

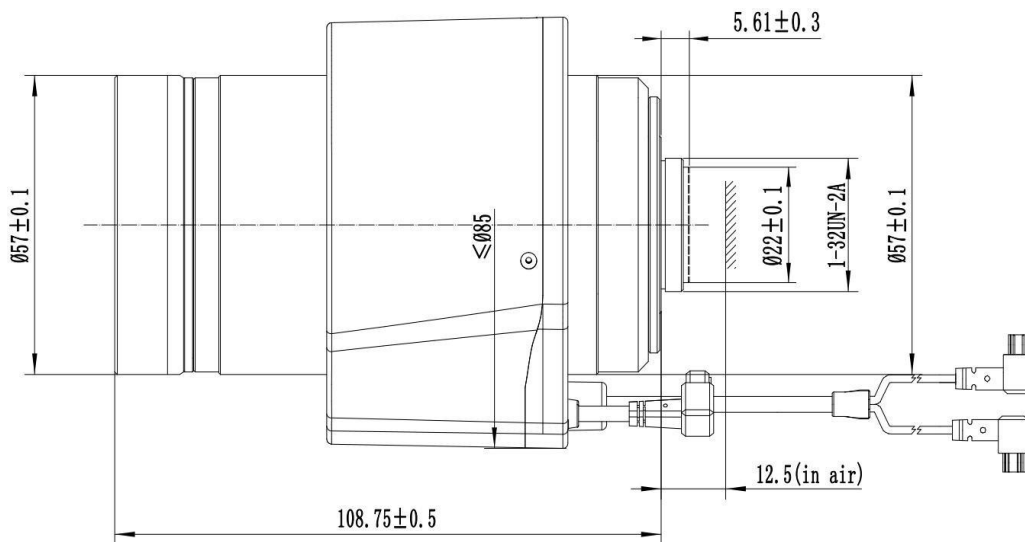
(Parameter of Lens)

(Model) :

BLVZ112P2070MP8-IR



| | | | | | | | | |
|----------------------------------|--------------------------------|------------------|-------|---------------|-------|------------------|------|-----|
| (Resolution) | 8 MegaPixel | | | | | | | |
| (Image format) | 1/1.2" (Φ12.8mm) | | | | | | | |
| (Focal length) | 20 (W) ~70 (T) (±5%mm) | | | | | | | |
| (Aperture) | F1.3 (W) ~1.5 (T) (±5%mm) | | | | | | | |
| (Mount) | CS | | | | | | | |
| (Field Angle) D×H×V(°) ±5% | | 1/1.2" (16:9) | | 2/3" (4:3) | | 1/1.8" (16:9) | | |
| | | Wide | Tele | Wide | Tele | Wide | Tele | |
| | | D | 37.3 | 10.8 | 31.7 | 9.3 | 25.2 | 7.5 |
| | | H | 32.1 | 9.4 | 25 | 7.5 | 21.9 | 6.6 |
| V | 17.7 | 5.3 | 18.6 | 5.6 | 12.2 | 3.7 | | |
| (Optical Distortion) | -7.50% | 0.8% | -5.4% | 0.6% | -3.4% | 0.4% | | |
| (CRA) | 4.1 | 2.7 | 4.60 | 2.00 | 4.50 | 1.10 | | |
| (Weight) | 534±5g | | | | | | | |
| (Coating Range) | 400-900nm | | | | | | | |
| (M. O. D.) | 3m (W) ~5m (T) | | | | | | | |
| (Dimension) | Φ57×108.75mm | | | | | | | |
| (Flange BFL) | 12.5±0.15mm (in air) | | | | | | | |
| (BFL) | 9.62mm (in air) | | | | | | | |
| (MBF) | 6.55mm (in air) | | | | | | | |
| (Relative illuminance) | 42%@Φ12.8mm(W), 40%@Φ12.8mm(T) | | | | | | | |
| (IR Correction) | Yes | | | | | | | |
| (Operation) | (Iris) | | | (P-Iris) | | | | |
| | (Focus) | | | (Motorized) | | | | |
| | (Zoom) | | | (Motorized) | | | | |
| (Operating temperature) | -30°C ~+70°C | | | | | | | |



| | | | |
|-----------------------|----------|-----------|------------|
| Size tolerance (mm) : | 0-10±0.2 | 10-30±0.3 | 30-120±0.5 |
| Angle tolerance | ±2° | | |

