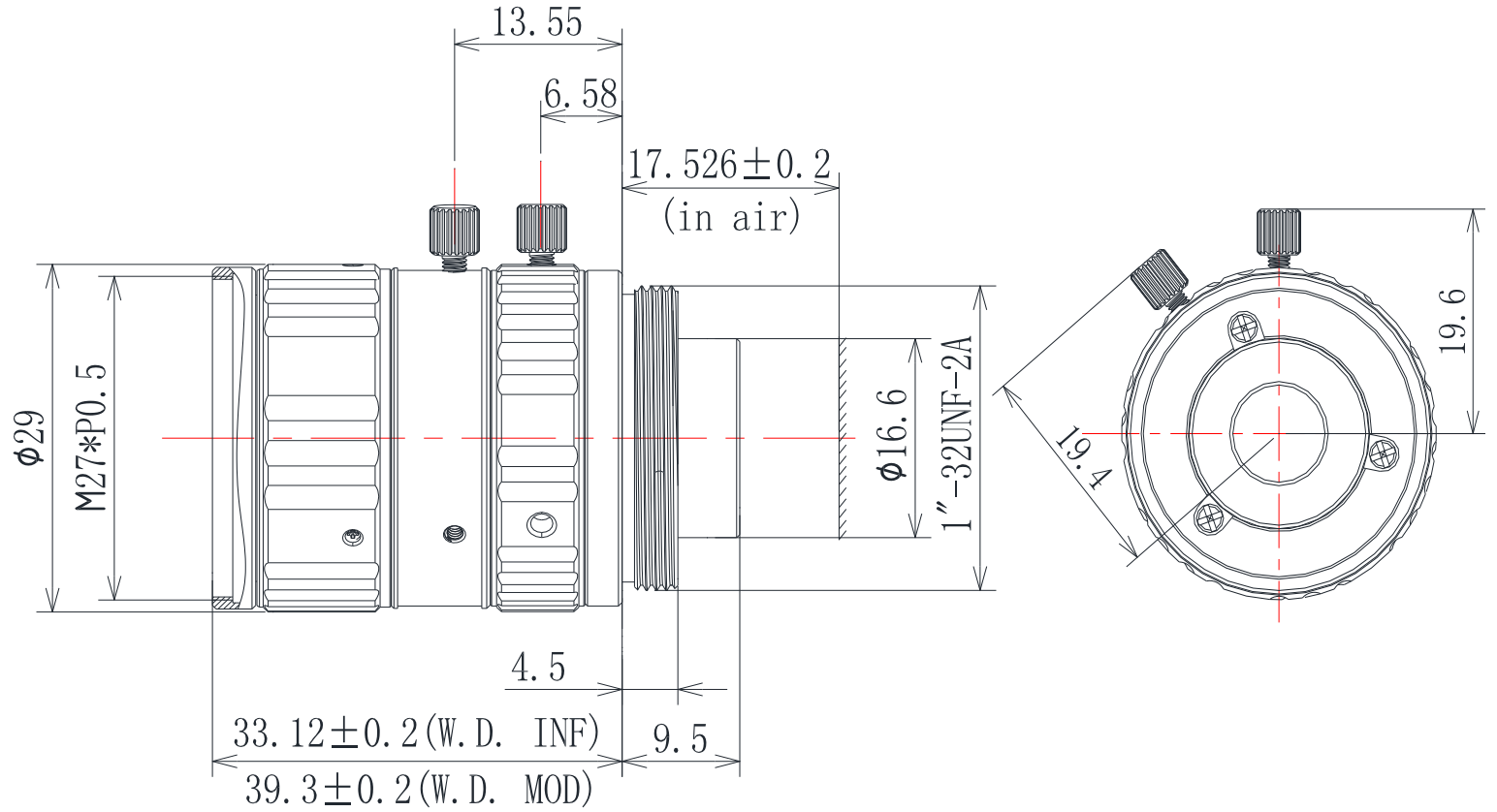


## 主要参数 (Key Parameters)

### 光学参数规格 (Optical Specifications)

NO.	项目 (Items)	具体规格 (Specification)			备注 (Note)	
1	F No.	F2.8-F16±10%				
2	焦距(Focal-Length)	17.1mm±5%			At MOD.	
		15.6mm±5%			At infinity.	
3	光学后焦 (Optical Back Focal Length)	9.97±0.2 (in air)			At MOD, In air..	
		9.97±0.2 (in air)			At infinity, In air..	
4	法兰后焦 (Flange Back Focal Length)	17.526±0.2 (in air)			At MOD, In air.	
		17.526±0.2 (in air)			At infinity, In air.	
5	镜头总长(TTL)	56.83±0.2 (in air)			At MOD, In air.	
		50.65±0.2 (in air)			At infinity, In air.	
6	像面大小 (Image circle)	Φ9.4 (MAX)			1/1.8"	
7	镜片构成 (Lens structure)	5groups, 7elements				
8	接口 (Mount)	C 接口				
9	视场角(FOV)	sensor型号	H(水平)	V(垂直)	D(对角)	sensor尺寸
		1/3"	16.9°	12.7°	21.1°	At 0.4m.For 1/3" (D: 6mm, H:4.8mm, V: 3.6mm)Sensor.
		1/2"	22.3°	16.9°	28.0°	At 0.4m.For 1/2" (D: 8mm, H:6.4mm, V: 4.8mm)Sensor.
		1/1.8"	25.7°	17.5°	31°	At 0.4m.For 1/1.8" (D: 8.96mm, H:7.37mm, V: 4.92mm)Sensor.
10	光学畸变 (Optical Distortion)	-0.51%			At MOD.	
		-0.08%			At 0.4m..	
11	TV畸变 (TV Distortion)	-0.06%			At MOD.	
		0.04%			At 0.4m.	
12	相对亮度 (Relative Illumination)	88%			At the edge of the max image circle .	
13	最大主光线夹角 (CRA)	4.6°			At the edge of the max image circle .	
14	近摄距 (M.O.D)	0.1m				
15	前螺纹规格 (Filter Thread)	M27*P0.5				
16	重量 (Weight)	46.72g				
17	环保&安全 (HSF&Safety)	RoHS				

## 机构参数规格 (Mechanical Specifications)



项目	物距	角度
光圈调节环角度	F2.8-F16	43.4°
物调环角度	MOD-INF	212°

未注公差 (Tolerance):  $\Phi \pm 0.1$ ,  $L \pm 0.15$

未注单位 (Unit): mm

## 光学检测标准 (Optical Performance Testing Standard)

No.	检测项目 (Items)	描述 (Description)
