

TCUV23056

UV telecentric lens

SPECIFICATIONS

Magnification	(x)	0.157
Object field of view		
with 1/3" detector (4.8 x 3.6 mm)	(mm x mm)	30.6 x 22.9
with 1/2.5" detector (5.70 x 4.28 mm)	(mm x mm)	22.9 x 17.2
with 1/2" detector (6.4 x 4.8 mm)	(mm x mm)	40.8 x 30.6
with 1/1.8" detector (7.13 x 5.37 mm) (8)	(mm x mm)	45.4 x 33.9
with 2/3" detector (8.8 x 6.6 mm)	(mm x mm)	56.1 x 42.1
Optical specifications		
Working distance (1)	(mm)	154.0
wF/# (2)		8
Telecentricity (3)	(deg)	< 0.1
Distortion (4)	(%)	< 0.08
Field depth (5)	(mm)	26.8
CTF@ 70 lp/mm (6)	(%)	> 40
Mechanical specifications		
Phase adjustment (10)		
Mount		C
Length (7)	(mm)	216.8
Diameter	(mm)	80.0
Mass	(g)	940

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 (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.
- 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.
- 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.
- Nominal value
- 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).
- For the fields with the indication "Ø =", the image of a circular object of such diameter is fully inscribed into the detector.
- Indicates the availability of an integrated camera phase adjustment feature.

