

Optical Specification	
Model	OPT-CH05-110C-F45
Optical Configuration	Bi-Telecentric
Working Distance (mm)	110±2
Magnification	0.5X
Sensor Ø(mm)	11.0(2/3")
Aperture	F45
Telecentricity	0.10°
NA	0.00555
Distortion	<0.1%
Depth of Field (mm)	14.85
Object Resolution (μm)	60.45
Resolution (μm)	21.7
Image MTF30(lp/mm)	23
Field of View Ø(mm)	22.00
O/I Distance (mm)	264.7
Mount	C-Mount
Weight (kg)	0.28
Size (mm)	Ø42.0×137.2
Filter Thread (mm)	M39×0.5-6H
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

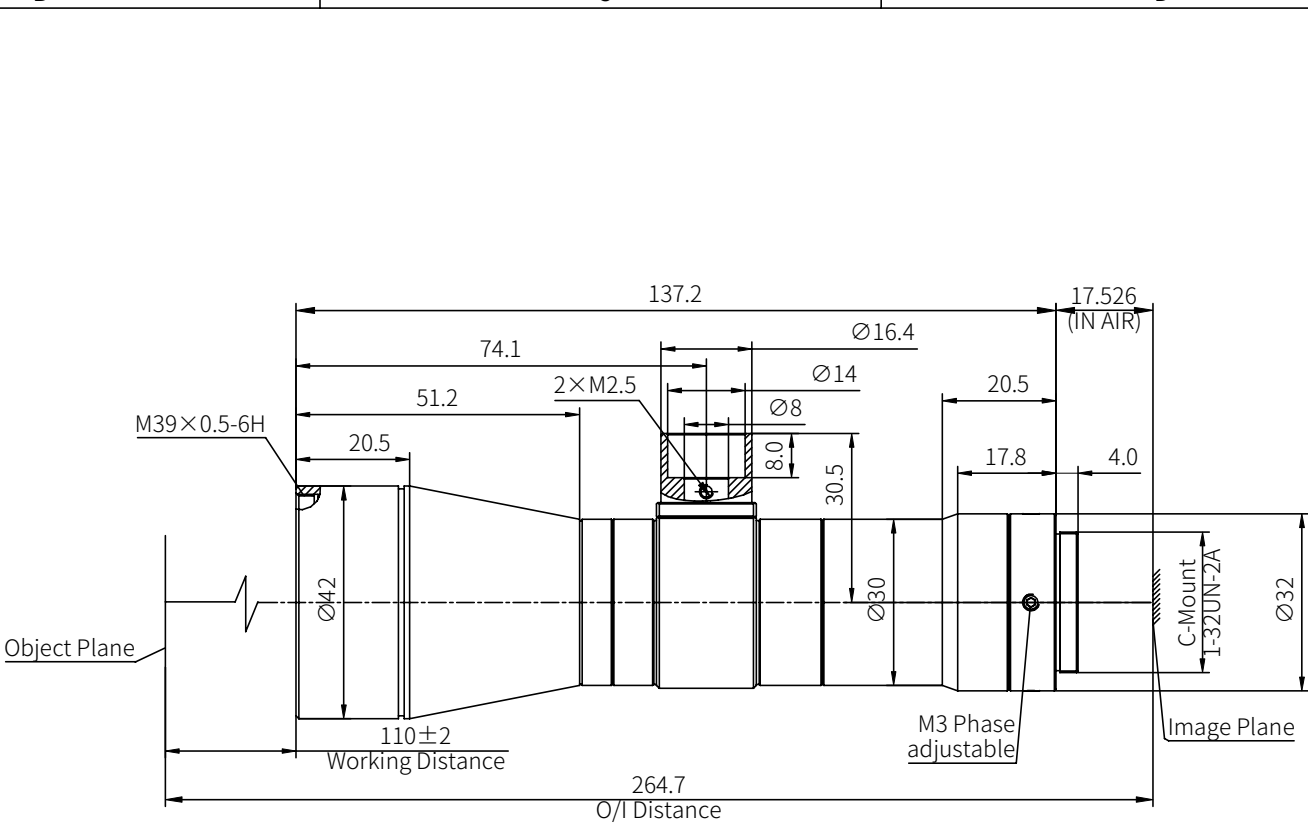
P:Sensor pixel size(5.5 μm used here)

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-CH05-110C-F45		
		Paper Size	A4		Unit	mm	Page 1 / 1	Version 1.0