

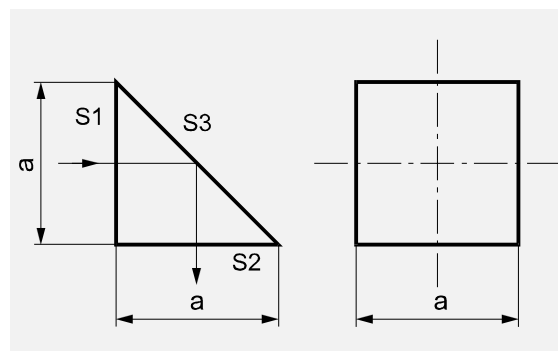
In this section SOLAR LS offers beamsteering prisms, such as right angle (or 90 Degree Bending) prisms and 180 Degrees Folding prisms. These prisms are serially produced and are available in stock. Any other prisms of any shape and dimensions, can be, however, manufactured upon request.

Right angle prisms are used for the beam rotation at an angle of 90°. Their operation is based on a full internal reflection by the hypotenuse face; the prisms input/output faces are normally anti-reflection coated. Due to ease in mounting and to a relatively low dependence on external mechanical and acoustic loads, these prisms are often preferred to inclined mirrors. Furthermore, an ARC is comparatively low-cost and can be made far more wide-band than a mirror. In this connection, right angle prisms are indispensable in rotation of wide-band tunable laser beams. SOLAR LS offers a wide range of ARCs for one, two wavelengths as well as for wavelength ranges of a number of known lasers, including tunable lasers, and their harmonics.

180 Degree Folding Prisms have anti-reflection coated hypotenuse faces. Due to utilization of a full internal reflection by faces-legs, these prisms reverse the direction of the incident beam from the initial direction. SOLAR LS offers a variety of optional anti-reflection coatings for these prisms. In case you are interested in anti-reflection coating other than those offered, please, specify your requirements.

Specifications

MaterialBK-7 or UV Fused Silica
 S_1, S_2, S_3 surfaces:
 Surface Figure $\lambda/4$ (SF: $\lambda/10$ upon request)
 Surface Quality40-20 (SQ: 20-10 upon request)
 Size Tolerances+0.0 mm; -0.15 mm
 Angle Between Input
 and Output Beam $90^\circ \pm 3'$
 Chamfer0.5 mm at 45°
 Clear Aperture85%



ORDERING INFORMATION

Part No		a (mm)
BK 7	UVFS	
PR0151	PR1151	15
PR0201	PR1201	20
PR0251	PR1251	25

S_1 & S_2 surfaces can be AR-coated upon request

Part No		a (mm)
BK 7	UVFS	
PR0151/□	PR1151/□	15
PR0201/□	PR1201/□	20
PR0251/□	PR1251/□	25

To order, select a part number from the product table and complete the ordering blocks in the following way: add, instead of □, ARC part number (see the antireflection coating section page 5-1) to prism part number. For example:

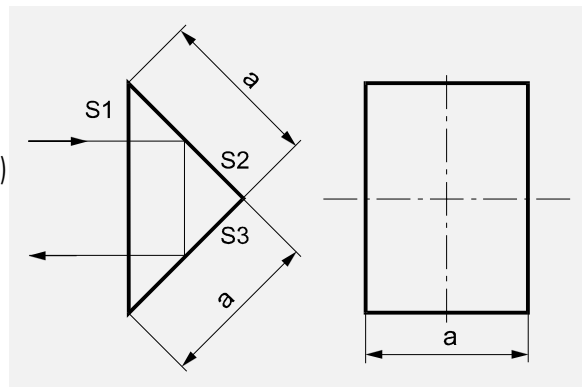
PR0201/AR04

AR04 - ARC part number for 532 nm.

Prisms with other sizes and parameters can be available upon request.

