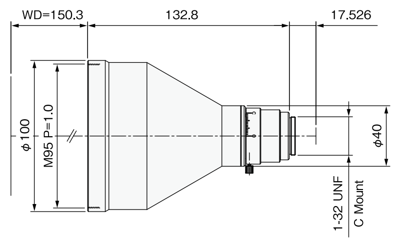
MGTL Series

# Low Magnification Telecentric Lens for 5 Mega Pixel

## Possible to capture large field of view with high resolution

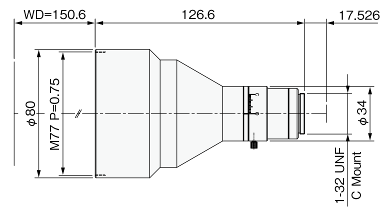
- Bring out the best quality in 5 mega pixel (3.45 μ of 2/3")
- 0.14x, 0.17x, 0.22x are available
- Long working distance, WD150mm
- Compact design with low magnification
- Adjustable iris, possible to adjust depth of field

### MGTL014VM



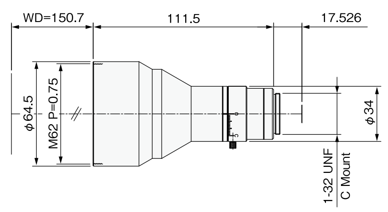

| | | | |
|---|---|---|---|
| Magnification | 0.14x | Depth of field | 17.5mm |
| F No. | 4.3 | Resolution | 20.5μ |
| Object side NA | 0.016 | TV distortion | 0.01% |
| WD | 150.3mm | Maximum Compatible sensor | 2/3 |
| OI | 300.6mm | Mount | C |

### MGTL017VM




| | | | |
|---|---|---|---|
| Magnification | 0.17x | Depth of field | 14.4mm |
| F No. | 5.2 | Resolution | 20.5μ |
| Object side NA | 0.016 | TV distortion | 0.00% |
| WD | 150.6mm | Maximum Compatible sensor | 2/3 |
| OI | 294.7mm | Mount | C |

### MGTL022VM




| | | | |
|---|---|---|---|
| Magnification | 0.22x | Depth of field | 8.5mm |
| F No. | 5.2 | Resolution | 15.8μ |
| Object side NA | 0.021 | TV distortion | 0.00% |
| WD | 150.7mm | Maximum Compatible sensor | 2/3 |
| OI | 279.7mm | Mount | C |

* Indicated specifications are design values. * Resolution indicates a theoretical resolution at a wavelength of 550nm.
*Depth of field is calculating assuming a horizontal 320 TV resolution using 1/2" camera (permissible circle of confusion 40μ).

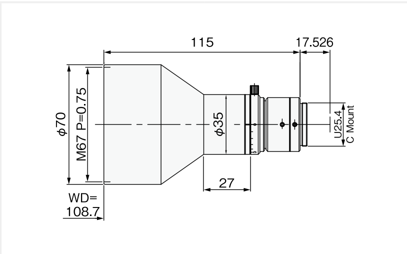
MGTL Series

# Telecentric Lens for 5 Mega Pixel

## Suitable for the inspection in ultra high accuracy

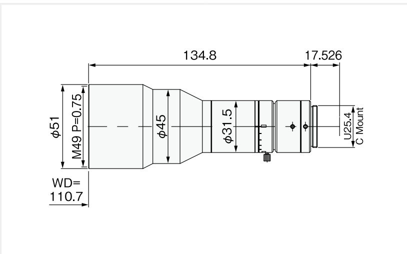
- Bring out the best quality in 5 mega pixel (3.45 µ of 2/3")
- Excellent brightness, compared to mega pixel telecentric lenses
- Adjustable iris, possible to adjust depth of field
- 1.0x is compatible with 1.1" sensor
- Compact design
- Reduce hot spots of co-axial illumination

### MGTL023H



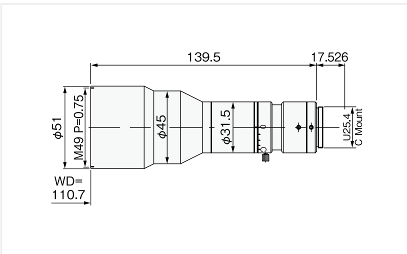
| | |
|---|---|
| Magnification | 0.23x |
| F No. | 5.2 |
| Object side NA | 0.022 |
| WD | 109mm |
| OI | 241mm |
| Depth of field | 7.9mm |
| Resolution | 8.7µ |
| TV distortion | 0.00% |
| Maximum Compatible sensor | 2/3 |
| Mount | C |