(P-Iris)

(Model) :

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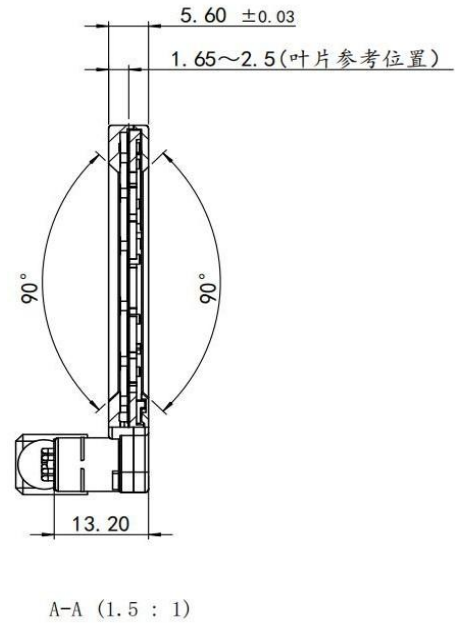
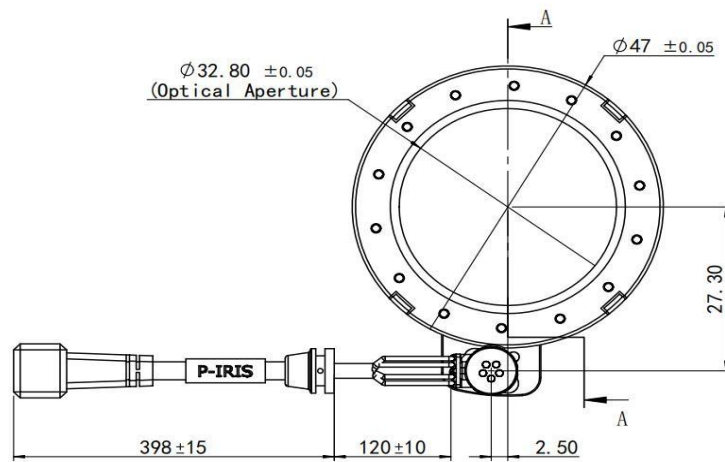
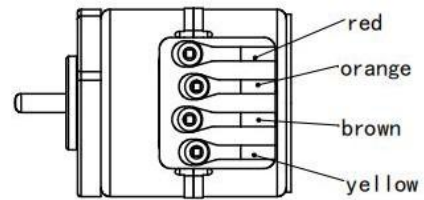
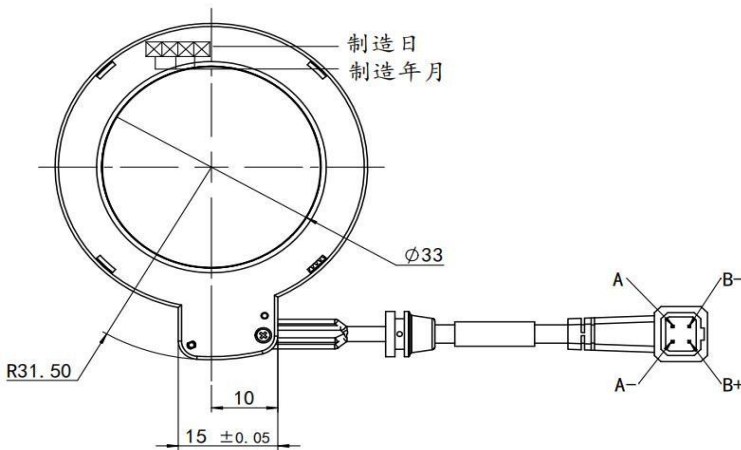
| 一般公差 | 1級 | 2級 | 3級 |
|---------------------|------------|-----------|-----------|
| $L \leq 6$ | ± 0.05 | ± 0.1 | ± 0.2 |
| $6 < L \leq 30$ | ± 0.1 | ± 0.2 | ± 0.5 |
| $30 < L \leq 120$ | ± 0.15 | ± 0.3 | ± 0.8 |
| $120 < L \leq 315$ | ± 0.2 | ± 0.5 | ± 1.2 |
| 角度公差: $\pm 1^\circ$ | | | |

