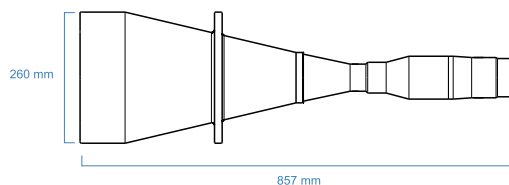


# TC12K192

Telecentric lens for 12k and 16k linescan cameras, magnification 0.320 x, M72 x 0.75 mount

## SPECIFICATIONS

Magnification	(x)	0.320
Image circle Ø	(mm)	62.4
<b>Object field of view</b>		
with line - 12k detector 12k x 5.2 µm	(mm)	195.3
with line - 12k detector 12k x 5 µm	(mm)	192.3
with line - 16k detector 16k x 3.5 µm	(mm)	179.4
with line - 8k detector 8k x 7 µm	(mm)	179.4
<b>Optical specifications</b>		
Working distance (1)	(mm)	265.5
wF/# (2)		16
Telecentricity typical (max) (3)	(deg)	< 0.06 (0.08)
Distortion typical (max) (4)	(%)	< 0.08 (0.10)
Field depth (5)	(mm)	10
CTF@ 70 lp/mm	(%)	> 35
<b>Mechanical specifications</b>		
Length (6)	(mm)	857.5
Diameter	(mm)	260
Mass	(g)	15000
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 (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 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

LTCLHP192-G Telecentric HP illuminator, beam diameter 250 mm, green