

Young's Fringes

Set of 3 Double Slits



HL4850-001 (set/3 double slits in plastic mounts)

Description:

The IEC set of 3 double slits are used for creating “Young's Fringes” to demonstrate that light diffracts on the edges of a slit has the properties of a “wave”. The slits, when used with monochromatic light or laser light, will cause diffraction and an “interference” pattern caused by the overlapping of the two diffracting rays. This interference results in the formation of a pattern of dark and bright bands of light on a screen some distance away.

The slit specifications are as follows:

- Narrow slits positioned side by side a certain distance apart are created on fine grain film which is then cut and mounted into plastic mounts. These mounts have a dimension of 50 x 50mm. The slit details are marked on each mount.
- All slits have a width of 0.05mm. Note that narrow slits provide sharper images.
- The pitch (the dimension between the centres of each pair of slits) is: 1.0mm, 0.5mm and 0.2mm respectively.
- The pitch between the centres of the slits and the widths of the slits are marked clearly both on the film and the mount. If the marking on the film is unwanted it can be covered or it can be eliminated with a black marker pen.

Each slit is available separately as below:

PA4850-010
1.0mm PITCH @ 0.05 SLIT

PA4850-012
0.5mm PITCH @ 0.05 SLIT

PA4850-014
0.2mm PITCH @ 0.05 SLIT

Note: The slits are quite narrow and are difficult to reproduce clearly on this sheet.

Length: 50mm	Width: 50mm	Weight: 4.5g
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Designed and manufactured in Australia