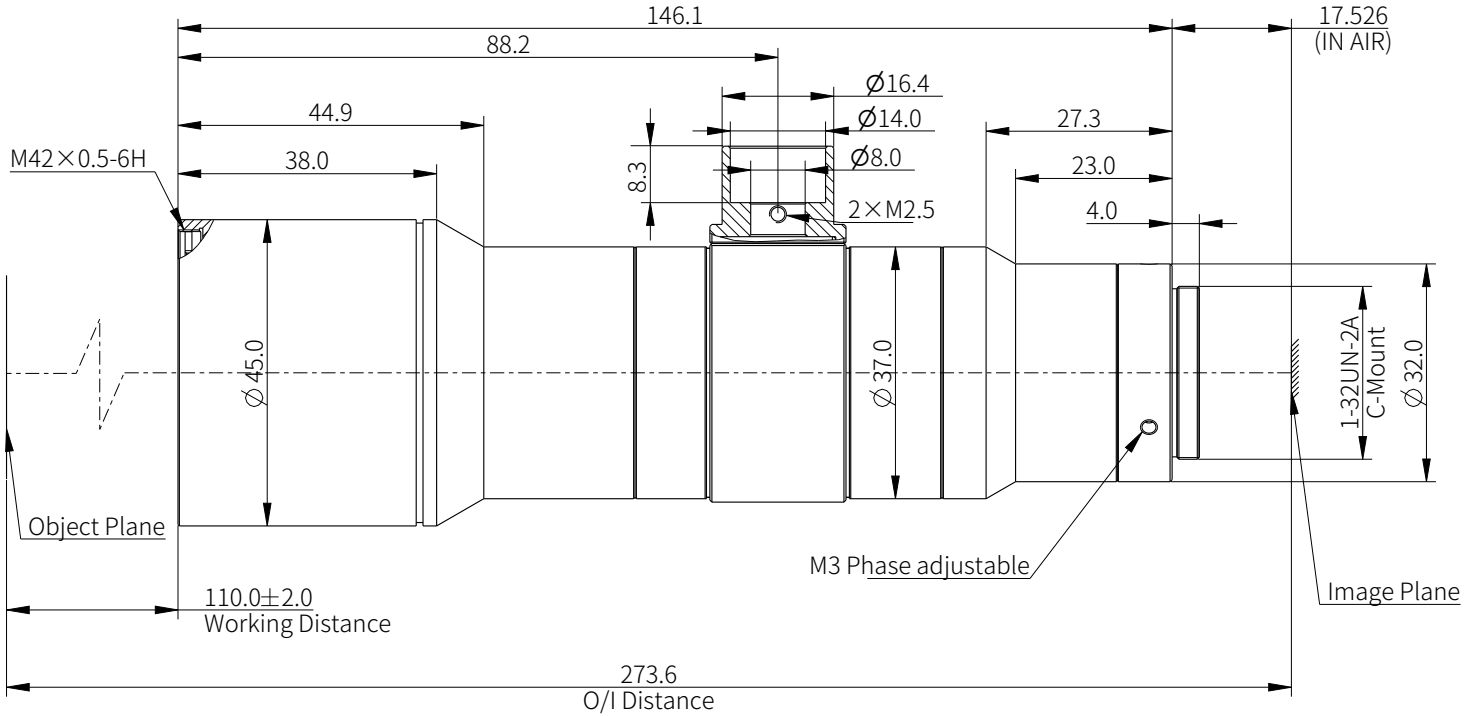
Optical Specification

Model	OPT-HP10-110C-F7
Optical Configuration	Telecentric
Working Distance (mm)	110±2
Magnification	1.0X
Sensor∅ (mm)	18.4(1.1")
Aperture	F7.0
Telecentricity	0.10°
NA	0.07124
Distortion	<0.1%
Depth of Field(mm)	0.58
Resolution (μm)	3.85
Image MTF30(LP/mm)	130
Field of View∅ (mm)	18.40
O/I Distance(mm)	273.6
Mount	C-Mount
Weight (kg)	0.41
Size (mm)	∅45.0×146.1
Filter Thread (mm)	M42×0.5-6H
Working Temperature	-20°C～+60°C



[1]Resolution:The resolution is the image resolution.

[2]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	OPT Machine Vision Tech Co., Ltd.		
		Drawing						
Standard Difference	IT14	Design			All Rights Reserved			
		Check						
Drawing Code		Scale	9:10		Name	OPT-HP10-110C-F7		
		Paper Size	A4		Unit	mm	Page 1 / 1	Version V1.0

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