



TCUV23080

UV telecentric lens

SPECIFICATIONS

| | | |
|---------------|-----|-------|
| Magnification | (x) | 0.110 |
|---------------|-----|-------|

Object field of view

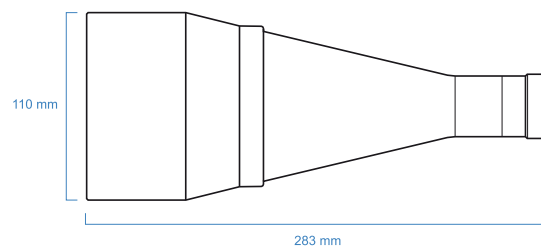
| | | |
|---|-----------|-------------|
| with 1/3" detector (4.8 x 3.6 mm) | (mm x mm) | 43.5 x 32.6 |
| with 1/2.5" detector (5.70 x 4.28 mm) | (mm x mm) | 32.6 x 24.4 |
| with 1/2" detector (6.4 x 4.8 mm) | (mm x mm) | 58.0 x 43.5 |
| with 1/1.8" detector (7.13 x 5.37 mm) (8) | (mm x mm) | 64.8 x 48.5 |
| with 2/3" detector (8.8 x 6.6 mm) | (mm x mm) | 79.7 x 59.8 |

Optical specifications

| | | |
|----------------------|-------|--------|
| 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

| | | |
|-----------------------|------|-------|
| Phase adjustment (10) | | |
| Mount | | C |
| Length (7) | (mm) | 283.0 |
| Diameter | (mm) | 116.0 |
| Mass | (g) | 1600 |



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 are listed.
- 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.
- 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.