

Glan Thompson Prisms | GTPA/GTPP

Catalog Code W3450

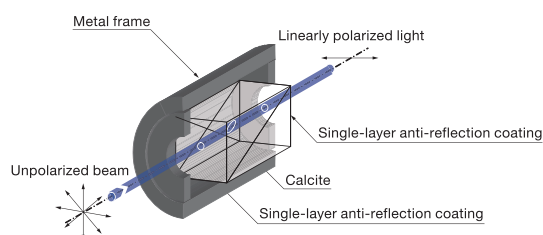
This is a special polarizer with minimal transmission loss, and a high extinction ratio below 5×10^{-5} is obtained. It is used in high-precision polarization experiments.

The Calcite type that can be used in the range of the visible region to the infrared region, and α -BBO crystal type usable in the ultraviolet region are both available.

- Glan Thompson prism is housed in a metal frame, and no stress is applied to the inner element when frame is mounted in the holder.
- For Calcite type Glan Thompson prism, the acceptance angle is chosen in two levels.
- A single-layer anti-reflection coating has been applied on the surface of the Glan Thompson prism, a high transmittance is obtained.

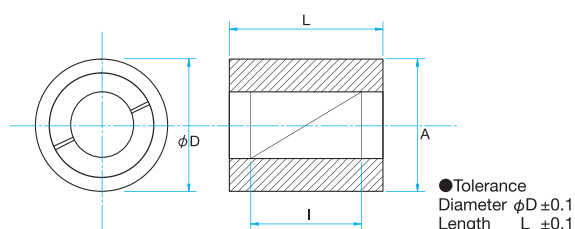


Schematic



Outline Drawing

(in mm)



Specifications

Material	α -BBO, Calcite
Beam Deviation	$<3''$
Surface Flatness	$\lambda/4$
Coating	MgF ₂ Single-layer anti-reflection coating
Laser Damage Threshold	0.3J/cm ² (Pulse duration 10ns)
Surface Quality (Scratch-Dig)	20-10
Material of metal frame	Aluminum Finishing: Black anodized

Guide

- ▶ Glan laser prism for high-power laser (GLPA / GLPC) and Wollaston prism (WPA / WPC) are also available.
- ▶ If you need uncoated Glan Thompson prism or anti-reflection coating with specific reflectance, please contact our International Sales Division.
- ▶ About the dedicated holder of the Glan Thompson prism, please contact our International Sales Division.

Attention

- ▶ A change in the incident angle may also changes the extinction ratio of the linearly polarized transmitted light.
- ▶ Separation angle will vary depending on the wavelength. Please confirm the wavelength characteristic graph for separation angle.
- ▶ Because of natural calcite crystals, there are individual differences, and variations in quality.

 α -BBO

Part Number	Wavelength Range [nm]	Extinction ratio	Acceptance angle [°]	A [mm]	φD×L
GTPA-06-18SN	200 – 900	$<5 \times 10^{-6}$	±7.5	6	15×18
GTPB-08-21SN	200 – 900	$<5 \times 10^{-6}$	±7.5	8	25.4×21
GTPA-10-24.5SN	200 – 900	$<5 \times 10^{-6}$	±7.5	10	25.4×24.5
GTPA-15-32.5SN	200 – 900	$<5 \times 10^{-6}$	±7.5	15	30×32.5

Calcite

Part Number	Wavelength Range [nm]	Extinction ratio	Acceptance angle [°]	A [mm]	φD×L
GTPP-06-23SN	350 – 2300	$<5 \times 10^{-5}$	±7	6	15×23
GTPP-08-28SN	350 – 2300	$<5 \times 10^{-5}$	±7	8	25.4×28
GTPP-10-33SN	350 – 2300	$<5 \times 10^{-5}$	±7	10	25.4×33
GTPP-15-45.5SN	350 – 2300	$<5 \times 10^{-5}$	±7	15	30×45.5
GTPP-06-26SN	350 – 2300	$<5 \times 10^{-5}$	±12.5	6	15×26
GTPP-08-32SN	350 – 2300	$<5 \times 10^{-5}$	±12.5	8	25.4×32
GTPP-10-38SN	350 – 2300	$<5 \times 10^{-5}$	±12.5	10	25.4×38
GTPP-15-53SN	350 – 2300	$<5 \times 10^{-5}$	±12.5	15	30×53

Application Systems

Machine Vision

Manual Positions

Motion Control Products

Optical & Mirror Holder

FA Parts

Measurement & Control

FA Electrical Parts

Tool & Measure

Cleanroom & AntiStatic

Index

Mirrors

Beamsplitters

Filters

Polarizers

Lenses

Multi-Element Optics

Prisms

Substrates & Windows

Holder & Vibration isolator