| Step | PHASE | | | |
|------|-------|----------------|---|----------------|
| | A | A ⁻ | B | B ⁻ |
| 1 | H | L | L | H |
| 2 | H | L | H | L |
| 3 | L | H | H | L |
| 4 | L | H | L | H |



两线圈励磁方式及顺序
 CLOSE→OPEN: 1→2→3→4→1
 OPEN→CLOSE: 1→4→3→2→1

Open基准励磁: A: H、A⁻: L、B: L、B⁻: H



| | | | |
|-------------------|----------------------|-----------------------|---|
| Max. Image Circle | $\Phi 32.8\text{mm}$ | Resistance | $40 \pm 10\% \Omega$ (at 25°C) |
| Iris Wire | (brown) | B ⁻ | Rated Voltage |
| | (yellow) | A ⁺ | DC 3.3V |
| | (red) | B ⁺ | Operating Voltage |
| | (orange) | A ⁻ | DC 3.3 -5.0V |
| Dimension | 见尺寸图 | Motor Step Angle | $18^\circ \pm 3^\circ$ /step |
| | | Output Step Angle | 0.845° /step |
| Reduction Ratio | 1:21.3 | Continuous Time | 30 sec (at 2.7DCV) |
| | | Operating Environment | $-40^\circ\text{C} \sim 80^\circ\text{C}$ |

(Motor)

(Model) :

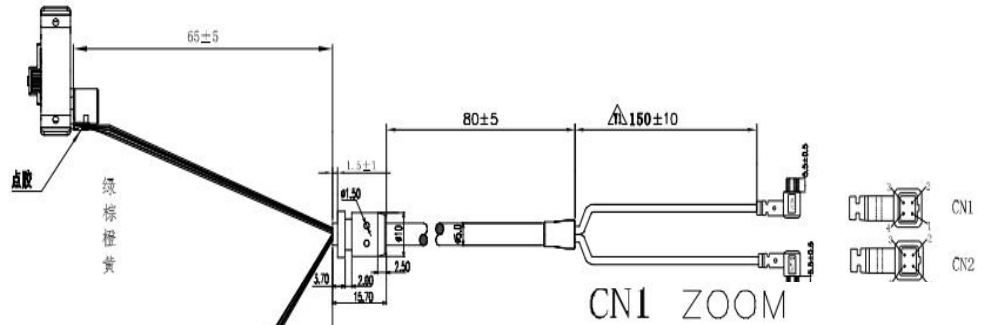
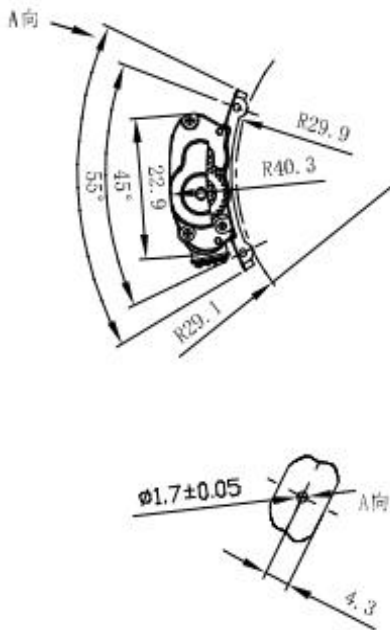
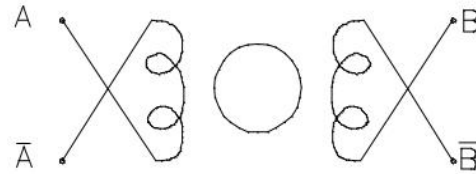
BLVZ112P2070MP8-IR

