

| Optical Specification  |                  |
|------------------------|------------------|
| Model                  | OPT-HP20-110C-VI |
| Optical Configuration  | Telecentric      |
| Working Distance (mm)  | 110±2            |
| Magnification          | 2.0X             |
| Sensor Ø(mm)           | 18.4(1.1")       |
| Aperture               | F8.6~F122        |
| Telecentricity         | 0.1°             |
| NA                     | 0.11614~0.00819  |
| Distortion             | <0.1%            |
| Depth of Field (mm)    | 0.18~2.52        |
| Object Resolution (μm) | 2.89~40.96       |
| Resolution (μm)        | 4.55~62.5        |
| Image MTF30(lp/mm)     | 110~8            |
| Field of View Ø(mm)    | 9.20             |
| O/I Distance (mm)      | 305.6            |
| Mount                  | C-Mount          |
| Weight (kg)            | 0.5              |
| Size (mm)              | Ø43×178.06       |
| Filter Thread (mm)     | M40×0.5-6H       |
| Working temperature    | -20℃~+60℃        |

- [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:

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

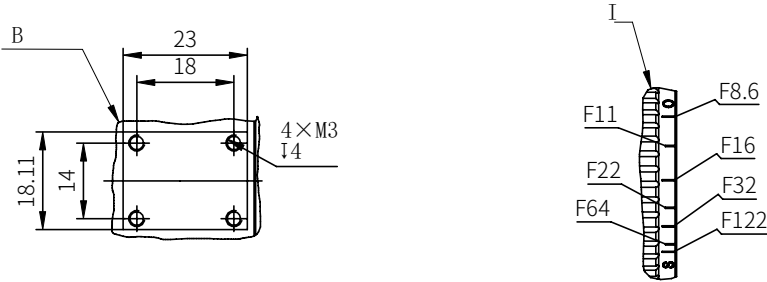
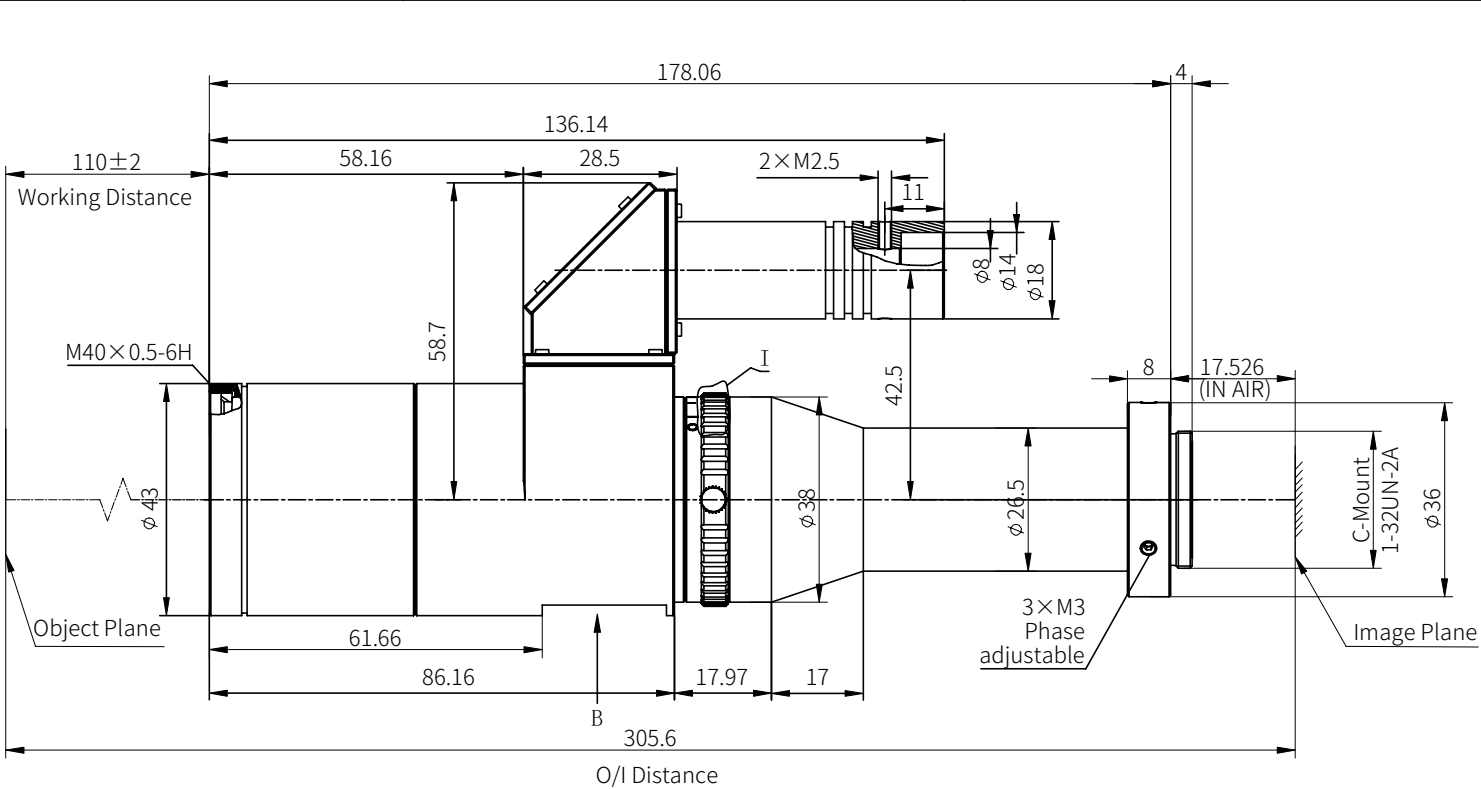
F#:The real F-number of a lens when used

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.



|                     |      |            |           |      |                                   |                  |            |             |
|---------------------|------|------------|-----------|------|-----------------------------------|------------------|------------|-------------|
| View Angle          |      | Item       | Signature | Date | OPT Machine Vision Tech Co., Ltd. |                  |            |             |
|                     |      | Drawing    |           |      |                                   |                  |            |             |
| Standard Difference | IT14 | Design     |           |      | All Rights Reserved               |                  |            |             |
|                     |      | Check      |           |      |                                   |                  |            |             |
| Drawing Code        |      | Scale      |           |      | Name                              | OPT-HP20-110C-VI |            |             |
|                     |      | Paper Size | A4        |      | Unit                              | mm               | Page 1 / 1 | Version 1.0 |