

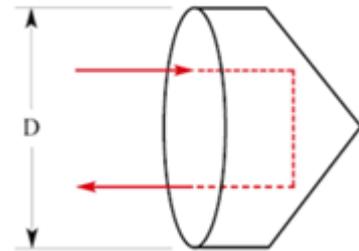
PORRO PRISMS

Porro Prisms operate on the principle of total internal reflection (TIR). A beam entering perpendicular to the entrance / exit surface is reflected by the two roof surfaces and emerges parallel to itself. For applications in which either the acceptance angle for TIR is exceeded, or the reflecting surfaces cannot be kept sufficiently clean for TIR, a metal or dielectric coating can be applied to the reflecting surfaces.

Antireflection coated entrance and exit faces are also available.

Standard Specifications:

Optical Material:	BK7 or Fused Silica
Dimension Tolerance:	± 0.2mm
Clear Aperture:	>80%
Deviation:	180°
Wavefront Distortion:	$\lambda/4$ at 632.8nm on big surface $\lambda/10$ at 632.8nm on other surface
Surface Quality:	60-40 scratch and dig
Bevel:	<0.25mm X 45°
Coating:	available upon request



Standard Porro Prisms

D(mm)	H(mm)	Angle Tolerance	Material	Product Number
7.16	7.16	10 arcsec	BK7	UQT-POPB0101
7.16	7.16	10 arcsec	Fused Silica	UQT-POPF0102
12.70	12.70	3 arcsec	BK7	UQT-POPB0103
12.70	12.70	3 arcsec	Fused Silica	UQT-POPF0104
25.40	25.40	3 arcsec	BK7	UQT-POPB0105
25.40	25.40	3 arcsec	Fused Silica	UQT-POPF0106
38.10	38.10	3 arcsec	BK7	UQT-POPB0107

Please Contact [ultiQuest](#) for other dimensions in prototype and production quantities.

NOTES!

- ➔ Every edge of these prisms is chamfered (beveled) for chipping prevention. The dimensions of these prisms are values not including chamfer.
- ➔ Be sure to wear laser safety goggles when checking optical path and adjusting optical axis.