

镜头参数 (Parameter of Lens)

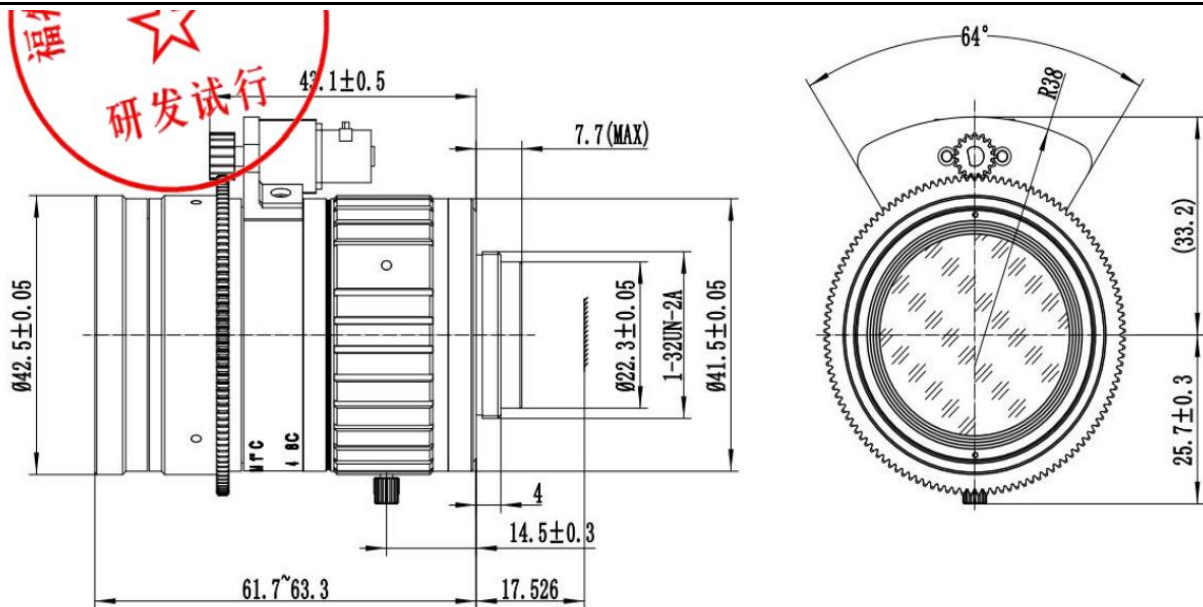
型号 (Model) :

C-M12IR(12MP)-1F14-E



分辨率 (Resolution)	12 Megapixel		
像面尺寸 (Image format)	1"		
焦距 (Focal length)	12±5%mm		
通光孔径 (Aperture)	F1.4±10%		
接口 (Mount)	C		
视场角 (Field Angle) D×H×V(°) ±5%	"	1 (IMX305)	EV2S (1:1)
	D	68.20	68.80
	H	61.70	51.30
	V	34.40	51.30
畸变(Optical Distortion)	≤-3.65%@Φ16mm		
主光束入射角(CRA)	≤16.0°@Φ16mm		
最近物距(M.O.D.)	0.5m		
外形尺寸(Dimension)	φ42.5×69.4~71mm		
重量(Weight)	263±5g		
法兰后焦距(Flange BFL)	17.526mm		
光学后焦距(BFL)	14.9mm(in air)		
机械后焦距(MBF)	10.9mm(in air)		
日夜共焦 (IR Correction)	Yes		
操作方法 (Operation)	光圈 (Iris)	手动光圈 (Manual)	
	聚焦 (Focus)	电动聚焦 (Motorized)	
	变焦 (Zoom)	/	
工作温度 (Operating temperature)	-30℃~+70℃		

尺寸 (Size)



尺寸公差Size tolerance (mm) :	0-10±0.05	10-30±0.10	30-120±0.20
角度公差Angle tolerance	±2°		

电机 (Motor)

