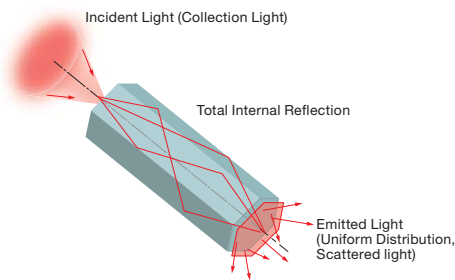


Light Pipe is an optical element for the illumination of uniform brightness distribution from a light having a non-uniform brightness distribution. It is used for the illumination optical system for image processing, and for converting the Gaussian profile to a top-hat profile.

- It uses a hexagonal prism with higher uniform efficiency than a rectangular prism.
- We offer a compact 30mm and higher homogeneity 75mm products.
- There are two materials BK7 for the visible to near-infrared region and synthetic fused silica for ultraviolet light.
- Distance of opposite sides are available in two types of 5mm and 10mm.



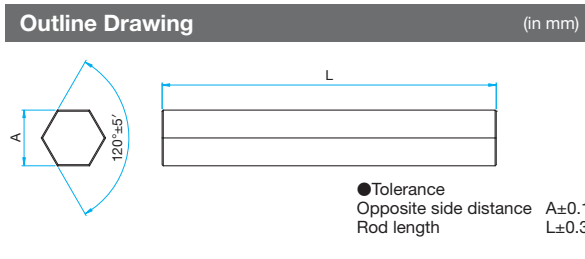
Schematic



Specifications	
Material	BK7, Synthetic fused silica
Angle tolerance	120°±5'
Parallelism	5'
Coating	Uncoated (Including the sides)
Recommended incident numerical aperture (NA)	>0.5
Surface Quality (Scratch-Dig)	60-40

- Guide**
- ▶ Dedicated adapter (LPH-ADP) is available to mount the light pipe to the lens holder and the mirror holder.

- Attention**
- ▶ Since it is totally reflected at the side, reflectance may get worse if fingerprints and dirt are on the side surfaces and may also cause an unevenness in the brightness distribution of the emitted light.
  - ▶ It can not be used in collimated light. Please use large incident light of collection angle (divergence angle)
  - ▶ Anti-reflection coating is not on both end faces and will have reflection (4%) of both end faces and transmittance loss of 7-8%.



Specifications				
Part Number	Material	Opposite side distance A [mm]	Rod length L [mm]	surface flatness of polished surface
LPB-05L30	BK7	5	30	λ
LPB-10L75	BK7	10	75	3λ
LPSQ-05L30	Synthetic fused silica	5	30	λ
LPSQ-10L75	Synthetic fused silica	10	75	3λ

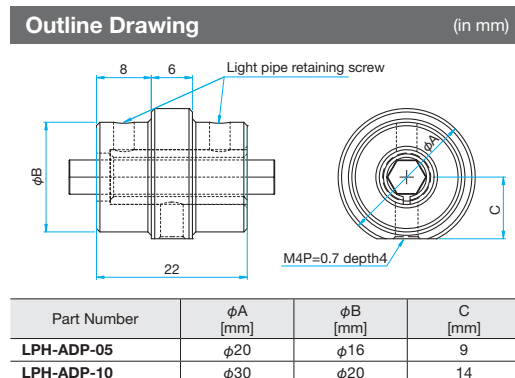
Light Pipe Adapter | LPH-ADP

This is the adapter for mounting the light pipe (LPB / LPSQ) and attaching to the mirror holder and lens holder.



- It can mount the light pipe without contacting the polished surface of the light pipe.
- Because of the resin attached, scratches can not occur to the light pipe.

Specifications	
Part Number	Compatible optics
LPH-ADP-05	LPB-05L30, LPSQ-05L30
LPH-ADP-10	LPB-10L75, LPSQ-10L75



Application Systems

Optics & Optical Coatings

Opto-Mechanics

Bases

Manual Stages

Actuators & Adjusters

MotORIZED Stages

Light Sources & Laser Safety

Index

Guide

Mirrors

Beamsplitters

Polarizers

Lenses

Multi-Element Optics

Filters

Prisms

Substrates/Windows

Optical Data

Maintenance

Selection Guide

45 Degrees Angle

Retro-reflectors

Equilateral Dispersing Prisms

Others