### MGTL03VM



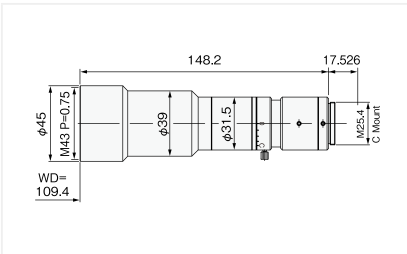
| | |
|---|---|
| Magnification | 0.3x |
| F No. | 5.0 |
| Object side NA | 0.03 |
| WD | 111mm |
| OI | 263mm |
| Depth of field | 4.4mm |
| Resolution | 6.6µ |
| TV distortion | -0.04% |
| Maximum Compatible sensor | 2/3 |
| Mount | C |

### MGTL0345VM



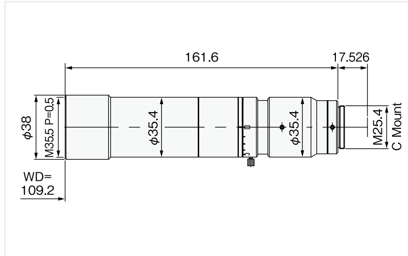
| | |
|---|---|
| Magnification | 0.345x |
| F No. | 4.9 |
| Object side NA | 0.035 |
| WD | 111mm |
| OI | 267mm |
| Depth of field | 3.3mm |
| Resolution | 5.5µ |
| TV distortion | 0.00% |
| Maximum Compatible sensor | 2/3 |
| Mount | C |

### MGTL04VM



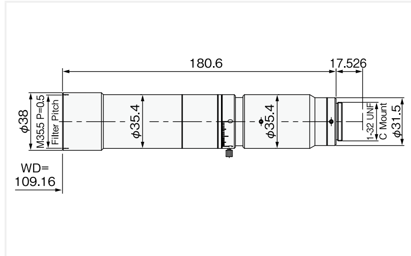
| | |
|---|---|
| Magnification | 0.4x |
| F No. | 5.0 |
| Object side NA | 0.04 |
| WD | 109mm |
| OI | 275mm |
| Depth of field | 2.5mm |
| Resolution | 4.9µ |
| TV distortion | 0.00% |
| Maximum Compatible sensor | 2/3 |
| Mount | C |

### MGTL05VM



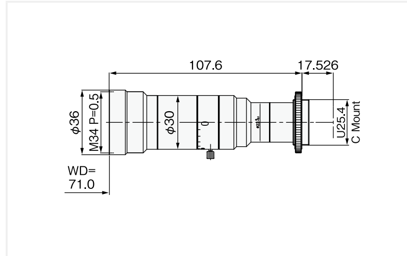
| | |
|---|---|
| Magnification | 0.5x |
| F No. | 4.7 |
| Object side NA | 0.05 |
| WD | 109mm |
| OI | 288mm |
| Depth of field | 2.3mm |
| Resolution | 3.8µ |
| TV distortion | -0.03% |
| Maximum Compatible sensor | 2/3 |
| Mount | C |

### MGTL069VM



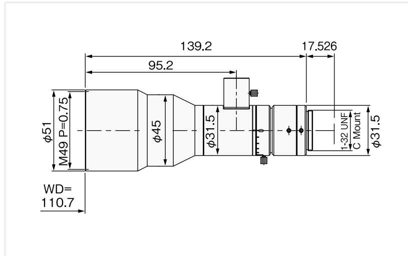
| | |
|---|---|
| Magnification | 0.69x |
| F No. | 6.6 |
| Object side NA | 0.052 |
| WD | 109mm |
| OI | 307mm |
| Depth of field | 1.1mm |
| Resolution | 3.9µ |
| TV distortion | -0.04% |
| Maximum Compatible sensor | 2/3 |
| Mount | C |

### MGTL10V



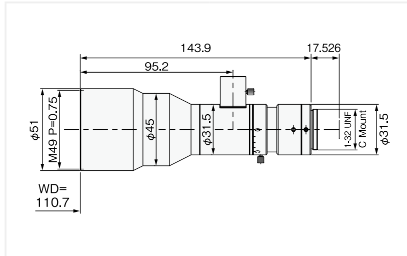
| | |
|---|---|
| Magnification | 1.0x |
| F No. | 5.4 |
| Object side NA | 0.093 |
| WD | 71mm |
| OI | 196mm |
| Depth of field | 0.43mm |
| Resolution | 2.5µ |
| TV distortion | 0.00% |
| Maximum Compatible sensor | 1.1 |
| Mount | C |

