

# TC12K 064

Telecentric lens for 12k and 16k linescan cameras, magnification 0.960 x, M72 x 0.75 mount

Magnification	(x)	0.960
Image circle	(mm)	62.4

### Object field of view

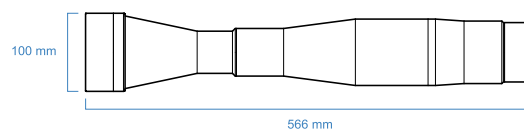
with line-12K detector 12k x 5.2 μm	(mm)	62.40
with line-12k detector 12k x 5 μm	(mm)	61.44
with line-16k detector 16k x 3.5 μm	(mm)	57.34
with line-8k detector 8k x 7 μm	(mm)	57.34

### Optical specifications

Working distance (1)	(mm)	162.8
f/# (2)		16
Telecentricity typical (max) (3)	(deg)	< 0.06 (0.08)
Distortion typical (max) (4)	(%)	< 0.08 (0.10)
Field depth (5)	(mm)	1
CTF@ 70 lp/mm	(%)	> 35

### Mechanical specifications

Length (6)	(mm)	566.7
Diameter	(mm)	100
Mass	(g)	2600
Mount (7)		M72 x 0.75 - FD 6.56



### NOTES

- Working distance: distance between the front lens and the object. Set this distance within +/- 3% of the nominal value for maximum resolution and minimum distortion
- Working F-number: the real F-number of a lens when used as a macro. Lenses with smaller apertures can be supplied on request
- Maximum slope of principal rays inside the lens: when converted to milliradians, it gives the maximum measurement error for any millimeter of object displacement
- 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 very sharp image, only half of the nominal field depth should be considered. Pixel size used for calculation is 4.35 μm.
- Measured from the front end of the mechanics to the camera flange.
- FD stands for Flange Distance (in mm), defined as the distance from the mounting flange (the "metal ring" in rear part of the lens) to the camera detector plane.

### COMPATIBLE PRODUCTS



LTCLHP064-G  
Telecentric HP illuminator, beam diameter 80 mm, green



CMHO TC12K 064  
Clamping mechanics for TC12K064



LTRN 064 NW  
Ring LED illuminator, white