1	解像力 (Resolution)	<p>1.1: TV实拍解像条件 (Condition)                      A:Chart: 6006专用chart                      B:拍摄距离(Distance): W.D.=400mm</p> <p>1.2: 拍摄方法(Method)                      A:旋转镜头调焦得到最清晰的像面中心后回调至像面均匀</p> <p>1.3: 拍摄标准(Criteria)                      W.D.=400mm                      拍摄 (resolution test) 中心<math>\geq 1800</math>本, <math>0.7Y \geq 1800</math>本, 边缘<math>\geq 1000</math>本                      (Center <math>\geq 1800</math>lines, <math>0.7Y \geq 1800</math>lines, Brink <math>\geq 1000</math>lines)</p>
2	外观标准 (Appearance Standards)	<p>2.1镜头内污 (LENS DUST)                      A:规格 60-40                      伤痕: 宽度 <math>&lt; 60\mu\text{m}</math>, 长度和 <math>&lt; D/2</math>, <math>\leq 15\mu\text{m}</math>不计;                      脏污: 单点直径 <math>&lt; 400\mu\text{m}</math>, <math>200\sim 400\mu\text{m}</math>点 <math>\leq 3</math>个, <math>\leq 200\mu\text{m}</math>不计。</p> <p>2.2其他外观(Other appearance)                      外表面颜色均匀, 无明显缺陷、污渍、异物伸出、明显划伤和收缩; 胶水不得溢入有效通光内。</p> <p>2.1 LENS DUST                      A: Specification 60-40                      Scratch: width <math>&lt; 60\mu\text{m}</math>, total length <math>&lt; D/2</math>, <math>\leq 15\mu\text{m}</math> ignored;                      Smudge: Single dot diameter <math>&lt; 400\mu\text{m}</math>, <math>200\sim 400\mu\text{m}</math> dot <math>\leq 3</math> pcs, <math>\leq 200\mu\text{m}</math> ignored.</p> <p>2.2 Other appearance                      Outside surface uniform color; no visible flaws, stains, foreign bodies extended, obvious scratch or contraction; no glue spill into the effective aperture.</p>

