

A

B

C

D

Optical Specification

Model	OPT-CH20-110C-F45
Optical Configuration	Bi-Telecentric
Working Distance (mm)	110±2
Magnification	2.0X
Sensor Ø (mm)	11.0(2/3")
Aperture	F45
Telecentricity	0.10°
NA	0.02221
Distortion	<0.1%
Depth of Field (mm)	0.92
Object Resolution (μm)	15.11
Resolution (μm)	21.7
Image MTF30(lp/mm)	23
Field of View Ø (mm)	5.50
O/I Distance (mm)	257.1
Mount	C-Mount
Weight (kg)	0.17
Size (mm)	Ø29.0×129.58
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:

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

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

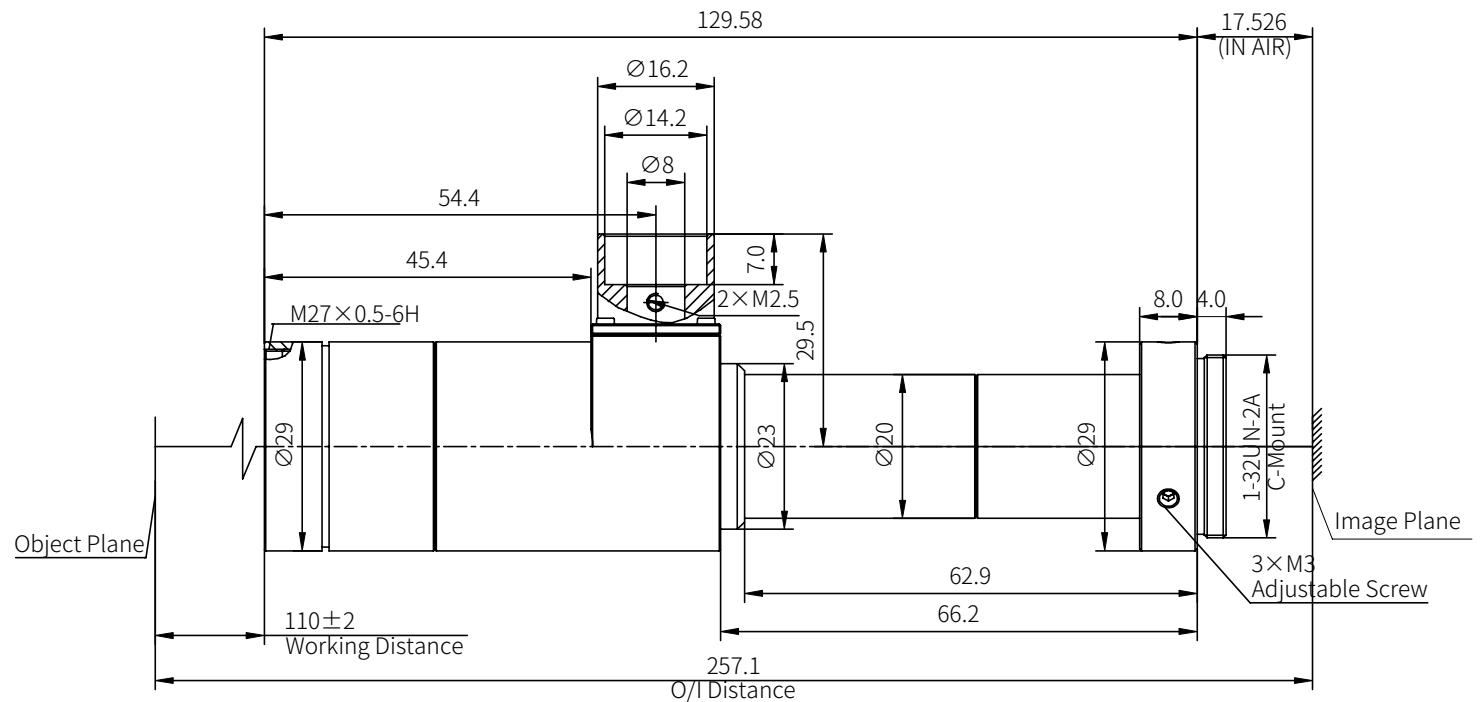
P:Sensor pixel size(5.5 μm used here)

β:Lens magnification

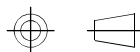
k:The parameter based on application (measurement,

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.

Standard Difference

IT14

Drawing

Design

Check

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Drawing Code

Scale

Paper Size

A4

Name

Unit

mm

Page 1 / 1

Version

1.0

A

B

C

D