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## TCUV23080

UV telecentric lens

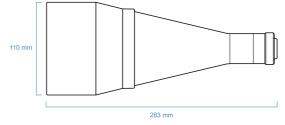
## SPECIFICATIONS

Magnification	(X)	0.110
Object field of view		
with 1/3" detector (4.8 x 3.6 mm)	(mm x mm)	43.5 x 32.6
with 1/2.5" detector (5.70 x 4.28 mm)	(mm x mm)	32.6 x 24.4
with 1/2" detector (6.4 x 4.8 mm)	(mm x mm)	58.0 x 43.5
with 1/1.8" detector (7.13 x 5.37 mm) (8)	(mm x mm)	64.8 x 48.5
with 2/3" detector (8.8 x 6.6 mm)	(mm x mm)	79.7 x 59.8

Optical specificat	tions
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Working distance (1)	(mm)	221.0
wF/# (2)		8
Telecentricity (3)	(deg)	< 0.08
Distortion (4)	(%)	< 0.08
Field depth (5)	(mm)	54.5
CTF@ 70 lp/mm (6)	(%)	> 40





## Mechanical specifications

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Phase adjustment (10)			
Mount		С	
Length (7)	(mm)	283.0	
Diameter	(mm)	116.0	
Mass	(g)	1600	

## 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.
- Working F-number (wF/#): the real F-number of a lens when used as a macro. Lenses with smaller apertures (higher wF/#) can be supplied on request.
- Maximum slope of chief rays inside the lens: when converted to millirad, it gives the maximum measurement error for any millimeter of object displacement. Typical (average production) values and maximum (guaranteed) values measured at 395 nm are listed.
- 4. Percent deviation of the real image compared to an ideal, undistorted image: typical (average production) values and maximum (guaranteed) values measured at 395 nm 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.
- 6. Nominal value
- 7. Measured from the front end of the mechanics to the camera flange.
- With 1/1.8" (8.9 mm diagonal) detectors, the FOV of TCUV 12 XX lenses may show some vignetting at the image corners, as these lenses are optimized for 1/2" detectors (8 mm diagonal).
- 9. For the fields with the indication "Ø =", the image of a circular object of such diameter is fully inscribed into the detector.
- 0. Indicates the availability of an integrated camera phase adjustment feature.



