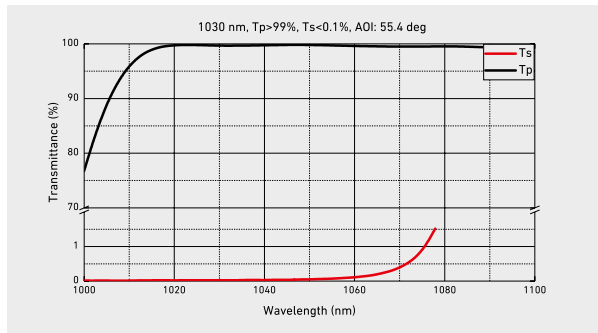
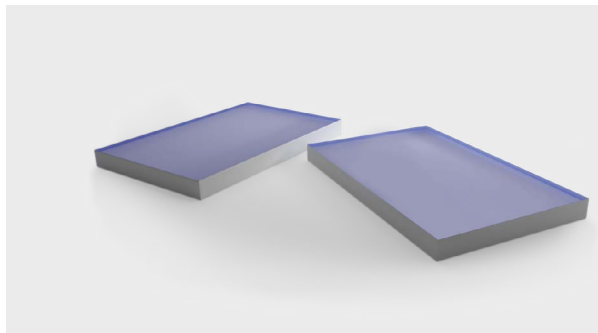


High-contrast thin-film polarizers



4Lasers standard high contrast Brewster-type and 45° thin-film polarizers provide high extinction ratio $T_p:T_s > 1000:1$ thanks to the ion beam sputtered (IBS) thin-film coatings. Moreover, these polarizers are ideal for high-power levels and UV wavelength range. 4Lasers

design and manufacture standard and custom Brewster type high contrast polarizers for the wavelength range between 230 nm and 2000 nm with face dimensions up to 160 mm.

Main features

- Substrates fabricated from high-quality UV grade fused silica optical glass
- Designed for most popular laser line and harmonic wavelengths
- Brewster and 45° angle of incidence selection
- Typical extinction ratio $T_p:T_s > 1000:1$
- Custom dimensions, operating wavelength available upon request

Application examples

- Polarization separation
- Optical isolation
- Polarization cleaning
- Laser power attenuation

Standard specifications

HIGH CONTRAST THIN-FILM POLARIZERS	
Material	UVFS
Clear aperture	>85%
Face dimensions tolerance	+0/0,15 mm
Thickness tolerance	± 0,25 mm
Parallelism error	<30 arcsec
Protective chamfers	<0,35 mm at 45°
Surface quality	20-10 S-D
Surface flatness	<λ/2@632,8 nm for 10x20 mm; <λ/2@632,8 nm for 20x40 mm
Transmitted wavefront distortion	<λ/10@632,8 nm for 10x20 mm; <λ/6@632,8 nm for 20 x 40 mm
Laser induced damage threshold	>12 J/cm²@1064 nm, 10 ns (for 1064 nm polarizer)
Mount	Unmounted

Standard products

FACE DIMENSIONS	THICKNESS	WAVELENGTH	TRANSMISSION (P-POL)	TRANSMISSION (S-POL)	AOI	SKU	PRICE
20 x 15 mm	6 mm	532 nm	>98%	<0,2%	45°	9192	245 €
		1030 nm	>98%	<0,2%	45°	9194	245 €
		1064 nm	>98%	<0,2%	45°	9196	245 €
10 x 20 mm	5 mm	343 nm	>96%	<0,2%	55,4°	9185	105 €
		355 nm	>96%	<0,2%	55,4°	9186	105 €
		515 nm	>99%	<0,1%	55,4°	9187	105 €
		532 nm	>99%	<0,1%	55,4°	9188	105 €
		1030 nm	>99%	<0,1%	55,4°	9189	105 €
		1064 nm	>99%	<0,1%	55,4°	9190	105 €
20 x 15 mm	6 mm	355 nm	>96%	<0,2%	55,4°	9191	205 €
		532 nm	>99%	<0,1%	55,4°	9193	205 €
		1030 nm	>99%	<0,1%	55,4°	9195	205 €
20 x 40 mm	5 mm	1064 nm	>99%	<0,1%	55,4°	9197	205 €
		343 nm	>96%	<0,2%	55,4°	9179	205 €
		355 nm	>96%	<0,2%	55,4°	9180	205 €
		515 nm	>99%	<0,1%	55,4°	9181	205 €
		532 nm	>99%	<0,1%	55,4°	9182	205 €
		1030 nm	>99%	<0,1%	55,4°	9183	205 €
		1064 nm	>99%	<0,1%	55,4°	9184	205 €