SPECIFICATIONS

Material BK7 or UV Fused Silica
 S_1, S_2, S_3 surfaces:
 Surface Figure $\lambda/4$ (SF: $\lambda/10$ upon request)
 Surface Quality 40-20 (SQ: 20-10 upon request)
 Size Tolerances +0.0 mm; -0.15 mm
 Angle Between Input
 and Output Beam ... $180^\circ \pm 3'$
 Chamfer 0.5 mm at 45°
 Clear Aperture 85%



ORDERING INFORMATION

Part No		a (mm)
BK 7	UVFS	
PF0151	PF1151	15
PF0201	PF1201	20
PF0251	PF1251	25

S_1 surfaces can be AR-coated upon request

Part No		a (mm)
BK 7	UVFS	
PF0151/□	PF1151/□	15
PF0201/□	PF1201/□	20
PF0251/□	PF1251/□	25

To order, select a part number from the product table and complete the ordering blocks in the following way: add, instead of □, ARC part number (see the antireflection coating section page 5-1) to prism part number. For example:

PH0201/AR04

AR04 - ARC part number for 532 nm

Prisms with other sizes and parameters can be available upon request.

In this section SOLAR LS offers dispersion prisms, such as Equilateral Dispersing Prisms and Pellin Broca Dispersing Prisms. These prisms are serially produced and are available in stock. Any other prisms of any shape and dimensions, can be, however, manufactured upon request.

Equilateral Dispersing Prisms are used to separate or combine different wavelengths. Due to that the beam is incident on the prism and emerges from it at a Brewster angle, these prisms introduce, in fact, no losses into a propagating p-polarized beam and therefore are widely used for intracavity dispersing components in lasers.

Pellin Broca Dispersing Prisms combine dispersing properties with the ability to rotate the beam, incident onto a prism, at an angle of 90° . SOLAR LS Pellin-Broca prisms are made such as to provide low losses for a p-polarized beam by bringing the angles of incident and emerging beams close to a Brewster angle. Due to this reason they can be used as dispersing components, after Raman Shifters and harmonic generators, practically over the entire transmission region of the prism material.

SPECIFICATIONS

Material UV Fused Silica, BK7 or Flint Glass

S_1, S_2 surfaces:

Surface Figure $\lambda/10$

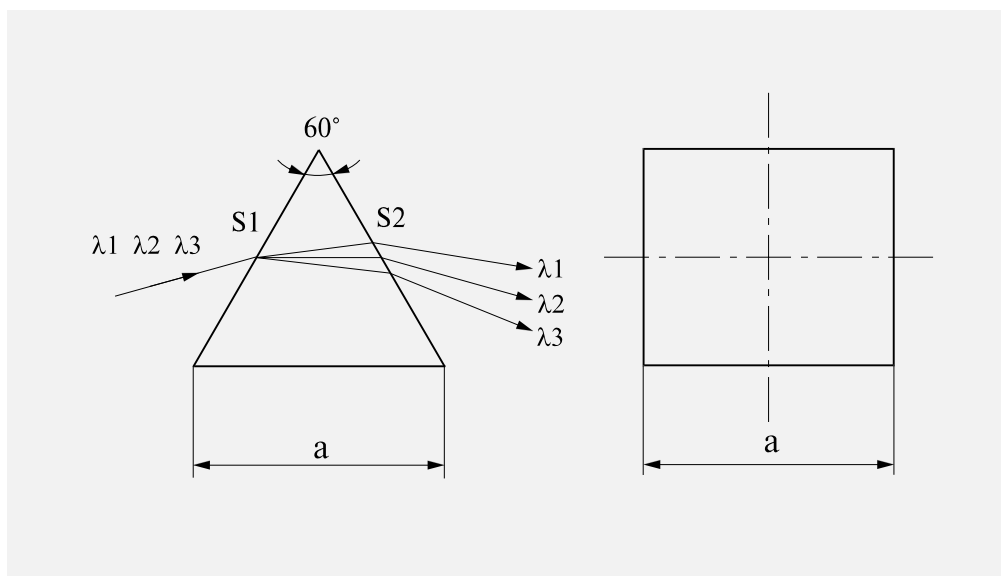
Surface Quality 20-10

Size Tolerances +0.0 mm; -0.2 mm

60° Angle Tolerance $\pm 3'$

Chamfer 0.5 mm at 45°

Clear Aperture 85%



ORDERING INFORMATION

BK 7	Part No		a (mm)
	UVFS	Flint Glass	
PD0151	PD1151	PD7154	15
PD0201	PD1201	PD7204	20
PD0251	PD1251	PD7254	25

