

**VARIABLE ATTENUATOR FOR Nd:YAG LINEARLY POLARIZED LASER BEAM 990-0071**

### Features

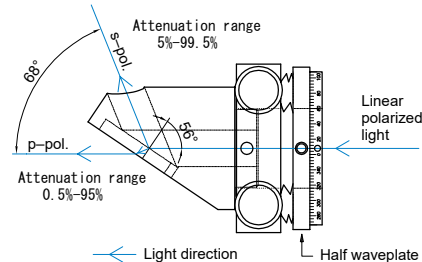
- Divides laser beam into separated by 68° angle two beams of manually adjustable intensity ratio
- Large dynamic range
- Transmitted beam shift ~0.5 mm
- High Optical damage threshold



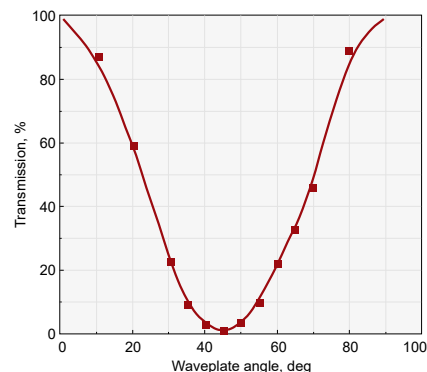
Note: Solid Base Height Extender **820-0210** and Standard Rod **820-0020-20** should be ordered separately

This variable attenuator/beamsplitter consists of special design opto-mechanical adapter for polarizer at 56° 840-0117A or 840-0118A and precision opto-mechanical holder 840-0197. Thin Film Brewster type polarizer, which reflect s-polarized light at 56° while transmitting p-polarized light, is housed into adapter for polarizer at 56°. 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 polarizer by  $\pm 2^\circ$  and to get the maximum polarization contrast.



### Specifications

Aperture diameter	10 mm
Damage threshold	5 J/cm <sup>2</sup> pulsed at 1064 nm, typical
Polarization Contrast	>1:200
Weight	0.25 kg

Wavelength, nm	Catalogue number
266	<b>990-0071-266H *</b>
355	<b>990-0071-355</b>
532	<b>990-0071-532</b>
1064	<b>990-0071-1064</b>

\* With Zero Order Air-Spaced half waveplate.

### Related Products

Motorized Variable Attenuator for Linearly Polarized Laser Beam 990-0071M

See page 5.13



Multiple Order Plates for Nd:YAG applications

See page 3.21

Thin Film Laser Polarizers for Nd:YAG applications

See page 3.17