

Edmund Optics TML™ Telecentric Measuring Lenses

- Designed for Metrology and Gauging Applications
- Economical
- Exceptional Image Quality
- Fixed Focus
- 1/2" CCD Max Format Design
- Ideal for Factory Automation

Telecentric lenses correct perspective errors that yield variations in magnification through the depth of field. TML™ lenses offer a compact, cost-effective solution for replacing standard fixed focal length lenses. Telecentric lenses are ideal for both on-line and off-line production environments that require accurate measurements. Edmund has designed this series of lenses to specifically replace lenses that give inaccurate or inconsistent readings.

TML™ lenses offer superior image quality and less distortion than conventional fixed focal length lenses. This design yields more symmetrical images that are superior for software-integrated measurements.

Each lens also has a standard front filter thread. Two different, unique twin-ring mounting clamps are available separately. Each mounting clamp has the same twin-ring clamp design that fits on the 30mm diameter mounting surface. One offers a 1.75" (dimension A in diagram below, center of TML™ to bottom of mounting clamp base) stand-off distance that is ideal for 0.60X through 0.25X TML™s. The 2.25" stand-off version is ideal for the larger 0.20X and 0.16X TML™s. Bases have a variety of 1/4-20 tapped and clearance holes.

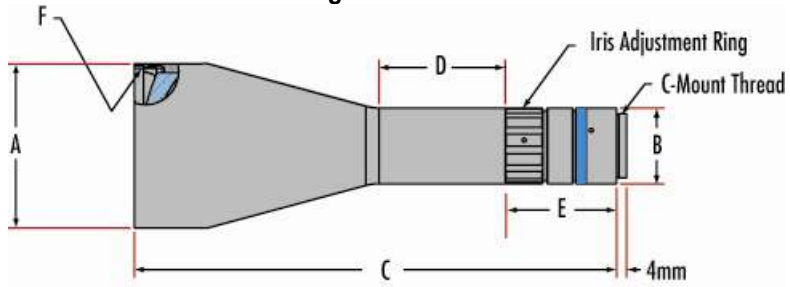
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|---------------------------------|-----------|
| Primary Magnification | 0.40X |
| Working Distance (±3mm) | 103mm |
| DOF (10% @ 20lp/mm, F10) | ±3.3mm |
| Weight (lens only) | 290g |
| Stock Number | LEC-56677 |

| | |
|---------------------------------------|---------------------|
| Common Specifications | |
| Max. CCD Format | 1/1.8" |
| Aperture (f/#) | F6 - Closed |
| Resolution (image space @ F10) | >40% at 40lp/mm |
| Telecentricity | <0.1° |
| Distortion | <0.3% |
| Lens Element Coating | BBAR from 425-675nm |

| PMag | A | B | C | D | E | F |
|-------------|----------|----------|----------|----------|----------|------------|
| 0.40X | 45mm | 30mm | 159mm | 67mm | 33mm | M43 x 0.75 |

| Field of View and Res. Table | IN-SIGHT | | | | DVT Vision Sensors | | |
|------------------------------|----------|--------------------------|--------|--------|--------------------|------------------------|-----------|
| | | | | | | | |
| 0.60X TML | 5000 | 5100, 5400, 5400C, 5400S | 5401 | 5403 | 542C, 552C | 515, 535, 545, 550, XS | 554, 554C |
| FOV in mm | 8.86 | 11.84 | 11.90 | 17.60 | 8.86 | 11.84 | 9.92 |
| Res. per pixel in microns | 14.00 | 18.50 | 11.63 | 11.00 | 14.00 | 18.50 | 7.75 |
| FOV in inches | 0.35 | 0.47 | 0.47 | 0.69 | 0.35 | 0.47 | 0.39 |
| Res. per pixel in inches | 0.0006 | 0.0007 | 0.0005 | 0.0004 | 0.0006 | 0.0007 | 0.0003 |

TML™ Telecentric Measuring Lenses



Mounting Bracket

