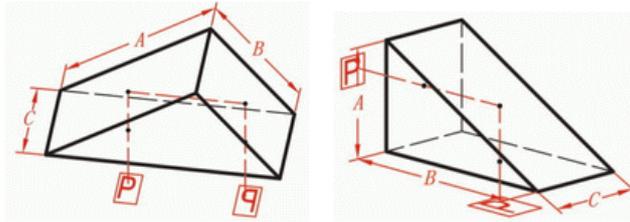


Right Angle Prism



Right Angle Prism can be used to deviate a light path by 90° or 180° , depending on which surface is used as the input for the light source. Right Angle Prism is fabricated from N-BK7, UV fused silica, CaF₂, ZnSe, or Ge. N-BK7(K9) Right-Angle Prism is available uncoated or with one of our three standard broadband antireflection coatings on either the hypotenuse or both legs, thereby reducing surface losses.

Due to total internal reflection (TIR), the right angle prism can be used as a 90° reflector. When the input light is incident on one of the prism's legs, it undergoes TIR at the glass/air boundary of the hypotenuse and exits via the other prism leg. This 90° deviation of the input light makes the right angle prism a suitable alternative for a mirror.

Right angle prism can be used as a 180° retroreflector. When the input light is incident on the face of the hypotenuse, it undergoes TIR at the glass/air boundary at the prism legs. It undergoes TIR a second time at the next prism leg and exits the hypotenuse in a path parallel to that of the input beam. Like the retroreflector, the 180° deviation of the light path is independent of the angle at which the light enters the prism.

Specification:

Material.....BK7 grade A optical glass
 Dimension Tolerance.....+0.0, -0.2mm
 Clear Aperture.....> 85%
 Angle Tolerance.....see the table
 Flatness..... $\lambda/8$ @632.8nm
 Surface Quality.....60-40
 Bevel.....Protective
 Coating.....No Coating

P/N	A	B	C	Deviation
20101	3.20	3.20	3.20	180"
20102	3.20	3.20	3.20	60"
20103	3.20	3.20	3.20	30"
20104	3.20	3.20	3.20	10"
20105	8.00	8.00	8.00	180"
20106	8.00	8.00	8.00	60"
20107	8.00	8.00	8.00	30"
20108	8.00	8.00	8.00	10"
20109	10.00	10.00	10.00	180"
20110	10.00	10.00	10.00	60"
20111	10.00	10.00	10.00	30"
20112	10.00	10.00	10.00	10"
20113	12.70	12.70	12.70	180"
20114	12.70	12.70	12.70	60"
20115	12.70	12.70	12.70	30"
20116	12.70	12.70	12.70	10"

- Dimension unit: mm
- Other sizes and coatings are available upon request.