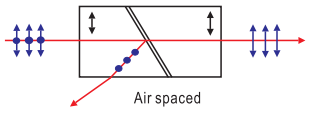
Glan Taylor Polarizers

Polarizer is a device that produces linearly polarized light from other states of polarization. Glan taylor polarizer consists two calcite prisms which are separated by an air space. Glan taylor polarizer will divide an entering unpolarized beam into two rays, one is the extraordinary ray that is transmitted through the other side, another is the ordinary ray that is totally internally reflected and absorbed.

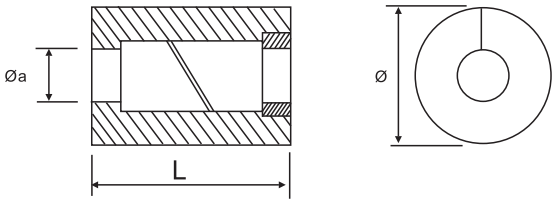
General Specifications

Material-	Calcite	α-BBO
Wavelength-	350-2300nm	190-3500nm
Extinction ratio-	$5x10^5$: 1	$1x10^6$: 1
Angle field-	7.7°	6°
Beam deviation-	3 arcmin	3 arcmin
Dimension tolerance-	±0.1mm	±0.1mm
Surface quality-	20-10 S/D	20-10 S/D
Clear aperture-	>90%	>90%
Coating on both sides-	Single layer MgF_2	Single layer MgF_2

Item#	Material	Clear aperture Øa (mm)	Holder Ø(mm)	Length (mm)	Application Wavelength
PZ1-C06	Calcite	6.0	15.0	15.0	350-2300nm
PZ1-C08	Calcite	8.0	25.4	17.0	
PZ1-C10	Calcite	10.0	25.4	19.0	
PZ1-C15	Calcite	15.0	30.0	23.0	
PZ1-B06	α-BBO	6.0	15.0	15.0	200--300nm 300--700nm 700-3000nm
PZ1-B08	α-BBO	8.0	25.4	17.0	
PZ1-B10	α-BBO	10.0	25.4	19.0	
PZ1-B15	α-BBO	15.0	25.4	23.0	
PZ1-Y08	YVO4	8.0	25.4	15.0	500-4000nm
PZ1-Y10	YVO4	10.0	25.4	17.0	



Mounted Polarizer

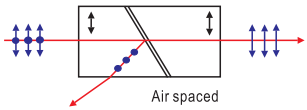


Glan Talor Polarizers -- with exiting holes
(Glan Laser Polarizers)

Also called Glan laser polarizers, the poarizers are specially designed for high energy application. The side of housing are drilled two holes. The ordinary ray is reflected through an angle and exits the polarizers through one of the holes.

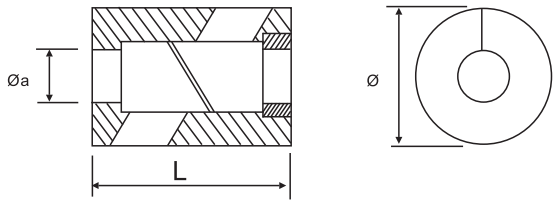
General Specifications

Material-	Calcite	α-BBO
Wavelength-	350-2300nm	190-3500nm
Extinction ratio-	$5x10^5$: 1	$1x10^6$: 1
Angle field-	7.7°	6°
Beam deviation-	3 arcmin	3 arcmin
Dimension tolerance-	±0.1mm	±0.1mm
Surface quality-	20-10 S/D	20-10 S/D
Clear aperture-	>90%	>90%
Coating on both sides-	Single layer MgF_2	Single layer MgF_2



Item#	Material	Clear aperture Øa (mm)	Holder Ø(mm)	Length (mm)	Application Wavelength
PZ2-C06	Calcite	6.0	15.0	15.0	350-2300nm
PZ2-C08	Calcite	8.0	25.4	17.0	
PZ2-C10	Calcite	10.0	25.4	19.0	
PZ2-C15	Calcite	15.0	30.0	23.0	
PZ2-B06	α-BBO	6.0	15.0	15.0	200--300nm 300--700nm 700-3000nm
PZ2-B08	α-BBO	8.0	25.4	17.0	
PZ2-B10	α-BBO	10.0	25.4	19.0	
PZ2-B15	α-BBO	15.0	25.4	23.0	
PZ2-Y08	YVO4	8.0	25.4	15.0	500-4000nm
PZ2-Y10	YVO4	10.0	25.4	17.0	

Mounted Polarizer



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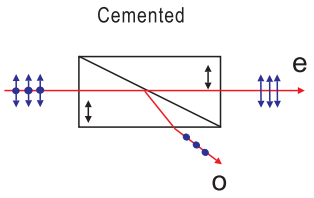
Glan Thompson Polarizers

Glan Thompson polarizer consists two same calcite prisms which are cemented together. The extraordinary ray is transmitted, while ordinary ray is deflected and absorbed.
Glan Thompson Polarizers are ideal choices for applications requiring a large field of view and high extinction ratio.

