

Prism

Mirror

Window

Beamsplitter

Waveplate

IR Optics

Lens

Filter

Micro Optics

Plastic Optics

Right Angle Prism

Introductions



A Right Angle Prism is used as a mirror to deviate light through 90 degree, and also as a retro reflector to deflect light through 180 degree by total internal reflection.

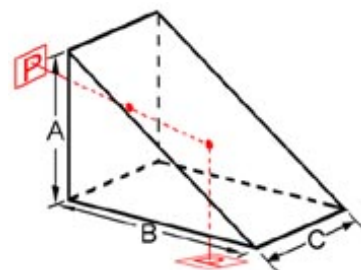
90-degree Deflection

90 degree deflection occurs at the hypotenuse face. The image is erected and reversed

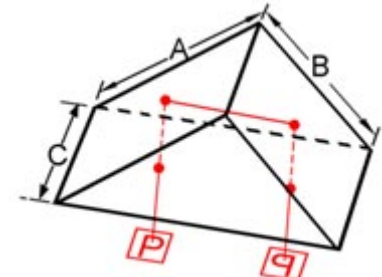
180-degree Deflection

180 degree deflection uses the hypotenuse as the entrance and exit face.

Beam Path



90 degree Deflection



180 degree Deflection

Standard Specifications

| Items | Specification |
|---------------------|-------------------------|
| Material | UV Grade Fused Silica |
| Dimension Tolerance | +0/ -0.20 mm |
| Clear Aperture | > 80% |
| Surface Quality | scratch and dig 60-40 |
| Angle Tolerance | 30 arc seconds |
| Flatness | $\lambda/2$ at 632.8 nm |

Notes:

- Besides Fused Silica, BK7, ZF1, Sapphire and any other optical glass is available.
- Angle tolerance such as 3', 1', 10" is available.
- Surface Quality we could reach 20-10 scratch and dig.
- Please show us the size and the coating specification.

| Angle Tol. | 3 min. | 1 min. | 30 sec. |
|------------|----------|----------|------------|
| Size (mm) | Part NO. | Part NO. | Part NO. |
| A=B=C=10.0 | PRA1101 | PRA1201 | A=B=C=10.0 |
| A=B=C=12.7 | PRA1102 | PRA1202 | A=B=C=12.7 |
| A=B=C=25.4 | PRA1103 | PRA1203 | A=B=C=25.4 |

Right Angle Prism

Optical Components

PRA 02