SEQUENCE OF EXCITATION

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

Output Shaft Rotation CW

CONNECTION DIAGRAM



| PIN NO. | COLOR |
|---------|--------------------|
| ① | (ZOOM A+) YELLOW 黄 |
| ② | (ZOOM A-) BROWN 棕 |
| ③ | (ZOOM B+) ORANGE 橙 |
| ④ | (ZOOM B-) GREEN 绿 |

CN2 FOCUS

| PIN NO. | COLOR |
|---------|--------------------|
| ① | (FOCUS A+) RED 红 |
| ② | (FOCUS A-) WHITE 白 |
| ③ | (FOCUS B+) BLACK 黑 |
| ④ | (FOCUS B-) BLUE 蓝 |

ELECTRICAL CHARACTERISTIC

1. RATED VOLTAGE: 5V DC
2. COIL RESISTANCE: 30Ω ± 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: 1:172.1
11. INSULATION RESISTANCE: 5MΩ Min. /100 VDC
12. INSULATION STRENGTH: 3mA max. 100VAC/1 SECOND
13. OPERATING TEMPERATURE RANGE: -40~+80°C
14. OUTPUT TORQUE: 300gf-cm(min) AT 500pps 5VDC

输出齿参数

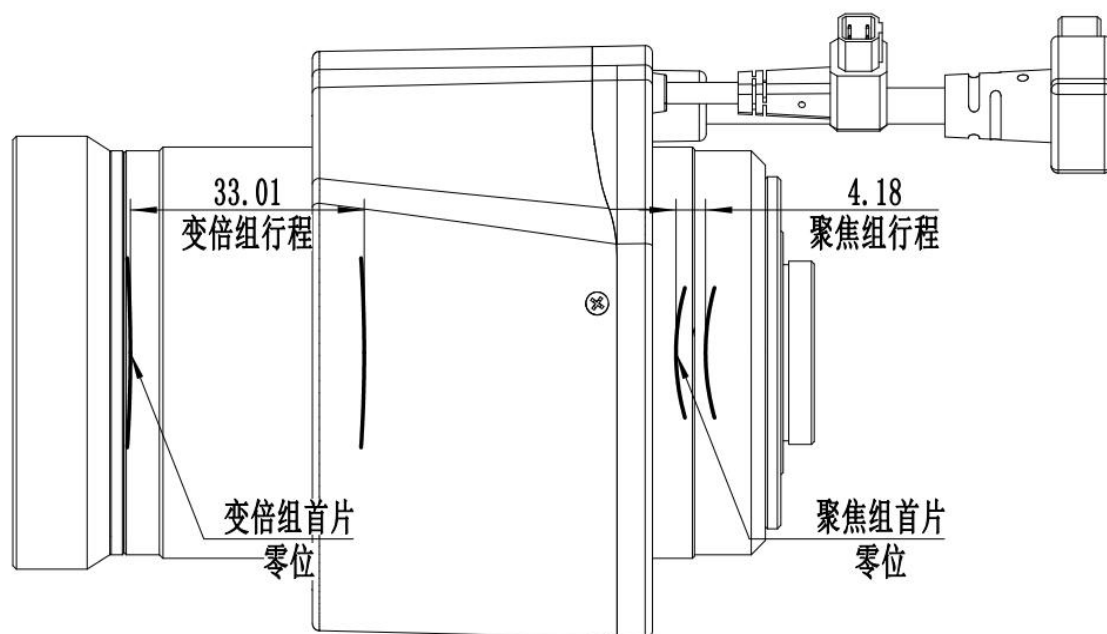
| | |
|-------|----------------|
| 压力角 | 20° |
| 模数 | 0.3 |
| 齿数 | 14 |
| 齿顶圆直径 | φ 4.8 |
| 分度圆直径 | φ 4.2 |
| 齿根圆直径 | φ 3.39 |
| 精度等级 | JGMA-116-02 4级 |