## 环境参数规格 (Environment Specifications)

No.	环境描述 (Items)	条件 (Description)
1	存放环境 (Storage condition)	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ ; 10-90%RH (No condensing)
2	工作环境 (Operation condition)	$-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$ ; 10-90%RH (No condensing)

## 信赖性要求 (Reliability Requirement)

No.	项目 (ITEM)	测试条件 (CONDITION)
1	高温存储试验 STORAGE TEST AT HIGH TEMPERATURE	镜头在85℃温度中存放48小时，之后再存放在常温常湿环境中恢复6小时，所有规格满足规定要求 All specifications meet the requirements after lens is exposed to 85℃ for 48 hours and then to normal temperature/humidity for 6 hours
2	低温存储试验 STORAGE TEST AT LOW TEMPERATURE	镜头在-40℃温度中存放48小时，之后再存放在常温常环境中恢复6小时后，所有规格满足规定要求 All specifications meet the requirements after lens is exposed to -40℃ for 48 hours and then to normal temperature/humidity for 6 hours
3	高温高湿试验 HIGH TEMPERATURE/HIGH HUMIDITY CHARACTERISTIC	镜头在温度60℃/湿度95%条件下存放48小时，之后再存放在常温常湿环境中恢复6小时后，所有规格满足规定要求 All specifications meet the requirements after lens is exposed to +60℃/95%RH for 48 hours and then to normal temperature/humidity for 6 hours
4	热冲击试验 TEMPERATURE CYCLE TEST	镜头在-40℃条件下保持30分钟，然后升温至+70℃，稳定后保持30分钟作为一个周期，共10个循环。之后再存放在常温常湿环境中恢复6个小时，所有规格满足规定要求 Lens is exposed to -40℃ for 30min, then heated to +70°C and kept for 30 minutes as one cycle, 10 cycle shall be performed and then to normal temperature/humidity for 6 hours. All specifications meet the specified requirements after that

## 信赖性要求 (Reliability Requirement)

No.	项目 (ITEM)	测试条件 (CONDITION)
5	振动试验 VIBRATION TEST	<p>镜头在振幅为 3.5mm、频率为 10-55-10 Hz 的正弦波参数下，在三个互相垂直的轴线上依次振动3个循环，每个轴向5分钟后，镜头无松动并满足所有规格要求</p> <p>All specifications meet the requirements after lens is subjected to the sine wave of 3.5mm amplitude and 10-55-10 Hz, three circulations and 5 min for each directions.</p> <p>镜头在功率谱密度为<math>0.01G^2</math>/HZ、频率为50-2000HZ的随机振动状态下，在3个相互垂直的轴线上依次振动1.5h后，镜头无松动并满足所有规格要求</p> <p>All specifications meet the requirements after lens is subjected to the stochastic wave of <math>0.01G^2</math>/HZ PSD and 50-2000HZ, three circulations and 90 min for each directions.</p>
6	跌落试验 SHOCK TEST	<p>按包装仕样进行包装后镜头，在距木质地板1.0米处，按1角3棱6面自由跌落各5次，镜头无松动并满足所有规格要求</p> <p>Packing lens according to instructions, lens dropped onto the wooden plate from a height of 1.0 meter , onto one corner, three edges and six suifaces, 5 times. All specifications meet the requirements after that.</p>