

ASPHERIC LENS EQUATION

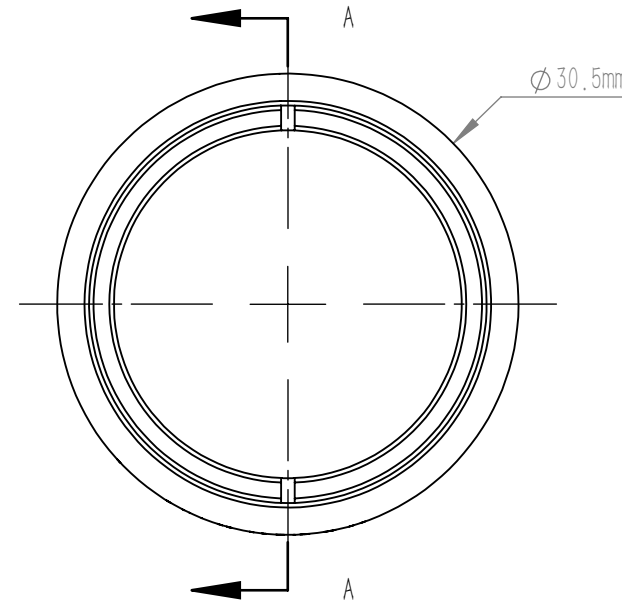
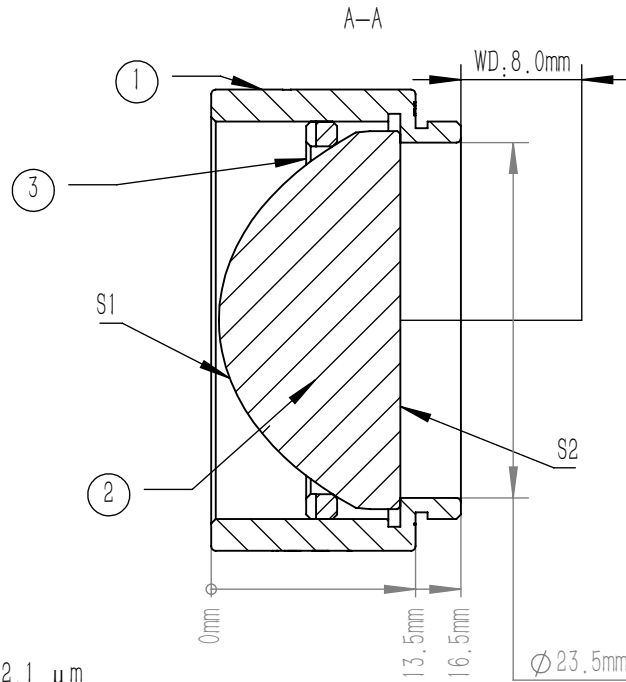
| | R | k | A4 |
|----|--------|---------|---------|
| S1 | 10.462 | -0.6265 | 1.5E-05 |
| S2 | PLANO | - | - |

ASPHERIC COEFFICIENTS

$$z = \frac{Y^2}{R(1 + \sqrt{1 - (1+k)Y^2/R^2})} + A_4Y^4$$

NOTE

- DESIGN WAVELENGTH: 633.0 nm
- CLEAR APERTURE: >90%CA
- OPERATION WAVELENGTH: 380 nm-2.1 μm
- NA: 0.60
- F/#: 0.89
- DIAMETER TOLERANCE: +0.0/-0.5 mm
- THICKNESS TOLERANCE: ±0.3 mm
- FOCAL LENGTH: 20.1 mm±8%
- BACK FOCAL LENGTH(REF): 12.0 mm
- SURFACE QUALITY(S1,S2): 80/50 (S/D)
- SURFACE FLATNESS(S2): λ/2@632.8 nm
- CENTRATION: <30 arcmin
- CHAMFER: <0.2 mm, 45°
- COATING (S1,S2) : UNCOATED



| | PART DESCRIPTION | MATERIAL |
|---|------------------|--------------------|
| ① | SM1L12.5A | ANODIZED ALUMINIUM |
| ② | ASL2520 | B270 |
| ③ | SM1SR | ANODIZED ALUMINIUM |

| | | | | | | | |
|--|---------|------------|--|-----------------------|-------|-----|--|
| DRAWING PROJECTION | | | | cruiss-optics.com | | | |
| | NAME | DATE | ASL2520M | | | | |
| DRAWN | WENSHUO | 2024/08/27 | ∅ 25.0 mm, F=20.1 mm, NA=0.60 ASPHERIC CONDENSER LENS UNCOATED | | | | |
| APPROVAL | SHAWN | 2024/08/27 | MATERIAL | WEIGHT | SCALE | REV | |
| FOR INFORMATION ONLY NOT FOR MANUFACTURING PURPOSES | | | N/A | | 2:1 | A | |