### MGTL03VMC



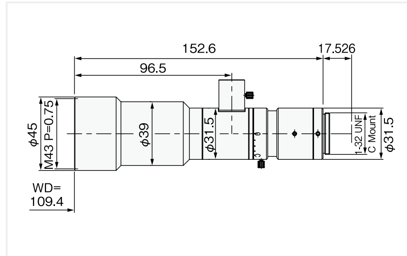
| | |
|---|---|
| Magnification | 0.3x |
| F No. | 5.0 |
| Object side NA | 0.03 |
| WD | 111mm |
| OI | 267mm |
| Depth of field | 4.4mm |
| Resolution | 6.6µ |
| TV distortion | -0.04 |
| Maximum Compatible sensor | 2/3 |
| Mount | C |

### MGTL0345VMC



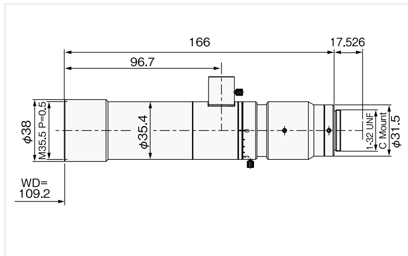
| | |
|---|---|
| Magnification | 0.345x |
| F No. | 4.9 |
| Object side NA | 0.035 |
| WD | 111mm |
| OI | 272mm |
| Depth of field | 3.3mm |
| Resolution | 5.5µ |
| TV distortion | 0.00% |
| Maximum Compatible sensor | 2/3 |
| Mount | C |

### MGTL04VMC



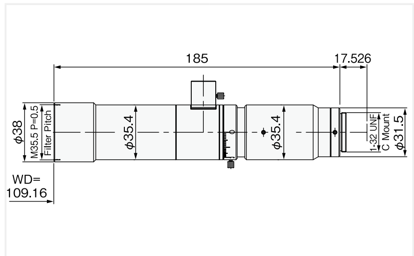
| | |
|---|---|
| Magnification | 0.4x |
| F No. | 5.0 |
| Object side NA | 0.04 |
| WD | 109mm |
| OI | 280mm |
| Depth of field | 2.5mm |
| Resolution | 4.9µ |
| TV distortion | 0.00% |
| Maximum Compatible sensor | 2/3 |
| Mount | C |

### MGTL05VMC



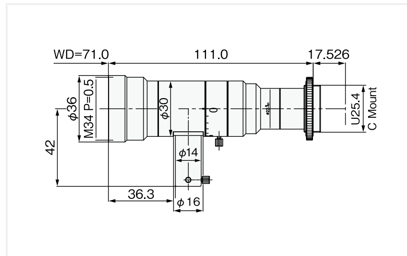
| | |
|---|---|
| Magnification | 0.5x |
| F No. | 4.7 |
| Object side NA | 0.05 |
| WD | 109mm |
| OI | 293mm |
| Depth of field | 2.3mm |
| Resolution | 3.8µ |
| TV distortion | -0.03% |
| Maximum Compatible sensor | 2/3 |
| Mount | C |

### MGTL069VMC



| | |
|---|---|
| Magnification | 0.69x |
| F No. | 6.6 |
| Object side NA | 0.052 |
| WD | 109mm |
| OI | 312mm |
| Depth of field | 1.1mm |
| Resolution | 3.9µ |
| TV distortion | -0.04% |
| Maximum Compatible sensor | 2/3 |
| Mount | C |

### MGTL10VC



| | |
|---|---|
| Magnification | 1.0x |
| F No. | 5.4 |
| Object side NA | 0.093 |
| WD | 71mm |
| OI | 200mm |
| Depth of field | 0.43mm |
| Resolution | 2.5µ |
| TV distortion | 0.00% |
| Maximum Compatible sensor | 1.1 |
| Mount | C |

* Indicated specifications are design values. * Resolution indicates a theoretical resolution at a wavelength of 550nm.
*Depth of field is calculating assuming a horizontal 320 TV resolution using 1/2" camera (permissible circle of confusion 40µ).

