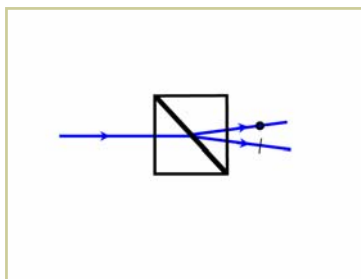


# Rochon & Wollaston Beamsplitters



Rochon and Wollaston beamsplitters consist of two prisms of calcite cemented together in such a way as to separate the s- and p- components of polarization and

make them emerge at an angle to each other. These prisms have a length/aperture ratio of one. In the



case of the Rochon beamsplitter the p-component is un-deviated while the Wollaston produces a symmetrical split of the two components. A small ( $5^\circ$ ) separation of the two beams is produced by the Rochons, while Wollastons provide larger angles of separation, typically  $10^\circ$  or  $15^\circ$ .

The Calcite used in these prisms is available in several different grades. Optical grade calcite, which has few inclusions and shows no scattering when viewed under a 40 watt incandescent lamp, is normally used. However, for application with lasers it is recommended to use laser grade calcite. This grade of calcite exhibits no scattering

when illuminated with a helium neon laser beam. For situations in which scattering is unimportant a standard grade of calcite may be used.

Rochon & Wollaston beamsplitters are normally supplied as square cross section prisms with an aperture of 5, 8, 10, 15 or 20 mm. They are mounted in an absorbing black potting compound within a metal cell.

Single layer  $MgF_2$  anti-reflection coatings may be applied if required. These coatings provide a reflectance of less than 2% over a range of 220-400 nm, 400-700 nm or 700-1100 nm.

## Typical Specifications

Material:	Crystal Calcite - Laser, Optical or Standard grade
Cell:	Aluminium (black anodized)
Wavelength:	350 - 2800 nm
Wavefront distortion:	$\lambda/4$ @ 633nm
Surface quality:	20-10
Dimensions:	$\pm 0.25$ mm
Clear aperture:	>90%
Length/Aperture:	1
Centration to cell OD:	10 arcmin

### To request a quote or to order, please specify:

Quantity— Rochon or Wollaston — Calcite Grade (L, O or S) — Aperture — Separation ( $5^\circ$ ,  $10^\circ$ ,  $20^\circ$ ) – AR Coating (UV, Vis or NIR)

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For a quotation — please phone, fax or email us with details of your requirements.