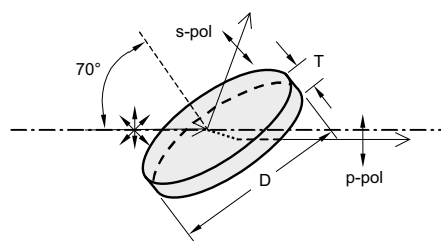


THIN FILM POLARIZERS (70° Angle of Incidence)

Broadband thin film polarizers separate the s- and p-polarization components in broad region at 70° angle of incidence (AOI). These polarizers are designed to be used in high energy laser systems, typically as extracavity attenuators for femtosecond lasers. Polarizers are made from UV fused silica and feature a high laser damage threshold – up to 50 mJ/cm², 50 fsec pulse, 50 Hz, 800 nm typical.



Specifications

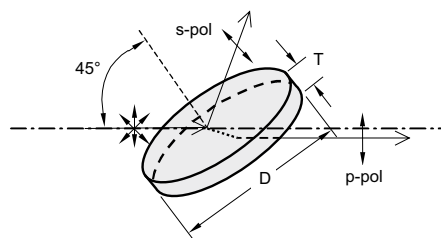
Substrate material	UV FS
Surface quality	20–10 scratch & dig (MIL-PRF-13830B)
Transmitted wavefront distortion	$\lambda/10$ @ 633 nm
Clear aperture	>90% of diameter
Angle of incidence (AOI)	$70 \pm 2^\circ$
Parallelism	<30 arcsec

Rectangular Polarizers. Material – UV FS. Rs / Tp > 99.5 / 95.0%.
Extinction ratio for transmitted light Tp/Ts >200:1

Centre wavelength, nm	Operating wavelength region, nm	Rectangular dimensions		Thickness T, mm	Catalogue number	Price, EUR
		Length, mm	Width, mm			
800	750 – 850	60.0	20.0	4.0	420-1696BBi70	500
1030	980 – 1080	60.0	20.0	4.0	420-1698BBi70	500

THIN FILM POLARIZERS (45° Angle of Incidence)

These thin film polarizers separate or combine the s- and p-polarization components at 45° angle of incidence. They are designed for use in high energy lasers. Polarizers are made from UV FS and feature high laser damage threshold reaching 10 J/cm² at 1064 nm.



Specifications

Substrate material	UV FS
Surface quality	20–10 scratch & dig (MIL-PRF-13830B)
Transmitted wavefront distortion	$\lambda/10$ @ 633 nm
Clear aperture	>90% of diameter
Angle of incidence (AOI)	$45 \pm 2^\circ$
Parallelism	<30 arcsec

TF POLARIZERS WITH HIGH EXTINCTION RATIO

Round Polarizers. Material – UV FS. Tp > 98%, Ts < 0.1%.
Extinction ratio for transmitted light Tp/Ts: >1000:1

Wavelength, nm	Diameter D, mm	Thickness T, mm	Catalogue number	Price, EUR
343	25.4	3	420-1242i45HE	377
515	25.4	3	420-1244i45HE	339
1030	25.4	3	420-1248i45HE	362
343	50.8	6	420-1512i45HE	736
515	50.8	6	420-1514i45HE	638
1030	50.8	6	420-1518i45HE	713

STANDARD THIN FILM POLARIZERS

Round Polarizers. Material – UV FS. Rs / Tp > 99.5 / 95.0%.
Extinction ratio for transmitted light Tp/Ts >200:1

Wavelength, nm	Diameter D, mm	Thickness T, mm	Catalogue number	Price, EUR
343	25.4	3	420-1242i45	274
515	25.4	3	420-1244i45	230
1030	25.4	3	420-1248i45	259
343	50.8	6	420-1512i45	523
515	50.8	6	420-1514i45	454
1030	50.8	6	420-1518i45	506