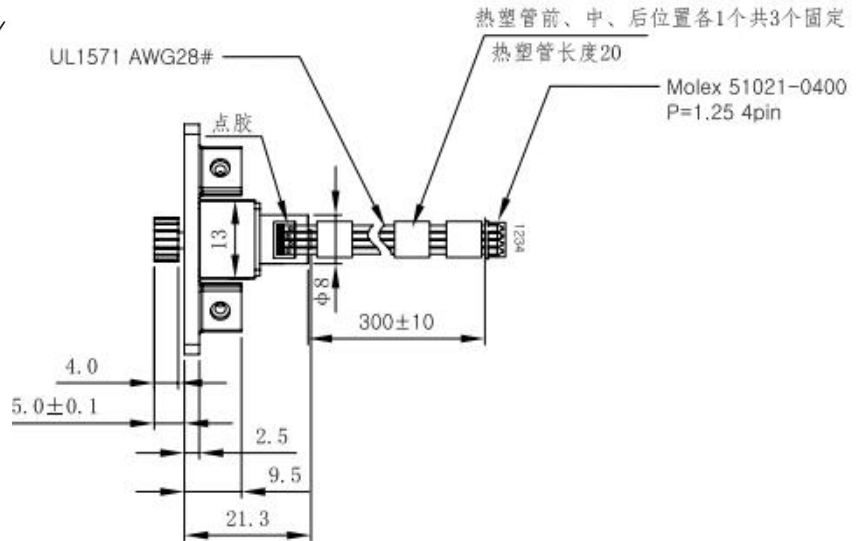
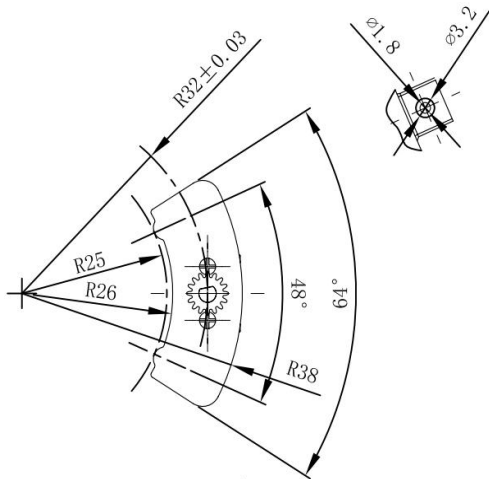
型号 (Model) :

C-M12IR(12MP)-1F14-E

ELECTRICAL CHARACTERISTIC

1. RATED VOLTAGE: 5V DC
2. COIL RESISTANCE: $30\Omega \pm 7\%$
3. No. OF PHASES: 2PHASES
4. STEP ANGLE: 18° /STEP
5. EXCITATION METHOD: 2-2PHASE EXCITATION
6. DRIVE MODE: BI-POLAR DRIVE
7. MAX. STARTING PULSE RATE: 1200PPS Min. /5VDC
8. MAX. SLEWING PULSE RATE: 2500PPS Min. /5VDC
9. INSULATION CLASS: CLASS E FOR COILS
10. SPEED REDUCING RATION: 1:156
11. INSULATION RESISTANCE: $5M\Omega$ Min. /100 VDC
12. INSULATION STRENGTH: 3mA max. 100VAC/1 SECOND
13. OPERATING TEMPERATURE RANGE: $-20 \sim +70^\circ\text{C}$
14. OUTPUT TORQUE: 200gf-cm(min) AT 500pps 5VDC

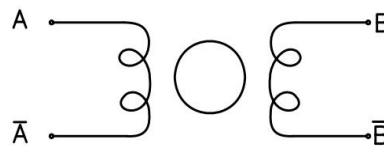
Output Tooth Parameter	
Pressure angle	20°
Modulus	0.4
Number of teeth	16
Tip diameter	$\Phi 7.2$
Pitch diameter	$\Phi 6.4$
Root diameter	$\Phi 5.4$
Precision level	JGMA-116-02 Four Glass



