Glan Taylor Prism Polarizers

Calcite Polarizer

The Glan Taylor prism polarizer is made of two calcite prisms which are assembled with an air space. It has a length to aperture ratio of approximately 1.0 which makes it a relatively thin polarizer. It is made of UV selected calcite. A 10mm thick calcite plate having 50% or more transmission at 250nm is considered UV selected. The spectral range of this polarizer is from 250-2300nm. Below 250nm, transmission cutoff wavelength varies from crystal to crystal.

Specifications

A grade calcite	: quarter to one wave wavefront deformation @ 633nm due to striae only
S grade calcite	: quarter wave wavefront deformation @ 633nm due to striae only
E type	: made of S grade calcite but polarizer has beam deviation of one instead of three arc minutes
Surface flatness	: at least quarter wave @ 633nm over the clear aperture
Surface quality	: 40-20 scratch dig
Teansmission (uncoated)	: 25-30% at 250nm, 40-45% at 300nm, 65-70% at 400nm and 85-87% at > 500nm





Glan Taylor

• · · /	Clear	Mount Dimensions (Inches)		
Catalog Number	Aperture Diameter (mm)	Outside Diameter +/0015	Length +/007	Remarks
MGTYA 8	8	0.748	0.625	
MGTYA 10	10	0.748	0.625	Grade A
MGTYA 12	12	0.873	0.750	Extinction 5 x 10 ⁻⁵
MGTYA 15	15	1.123	0.875	Beam Deviation 3 Arc Minutes
MGTYA 20	20	1.373	1.125	
MGTYS 8	8	0.748	0.625	
MGTYS 10	10	0.748	0.625	Grade S
MGTYS 12	12	0.873	0.750	Extinction 1×10^{-5}
MGTYS 15	15	1.123	0.875	Beam Deviation 3 Arc Minutes
MGTYS 20	20	1.373	1.125	_
MGTYE 8	8	0.748	0.625	
MGTYE 10	10	0.748	0.625	Grade S
MGTYE 12	12	0.873	0.750	Extinction 5 x 10 ⁻⁶
MGTYE 15	15	1.123	0.875	Beam Deviation 1 Arc Minutes
MGTYE 20	20	1.373	1.125	

