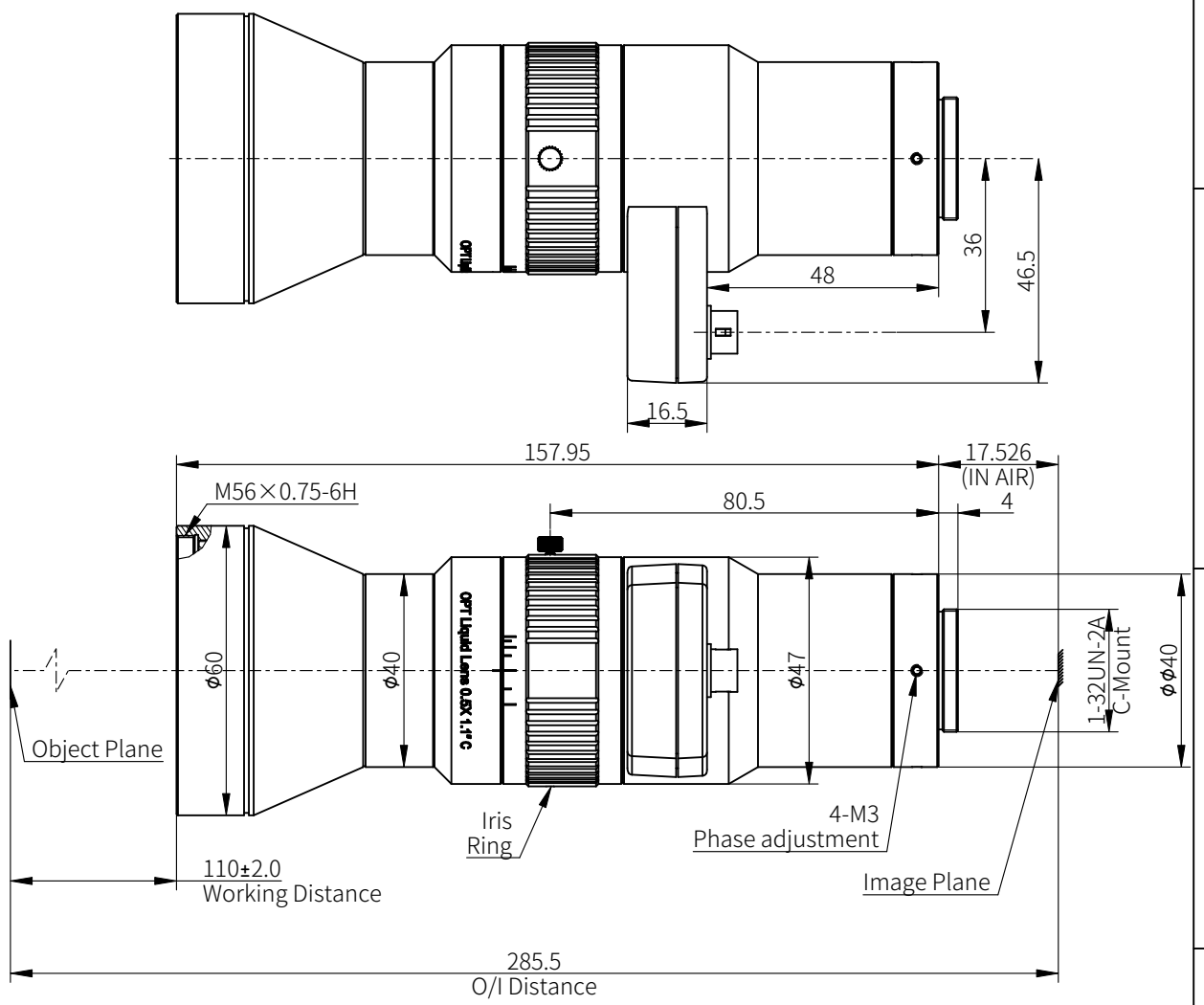
Optical Specification

Model	OPT-HP05-110-LQLTC
Optical Configuration	Bi-Telecentric
Working Distance (at 0 dpt) （mm）	110±2
Magnification	0.5X
Sensor ϕ(mm)	18.4(1.1")
Aperture	F6.5 ~ F44
Telecentricity	0.10°
NA	0.03846 ~ 0.00569
Distortion	<0.2%
Depth of Field (mm)	2.15
Resolution (at 0 dpt) (μm)	3.45
Image MTF30 (at 0 dpt) (lp/mm)	145
Field of View ϕ(mm)	36.80
Mount	C-Mount
Size (mm)	ϕ60×157.95
Weight (kg)	0.60
Filter Thread (mm)	M56×0.75-6H
O/I Distance without current （mm）	285.5
Connector type	Hirose HR10G-7R-6SB(73)
Focus tunable lens specifications	EL-12-30-TC-VIS
Focal power at 0 mA (25°C, typical) (dpt)	-1 ～ +2
Focal power range (25°C, ±250 mA)(dpt)	-6～+10
Wavefront error at 532 nm (vertical/horizontal) (λRMS)	0.15 / 0.23
Working Temperature	-0°C～+65°C
Storage temperature	-40°C～+85°C
Temperature compensation	Yes
Wavelength range (nm)	400～1000

Distance data/mm	Normal focus distance(Min)	Normal focus distance(Max)	Clear focus distance(Min)	Clear focus distance(Max)
	35	163	105	112.8
Optical Power/dpt	7.824	-6	0.36	-0.438



[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 Tech Co., Ltd.		
		Drawing					
Standard Difference	IT14	Design			All Rights Reserved		
		Check					
Drawing Code		Scale	2:3		Name	OPT-HP05-110-LQLTC	
		Paper Size	A4		Unit	mm	Page 1 / 1	Version	V1.0