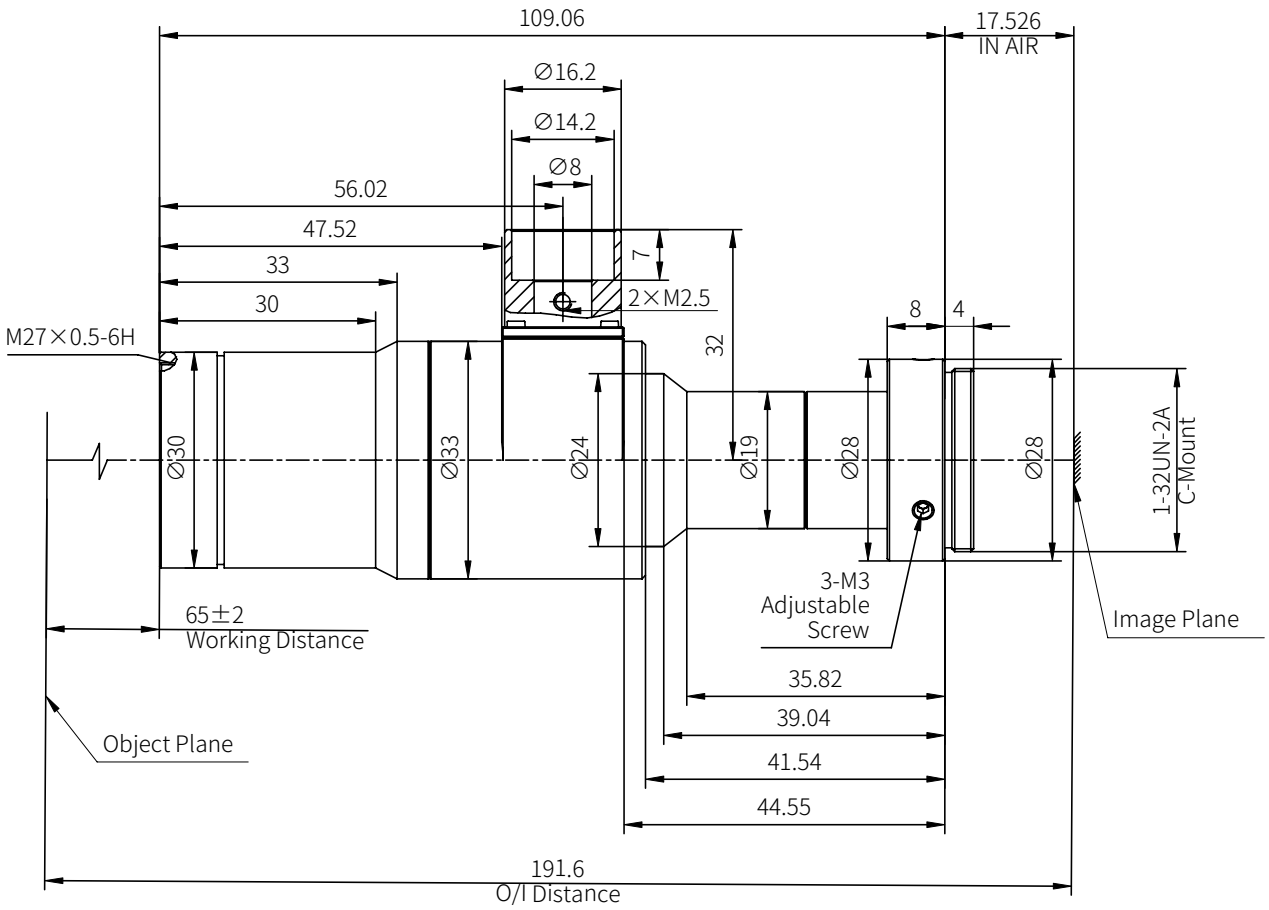
# Optical Specification

| Model | OPT-CH15-65C-F22 |
|---|---|
| Optical Configuration | Telecentric |
| Working Distance (mm) | 65±2 |
| Magnification | 1.5X |
| Sensor ∅(mm) | 11.0(2/3") |
| Aperture | F22 |
| Telecentricity | 0.10° |
| NA | 0.03407 |
| Distortion | <0.1% |
| Depth of Field (mm) | 0.80 |
| Object Resolution (μm) | 9.85 |
| Resolution (μm) | 11.10 |
| Image MTF30(lp/mm) | 45 |
| Field of View ∅(mm) | 7.33 |
| O/I Distance (mm) | 191.6 |
| Mount | C-Mount |
| Weight (kg) | 0.18 |
| Size (mm) | ∅33.0×109.06 |
| Filter Thread (mm) | M27×0.5-6H |
| Working temperature | -20°C～+60°C |

[1]Resolution:The resolution is the image resolution.
[2]WD:The distance between the front end of the mechanism and the object.
[3]DOF evaluation formula for telecentric lenses:

$$DOF(mm)=\frac{F\#\times P\times k}{\beta\times\beta}$$

F#:The real F-number of a lens when used
P:Sensor pixel size(5.5 μm used here)
β:Lens magnification
k:The parameter based on application (measurement, k=0.015;defect detection, k=0.008;0.015 used here)
At the borders of DOF,the image can still be used for measurement. But only half of the nominal DOF should be used to get a sharp image.

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|---|---|---|---|---|---|---|---|
| View Angle | | Item | Signature | Date | OPT Machine Vision | OPT Machine Vision Tech Co., Ltd. | |
| | | Drawing | | | | | |
| Standard Difference | IT14 | Design | | | All Rights Reserved | | |
| | | Check | | | | | |
| Drawing Code | | Scale | | | Name | OPT-CH15-65C-F22 | |
| | | Paper Size | A4 | | Unit | mm | Page 1 / 1 | Version | 1.0 |