MGTL Series

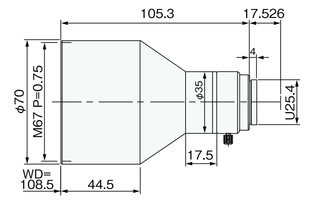
# Mega Pixel Telecentric Lens

## Suitable for Mega Pixel Sensor

- High resolution, compatible with mega pixel camera
- Compact design, suitable for small device
- MGTL05-1.1 is compatible with 1.1”
- MGTL0275 is compatible with $\phi$ 12.8mm sensor
- Adjustable iris, possible to adjust depth of field
- TV distortion less than 0.05%

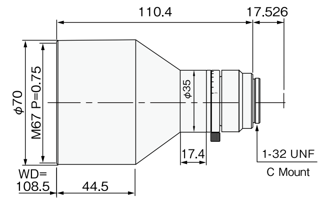
MaxxVision®
Sigmaringer Str. 121
70567 Stuttgart
Tel.: 0711 997 996 3
www.maxxvision.com

### MGTL014



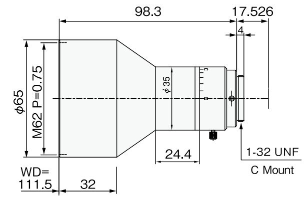

| | | | |
|---|---|---|---|
| Magnification | 0.14x | Depth of field | 32.7mm |
| F No. | 4.0 | Resolution | 19.7 µ |
| Object side NA | 0.017 | TV distortion | 0.02% |
| WD | 108mm | Maximum Compatible sensor | 1/2 |
| OI | 231mm | Mount | C |

### MGTL019



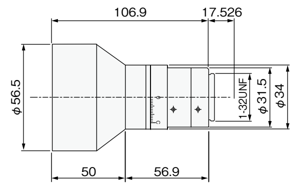

| | | | |
|---|---|---|---|
| Magnification | 0.19x | Depth of field | 17.7mm |
| F No. | 4.0 | Resolution | 14.0 µ |
| Object side NA | 0.024 | TV distortion | 0.01% |
| WD | 108mm | Maximum Compatible sensor | 2/3 |
| OI | 236mm | Mount | C |

### MGTL023



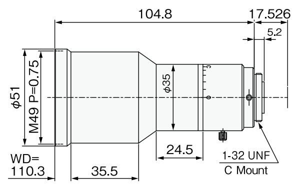

| | | | |
|---|---|---|---|
| Magnification | 0.23x | Depth of field | 12mm |
| F No. | 5.5 | Resolution | 16.0 µ |
| Object side NA | 0.021 | TV distortion | 0.01% |
| WD | 111mm | Maximum Compatible sensor | 2/3 |
| OI | 227mm | Mount | C |

### NEW MGTL0275



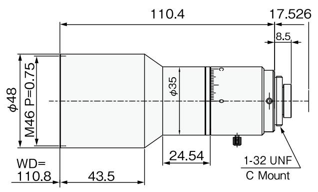

| | | | |
|---|---|---|---|
| Magnification | 0.275x | Depth of field | 8.1mm |
| F No. | 7.6 | Resolution | 18.6 µ |
| Object side NA | 0.018 | TV distortion | 0.00% |
| WD | 110mm | Maximum Compatible sensor | 2/3 |
| OI | 234mm | Mount | C |

### MGTL03



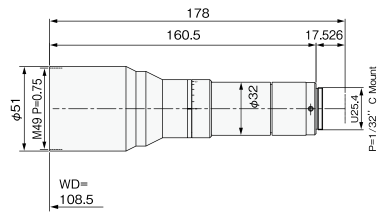

| | | | |
|---|---|---|---|
| Magnification | 0.3x | Depth of field | 6.2mm |
| F No. | 7.0 | Resolution | 16.0 µ |
| Object side NA | 0.021 | TV distortion | 0.05% |
| WD | 110mm | Maximum Compatible sensor | 2/3 |
| OI | 233mm | Mount | C |

### MGTL04




| | | | |
|---|---|---|---|
| Magnification | 0.4x | Depth of field | 4.6mm |
| F No. | 9.2 | Resolution | 15.2 µ |
| Object side NA | 0.022 | TV distortion | 0.00% |
| WD | 110mm | Maximum Compatible sensor | 2/3 |
| OI | 239mm | Mount | C |

### MGTL05-1.1




| | | | |
|---|---|---|---|
| Magnification | 0.5x | Depth of field | 2mm |
| F No. | 6.37 | Resolution | 8.6 µ |
| Object side NA | 0.039 | TV distortion | 0.00% |
| WD | 108mm | Maximum Compatible sensor | 1.1 |
| OI | 286mm | Mount | C |

* Indicated specifications are design values. *Resolution indicates a theoretical resolution at a wavelength of 550nm.
*Depth of field is calculating assuming a horizontal 320 TV resolution using 1/2" camera (permissible circle of confusion 40 µ).
* Depth of field of MGTL014, 019, and 023 indicate values at effective F No. 8