

# PENTA PRISMS

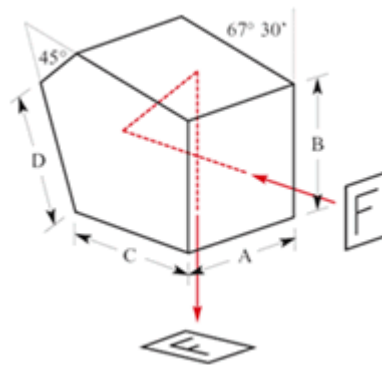
Penta prisms deviate beams by 90 degrees without changing the orientation of the resulting image. The deviation is independent of prism orientation. Due to the geometry, the reflecting surfaces must be coated with a metallic or MAX-R coating. Penta prisms come standard with an protected aluminum coating.

Antireflection coatings are available for entrance and exit faces.

ultiQuest Technology supplies prisms with three levels of deviation tolerance. The standard series has a deviation tolerance of less than 1 arc minutes. The precision series has a deviation tolerance of less than 10 arc seconds or 5 arc seconds more.

## Standard Specifications:

<b>Optical Material:</b>	BK7 grade A optical glass
<b>Dimension Tolerance:</b>	± 0.2mm
<b>Clear Aperture:</b>	>80%
<b>90° Deviation Tolerance:</b>	
Standard Series:	<30 arc seconds
Precision Series:	<10 arc seconds
<b>Flatness:</b>	
Standard Series:	λ/2 at 632.8nm
Precision Series:	λ/4 at 632.8nm
<b>Surface Quality:</b>	40-20 scratch and dig
<b>Bevel:</b>	<0.25mm X 45°
<b>Coating:</b>	R>95% from 630-680nm



## Standard BK7 Penta Prisms

Size(mm)	Material	1min.deviation	30sec.deviation	10sec.deviation
		Product Number	Product Number	Product Number
A=B=5x5	BK7	UQT-PTPB0101	UQT-PTPB0201	UQT-PTPB0301
A=B=7x6	BK7	UQT-PTPB0102	UQT-PTPB0202	UQT-PTPB0302
A=B=10x10	BK7	UQT-PTPB0103	UQT-PTPB0203	UQT-PTPB0303
A=B=15x15	BK7	UQT-PTPB0104	UQT-PTPB0204	UQT-PTPB0304
A=B=20x20	BK7	UQT-PTPB0105	UQT-PTPB0205	UQT-PTPB0305
A=B=25X25	BK7	UQT-PTPB0106	UQT-PTPB0206	UQT-PTPB0306

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

## NOTES!

- ➔ If you are looking for Fused silica Penta Prisms, please request us. We can support similar dimension as above.
- ➔ 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.

