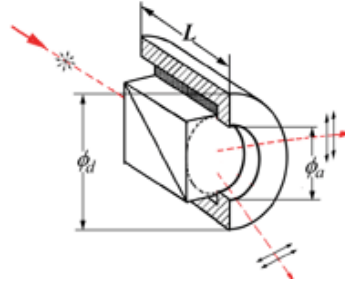


Wollaston Polarizer



Wollaston polarizer is made of two birefringent material prisms that are cemented together. The deviations of the ordinary and extraordinary beams are nearly symmetrical about the input beam axis, so that the Wollaston polarizing beam splitter has approximately twice the deviation of the Rochon. The separation angle exhibits chromatic dispersion, as shown in the blow. Any separation angle can be designed upon the requirement. The separation angle of standard products vs wavelength is shown in the plot below.

Specifications:

Material: α -BBO, Calcite, YVO₄, Quartz, MgF₂

Wavelength Range: α -BBO: 190-3500nm, Calcite: 350-2300nm, YVO₄: 400-4000nm, Quartz: 20-2300nm, MgF₂: 120-7500nm

Extinction Ratio: Calcite, Quartz: $<5 \times 10^{-5}$; α -BBO, YVO₄: $<5 \times 10^{-6}$, MgF₂: $<5 \times 10^{-6}$

Parallelism: <1 arc Min.

Surface Quality: 20-10

Beam Deviation: <3 arc minutes

Waveform Distortion: $\lambda/4$ @633nm

Damage Threshold: >500 MW/cm²

Coating: Single layer MgF₂

Mount: Black Anodized Aluminium

P/N	Material	Extinction Ratio	Separation Angle(°)	C.A.	O.D.	L
71501	α -BBO	$<5 \times 10^{-6}$	15-27	6.00	15.00	9.00
71502	α -BBO	$<5 \times 10^{-6}$	15-27	8.00	25.40	11.00
71503	α -BBO	$<5 \times 10^{-6}$	15-27	10.00	25.40	13.00
71504	α -BBO	$<5 \times 10^{-6}$	15-27	15.00	30.00	18.00
71505	α -BBO	$<5 \times 10^{-6}$	15-27	20.00	38.00	24.00
71506	Calcite	$<5 \times 10^{-6}$	16.7-22.5	6.00	15.00	9.00
71507	Calcite	$<5 \times 10^{-6}$	16.7-22.5	8.00	25.40	11.00
71508	Calcite	$<5 \times 10^{-6}$	16.7-22.5	10.00	25.40	13.00
71509	Calcite	$<5 \times 10^{-6}$	16.7-22.5	15.00	30.00	18.00
71510	Calcite	$<5 \times 10^{-6}$	16.7-22.5	20.00	38.00	24.00

P/N	Material	Extinction Ratio	Separation Angle(°)	C.A.	O.D.	L
71511	Quartz	<5x10 ⁻⁶	2~3	6.00	15.00	14.00
71512	Quartz	<5x10 ⁻⁶	2~3	8.00	25.40	18.00
71513	Quartz	<5x10 ⁻⁶	2~3	10.00	25.40	22.00
71514	Quartz	<5x10 ⁻⁶	2~3	15.00	30.00	32.00
71515	Quartz	<5x10 ⁻⁶	2~3	20.00	38.00	44.00
71516	YVO4	<5x10 ⁻⁶	19.6~23.3	6.00	15.00	8.00
71517	YVO4	<5x10 ⁻⁶	19.6~23.3	8.00	25.40	10.00
71518	YVO4	<5x10 ⁻⁶	19.6~23.3	10.00	25.40	12.00
71519	YVO4	<5x10 ⁻⁶	19.6~23.3	15.00	30.00	16.00
71520	YVO4	<5x10 ⁻⁶	19.6~23.3	20.00	38.00	21.00
71521	MgF2	<5x10 ⁻⁶	1.70~3.24	6.00	15.00	14.00
71522	MgF2	<5x10 ⁻⁶	1.70~3.24	8.00	25.40	18.00
71523	MgF2	<5x10 ⁻⁶	1.70~3.24	10.00	25.40	22.00
71524	MgF2	<5x10 ⁻⁶	1.70~3.24	15.00	30.00	32.00
71525	MgF2	<5x10 ⁻⁶	1.70~3.24	20.00	38.00	44.00

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