(Motor step meter)

(Model) :

BLVZ112P2070MP8-IR

| | ZOOM | FOCUS |
|-----|---------|--------|
| 1 | 0 | 7671.9 |
| 1.3 | 3456.1 | 5315.1 |
| 1.6 | 6175.4 | 3811.3 |
| 1.9 | 8263.1 | 3128.0 |
| 2.2 | 10017.5 | 3127.2 |
| 2.5 | 11403.5 | 3716.5 |
| 2.8 | 12631.5 | 4878.3 |
| 3.1 | 13701.7 | 6577.4 |
| 3.4 | 14491.2 | 8388.3 |



| (Test Standard) | | | |
|------------------|-----------------|---------------------|--|
| (Model) : | | BLVZ112P2070MP8-IR | |
| Test Items | | Test Content | |
| 1 | Resolution Test | Test Conditions | Flange Back Length:12.5mm(in air) Plate Glass Thickness:1.0±0.2mm Project Distance: Wide:3m, with RL7035 Relay Lens Tele:3m, with RL7035 Relay Lens |
| | | Center \geq | 250 lp/mm(Wide), 200 lp/mm(Tele) |
| | | $\phi 10\geq$ | 125 lp/mm(Wide), 125 lp/mm(Tele) |
| | | $\phi 12\geq$ | 100 lp/mm(Wide), 100 lp/mm(Tele) |
| | | Image Standard | The central shadow within the detection range was less than 1 times., Fog ≤ 1.5 times, Long focal edge drag shadow ≤ 1 times, Drag Shadow on short focal edge ≤ 1 times. |
| Environment | | ≤ 1 lux | |
| 2 | Appearance | Inside Lens Barrel | 60 Scratch: The maximum scratch width is allowed to be 0.06mm, scratch length on the first surface < 1 mm, scratch length on other surface $< \Phi / 4$. Scratch total length $< \Phi / 2$. 40 Bright Spots: (the size of the bright spot is determined by the longest side)The maximum bright spot size is allowed to be 0.4mm, only one in the middle and edge regions. Two bright spots is allowed when the size ≤ 0.2 mm, and the distance must ≥ 1 mm; |
| | | Outside Lens Barrel | The lens barrel has no obvious color difference, scratch, break, deformation; the glue is not allowed to overflow into the clear aperture; |
| 3 | 光 Auto Iris | Appearance | Cable and connector of iris have no obvious break, deformation, length of pins must be same. |
| | | Appearance | Open and close normally. |

(Reliability and Environmental Testing)

(Model) :

BLVZ112P2070MP8-IR

Test Items

Test Content

1

Temperature Cycling Test

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

Damp heat test

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

Drop Test

Lens drops from the height of (1 ± 0.1 m) to the concrete ground. After the testing, the indicators are qualified.

4

Vibration Test

Lens vibrates 2h in sinusoidal wave under 1 mm of amplitude and 50Hz of frequency. After the testing, refocus the lens, the indicators are qualified.

(Packing Specification)

(Model) :

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1. After the lens is covered with the cover, attach the internal standard;
2. Put the lens into the lined paper box, and put in the desiccant and instructions;
3. Cover the inner lining cover, pack the carton, and affix the external label;
4. Seal the corrugated box with tape and mark the surface.