SEQUENCE OF EXCITATION

Step Phase	1	2	3	4
A	+	+	-	-
\bar{A}	-	-	+	+
B	-	+	+	-
\bar{B}	+	-	-	+

CONNECTION DIAGRAM



PIN NO.	COLOR	
1	RED 红	A
2	YELLOW 黄	A-
3	BROWN 棕	B
4	ORANGE 橙	B-

Output Shaft Rotation CW



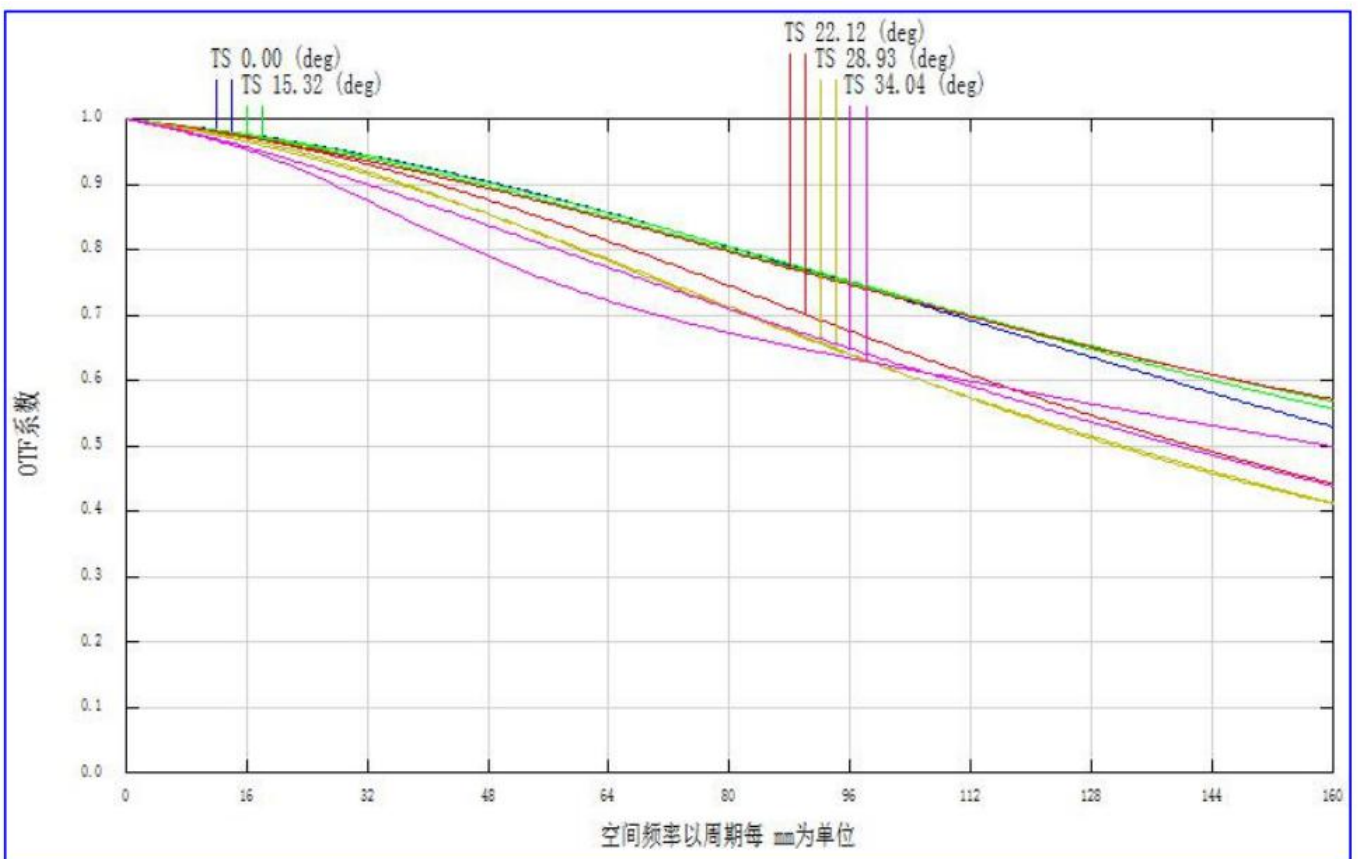
福建福特科光电股份有限公司

Foctek Photonics, Inc.

检测标准 (Test Standard)

型号 (Model) :		C-M12IR(12MP)-1F14-E	
检测项目 Test Items		检测内容 Test Content	
1	逆投影检测 Resolution Test	Test Range	Φ12
		Center≥	160 lp/mm
		Φ12≥	125 lp/mm
		Image standard	The image should be clear.
环境 Environment		25±2℃, ≤1 lux Dark room	

2	MTF Curve	C-M12IR(12MP)-1F14-E
---	-----------	----------------------





环境可靠性测试 (Reliability and Environmental Testing)

型号 (Model) :		C-M12IR(12MP)-1F14-E
检测项目 Test Items		检测内容 Test Content
1	温度循环试验 Temperature Cycling Test	镜头在试验温度(-30±3)°C放置1.5小时,(70±3)°C放置3小时的条件下,放置2个循环。试验后,将镜头放置于室温24小时后进行检验,各指标均合格。 Lens is placed on two cycles in the test temperature (-30±3)°C for 1.5 hours and in (70±3)°C for 3 hours separately. Then, the indicators are qualified after placing the lens at room temperature for 24 hours.
2	高温高湿试验 Damp heat test	镜头在试验温度(70±3)°C,湿度85%RH的条件下,放置48小时。试验后,将镜头放置于室温24小时后进行检验,各指标均合格。 Lens is placed in the test temperature (70±3)°C, humidity 85% RH for 48 hours. Then, the indicators are qualified after placing the lens at room temperature for 24 hours.
3	跌落试验 Drop Test	镜头在1米高(±0.1米)处,自由跌落到混凝土地板上。试验后,镜头各指标均合格。 Lens drops from the height of (1±0.1m) to the concrete ground. After the testing, the indicators are qualified.
4	振动试验 Vibration Test	镜头正弦波振动2小时,在振幅为1mm,频率为50Hz的条件下,试验后,镜头各指标均合格。 Lens vibrates 2h in sinusoidal wave under 1 mm of amplitude and 50Hz of frequency. After the testing, the indicators are qualified.

包装规格 (Packing Specification)

型号 (Model) :

C-M12IR(12MP)-1F14-E

1. Stick label on the surface of lens after capped.
2. Put the lens into the carton box with pearl wool, desiccant and instructions in order to protect it from moisture.
3. The unit will be packaged in a corrugated box. Seal the corrugated box with tape and mark the surface.