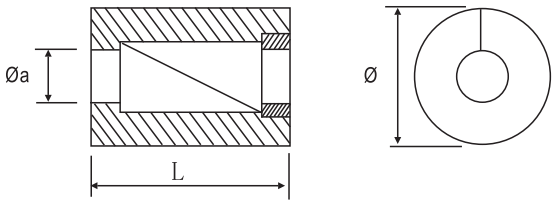
General Specifications

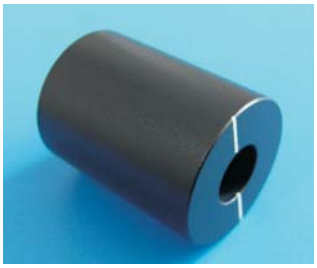
Material-	Calcite
Extinction ratio-	$5x10^5$: 1
Angle field-	14-16°
Beam deviation-	3 arcmin
Dimension tolerance-	±0.1mm
Surface quality-	20-10 S/D
Clear aperture-	>90%
Coating on both sides-	Single layer MgF_2



Item#	Material	Clear aperture Øa (mm)	Holder Ø (mm)	Length (mm)	Application Wavelength
PZ3-C06	Calcite	6.0	15.0	22.0	350-2300nm
PZ3-C08	Calcite	8.0	25.4	28.0	
PZ3-C10	Calcite	10.0	25.4	33.0	
PZ3-C12	Calcite	12.0	25.4	39.0	

Mounted Polarizer





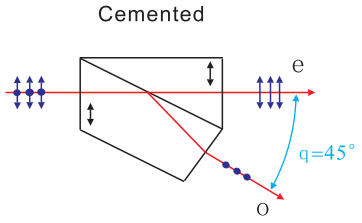
Glan Thompson Polarizers
(Beamsplitting)

The polarizing beamsplitter is Glan Thompson polarizer that permit the reflected beam output from exit-surface.
The extraordinary ray is straight transmitted, the ordinary ray deviated by 45¡is always normal to exit surface, and doesn't change angle with wavelength.

General Specifications

Material	Calcite
Extinction ratio (Ts)	10^5 : 1
Extinction ratio (Tp)	$5x10^{-5}$: 1
Angle field	14-16°
Deviation angle	θ=45°
Coating on both sides	Single layer MgF_2 coating

Item#	Material	Clear aperture Øa (mm)	Application Wavelength
PZ3B-C06	Calcite	6.0	350-2300nm
PZ3B-C08	Calcite	8.0	
PZ3B-C10	Calcite	10.0	
PZ3B-C12	Calcite	12.0	



Mount is customized.

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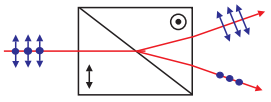
Wollaston Polarizers

Wollaston polarizers can separate an incident beam into two rays: extraordinary and ordinary ray with a deviation angle which is dependent on wavelength. Both rays are transmitted through the other surface.

General Specifications

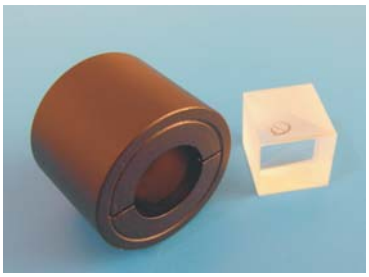
Material- Calcite, α-BBO, YVO4
Extinction ratio- 10^5 : 1
Angle field- 15° (Calcite)
Beam deviation- 3 arcmin
Dimension tolerance- ±0.1mm
Surface quality- 20-10 S/D
Clear aperture- >90%
Coating on both sides- Single layer MgF_2 coating



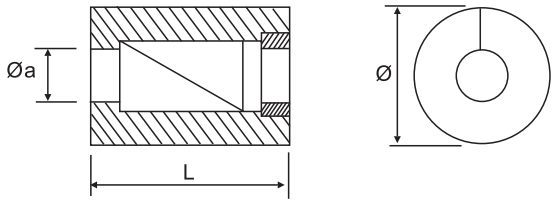
Cemented

Typical separation angle: 10--20°, for wollaston made of Calcite.

Item#	Material	Clear aperture Øa (mm)	Holder Ø (mm)	Length (mm)	Application Wavelength
PZ4-C08	Calcite	8.0	25.4	17.0	350-2300nm
PZ4-C10	Calcite	10.0	25.4	19.0	
PZ4-C15	Calcite	15.0	30.0	23.0	
PZ4-B08	α-BBO	8.0	25.4	17.0	190-3500nm
PZ4-B10	α-BBO	10.0	25.4	19.0	
PZ4-Y08	YVO4	8.0	25.4	17.0	500-4000nm
PZ4-Y10	YVO4	10.0	25.4	19.0	



Mounted Polarizer



Rochon Polarizers

Rochon polarizers separate incident beam into ordinary ray and extraordinary ray like wollaston polarizer, but extraordinary ray is straight transmitted through, while ordinary is transmitted with a deviation angle.

General Specifications

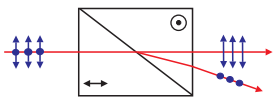
Material-	α-BBO, YVO4
Extinction ratio-	$5x10^5$: 1
Angle field-	>6.9°
Beam deviation-	3 arcmin
Dimension tolerance-	±0.1mm
Surface quality-	20-10 S/D
Clear aperture-	>90%
Coating on both sides-	Single layer MgF_2 coating

Un-mounted

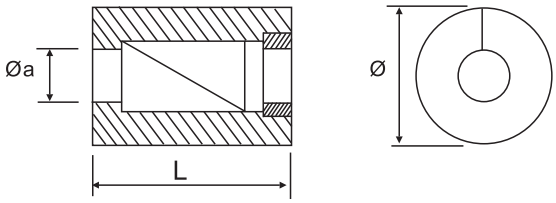
Typical separation angle: 8° @1064nm, α-BBO

Item#	Material	Clear aperture Øa (mm)	Holder Ø(mm)	Length (mm)	Application Wavelength
PZ5-B08	α-BBO	8.0	25.4	17.0	190-3500nm
PZ5-B10	α-BBO	10.0	25.4	19.0	
PZ5-B15	α-BBO	15.0	30.0	23.0	
PZ5-Y08	YVO4	8.0	25.4	17.0	400-4000nm
PZ5-Y10	YVO4	10.0	25.4	23.0	

Cemented



Mounted Polarizer



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