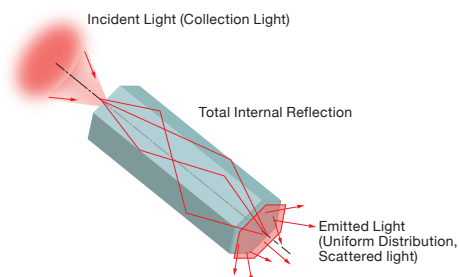


Light Pipe is an optical element for the illumination of uniform brightness distribution from a light having a non-uniform brightness distribution. It is used for the illumination optical system for image processing, and for converting the Gaussian profile to a top-hat profile.

- 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	$120^{\circ} \pm 5'$
Parallelism	5'
Coating	Uncoated (Including the sides)
Recommended incident numerical aperture (NA)	>0.5
Surface Quality (Scratch-Dig)	60-40

#### Guide

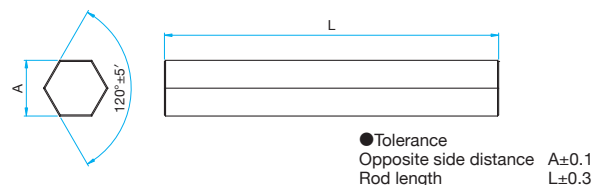
- Dedicated adapter (LPH-ADP) is available to mount the light pipe to the lens holder and the mirror holder.

#### 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%.

#### Outline Drawing

(in mm)



#### Specifications

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

## Light Pipe Adapter | LPH-ADP

Catalog Code W3217

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



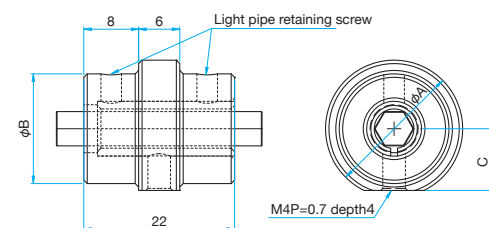
- It can mount the light pipe without contacting the polished surface of the light pipe.
- Because of the resin attached, scratches can not occur to the light pipe.

#### Specifications

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

#### Outline Drawing

(in mm)



Part Number	$\phi A$ [mm]	$\phi B$ [mm]	C [mm]
LPH-ADP-05	$\phi 20$	$\phi 16$	9
LPH-ADP-10	$\phi 30$	$\phi 20$	14