

TC 16M 048

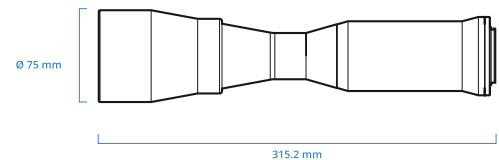
Bi-telecentric lens for 35 mm detectors, magnification 0.751 x, F-mount

| | | |
|---------------|------|-------|
| Magnification | (x) | 0.751 |
| Image circle | (mm) | 43.3 |

| Object field of view | | |
|--------------------------|-----------|-------------|
| with 2k x 10 µm detector | (mm) | 27.3 |
| with 4k x 7 µm detector | (mm) | 38.2 |
| with 8k x 5 µm detector | (mm) | 54.6 |
| with 36 x 24 mm detector | (mm x mm) | 47.9 x 32.0 |

| Optical specifications | | |
|----------------------------------|-------|---------------|
| Working distance (1) | (mm) | 127.0 |
| f/# (2) | | 16 |
| Telecentricity typical (max) (3) | (deg) | < 0.06 (0.10) |
| Distortion typical (max) (4) | (%) | < 0.05 (0.10) |
| Field depth (5) | (mm) | 2 |
| CTF@ 70 lp/mm | (%) | > 30 |

| Mechanical specifications | | |
|---------------------------|------|-------|
| Mount | | F |
| Length (6) | (mm) | 315.2 |
| Diameter | (mm) | 75 |
| Mass | (g) | 1000 |



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 chief rays inside the lens: when converted to milliradians, it gives the maximum measurement error for any millimeter of object displacement. Typical (average production) values and maximum (guaranteed) values are listed.
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 4.8 µm.
6. Measured from the front end of the mechanics to the camera flange.

COMPATIBLE PRODUCTS



LTCLHP048-G
Telecentric HP illuminator, beam diameter 60 mm, green



CMHO 048
Clamping mechanics for TCxx048 lenses and LTCL048-X illuminators



LTRN 048 NW
Ring LED illuminator, white