical (max) (4)	(%)	0.05 (0.08)
Field depth (5)	(mm)	16.4
CTF @ 50 lp/mm	(%)	>30

Mechanical specifications

Mount		M42x1
Flange distance		10.6
Length (6)	(mm)	396.6
Width	(mm)	114
Height	(mm)	52
Mass	(g)	1938



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 7 µm.
6. Indicates the availability of an integrated camera phase adjustment feature.
7. Measured from the front end of the mechanics to the camera flange.

COMPATIBLE PRODUCTS



LTCL4K090-G	Telecentric illuminator for linescan cameras, line width 90 mm, green
LTCL4K090-W	Telecentric illuminator for linescan cameras, line width 90 mm, white



LTZPFL120-00-6-W-24V	LED bar light, 6 LED rows, 120X26.3 illumination area, white, 24V
LTZPFL120-00-6-R-24V	LED bar light, 6 LED rows, 120X26.3 illumination area, red, 24V
LTZPFL120-00-6-G-24V	LED bar light, 6 LED rows, 120X26.3 illumination area, green, 24V
LTZPFL120-00-6-B-24V	LED bar light, 6 LED rows, 120X26.3 illumination area, blue, 24V



LTLNC100-W	LED line light 100 mm, white
LTLNC150-W	LED line light 150 mm, white

LTLNC200-W	LED line light 200 mm, white
LTLNC300-W	LED line light 300 mm, white



LT2QOG100-00-X-W-24V	LED coaxial light, 100x100 mm light emitting area, white, 24V
LT2QOG100-00-X-R-24V	LED coaxial light, 100x100 mm light emitting area, red, 24V
LT2QOG100-00-X-G-24V	LED coaxial light, 100x100 mm light emitting area, green, 24V
LT2QOG100-00-X-B-24V	LED coaxial light, 100x100 mm light emitting area, blue, 24V



CMMR4K090-V	45° adjustable first surface mirror, clamping size 114x38.5 mm, right angle vertical bend
CMMR4K090-L	45° adjustable first surface mirror, clamping size 114x38.5 mm, right angle lateral bend