

Glan-Thompson Polarizers

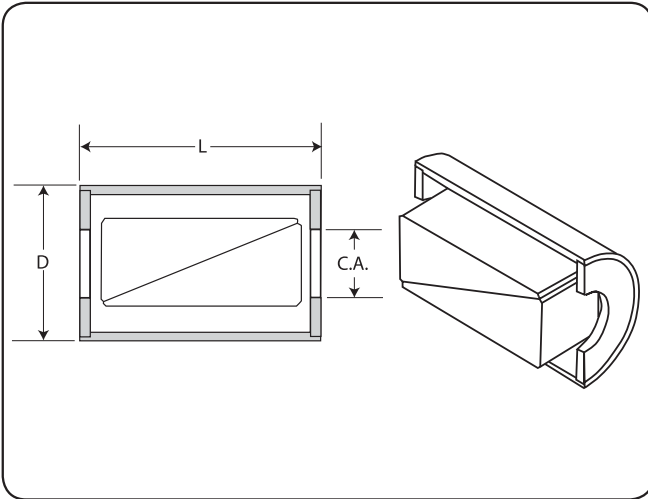
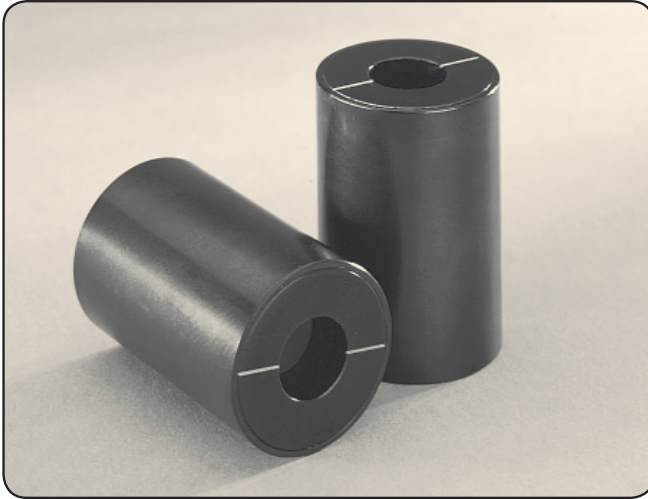


Fig. 1-24 Glan-Thompson Polarizer construction

| ORDERING INFORMATION | | | |
|----------------------|-----------------------|------------------|------------------|
| Clear Aperture (mm) | Wavelength Range (nm) | AR Coating | Part Number |
| 5 | 320 – 2300 | None | GTP – M05 |
| 5 | 400 – 700 | MgF ₂ | GTP – M05 – 0550 |
| 5 | 650 – 1000 | MgF ₂ | GTP – M05 – 0825 |
| 5 | 1000 – 1500 | MgF ₂ | GTP – M05 – 1250 |
| 8 | 320 – 2300 | None | GTP – M08 |
| 8 | 400 – 700 | MgF ₂ | GTP – M08 – 0550 |
| 8 | 650 – 1000 | MgF ₂ | GTP – M08 – 0825 |
| 8 | 1000 – 1500 | MgF ₂ | GTP – M08 – 1250 |
| 10 | 320 – 2300 | None | GTP – M10 |
| 10 | 400 – 700 | MgF ₂ | GTP – M10 – 0550 |
| 10 | 650 – 1000 | MgF ₂ | GTP – M10 – 0825 |
| 10 | 1000 – 1500 | MgF ₂ | GTP – M10 – 1250 |

Key Benefits

- Broad spectral range
- Excellent extinction ratio

Calcite is a naturally occurring birefringent crystal. By precisely controlling internal prism angles in our calcite polarizers, a very efficient linear polarizer is produced.

Meadowlark Optics offers Glan-Thompson Polarizers, intended for precision optical instrumentation and low power laser applications. Key advantages of Glan-Thompson Polarizers include excellent extinction ratio performance and a broad spectral range.

Our Glan-Thompson Polarizers are supplied in a black anodized cylindrical housing for easy mounting. Although raw calcite material transmits down to 215 nm, the cement interface limits ultraviolet transmission. For this reason, we recommend Glan-Thompson Polarizers for use over 320-2300 nm.

Three antireflection coating options cover the visible to near infrared range. Uncoated Glan-Thompson Polarizers are also available.

| SPECIFICATIONS | |
|---|---|
| Material | Grade A Optical Calcite |
| Extinction Ratio | 10,000:1 over central 2/3 of clear aperture |
| Reflectance (per surface, at normal incidence) | |
| Uncoated | ~ 4.5% |
| Single layer MgF ₂ | ~ 1.5% |
| Beam Deviation | ± 3 arc min |
| Acceptance Angle | ± 5° |
| Wavelength Range | 320-2300 nm |
| Recommended Safe Operating Limit | 25-30 W/cm ² CW |