

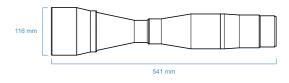
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## TC12K 080

Telecentric lens for 12k and 16k linescan cameras, magnification 0.698 x, M72 x 0.75 mount

Magnification	(x)	0.698
Image circle	(mm)	62.4
Object field of view		
with line-12K detector 12k x 5.2 μm 62.40	(mm)	89.5
with line-12k detector 12k x 5 μm 61.44	(mm)	88.1
with line-16k detector 16k x 3.5 μm 57.34	(mm)	82.2
with line-8k detector 8k x 7 μm 57.34	(mm)	82.2
Optical specifications		
Working distance (1)	(mm)	157.4
f/# (2)		16
Telecentricity typical (max) (3)	(deg)	< 0.06 (0.08)
Distortion typical (max) (4)	(%)	< 0.08 (0.10)
Field depth (5)	(mm)	2
CTF@ 70 lp/mm	(%)	> 35
Mechanical specifications		
Length (6)	(mm)	541.9
Diameter	(mm)	116
Mass	(g)	2600
Mount (7)		M72 x 0.75 - FD 6.56









## NOTES

- 1. 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
- 2. Working F-number: 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 principal rays inside the lens: when converted to milliradians, it gives the maximum measurement error for any millimiter of object displacement
- 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 very sharp image, only half of the nominal field depth should be considered. Pixel size used for calculation is 4.35  $\mu$ m.
- $\,$  6. Measured from the front end of the mechanics to the camera flange.
- 7. 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



LTCLHP080-G Telecentric HP illuminator, beam diameter 100 mm, green



CMHO TC12K 080 Clamping mechanics for TC12K080



LTRN 080 NW Ring LED illuminator, white