VARIABLE ATTENUATOR FOR Nd:YAG LINEARLY POLARIZED LASER BEAM 990-0070

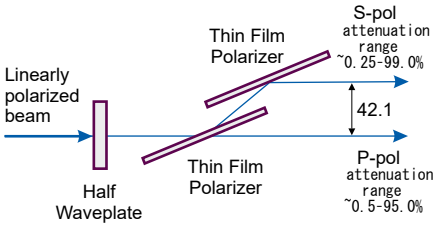
Features

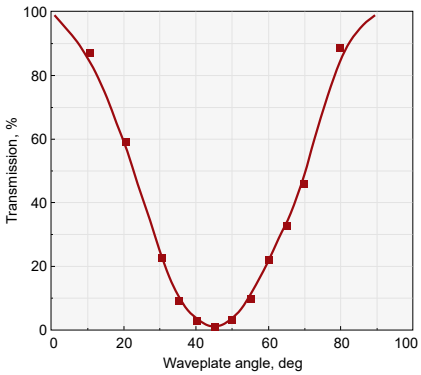
- Divides laser beam into two parallel beams of manually adjustable intensity ratio
- Large dynamic range
- Transmitted beam shift ~0.5 mm
- High Optical damage threshold

Note: Movable base ***820-0090***, Rod Holder ***820-0050-02*** and standard rod should be ordered seperately.

This variable attenuator/beamsplitter consists of special design opto-mechanical Adapter and precision opto-mechanical holder 840-0197. Two thin film brewster type polarizers, which reflect s-polarized light while transmitting p-polarized light, are housed into adapter. A quartz multiple order half waveplate is housed in rotating holder 840-0197.

The intensity ratio of those two beams may be continuously varied without alteration of other beam parameters by rotating the waveplate. The intensity of either exit beam, or their intensity ratio, can be controlled over a wide dynamic range. P-polarization could be selected for maximum transmission, or high-purity s-polarization could be reflected when maximum attenuation of the transmitted beam takes place. The holder 840-0197 allows to adjust angle of incidence of the Thin Film Brewster type polarizers by ±2° and to get the maximum polarization contrast.





Specifications

Aperture diameter	17 mm
Damage threshold	5 J/cm^2 pulsed at 1064 nm, typical
Polarization Contrast (after 1st polarizer)	>1:200
Polarization Contrast (after 2nd polarizer)	>1:500
Weight	0.35 kg

Wavelength, nm	Catalogue number
266	**990-0070-266H** *
355	**990-0070-355**
532	**990-0070-532**
1064	**990-0070-1064**

* With Zero Order Air-Spaced half waveplate.

Related Products

Neutral Density Filters
See page 1.14

Thin Film Laser Polarizers for Nd:YAG applications
See page 3.17

Motorized Variable Attenuator for Linearly Polarized Laser Beam 990-0070M
See page 5.10

Beam dumps 990-0800, 990-0820
See page 5.19