

VARIABLE ATTENUATOR FOR FEMTOSECOND LINEARLY POLARIZED LASER BEAM 990-0071

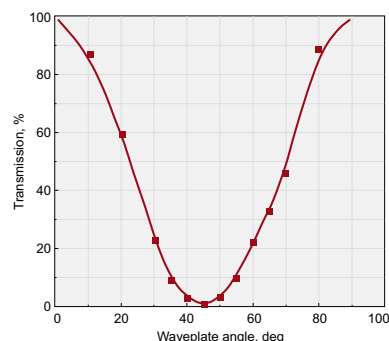
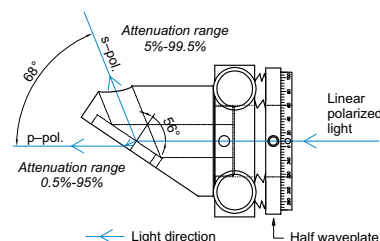


Note: Solid Base Height Extender 820-0210 and Standard Rod 820-0020-20 should be ordered separately

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 Half Waveplates are 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.



- Divides laser beam into separated by 68° angle two beams of manually adjustable intensity ratio
- Large dynamic range
- Negligible transmitted beam deviation
- High Optical damage threshold
- Weight – 0.25 kg

SPECIFICATIONS

Aperture diameter	10 mm
Damage threshold	>10 mJ/cm ² , 50 fs pulse at 800 nm, typical
for high power laser applications	>100 mJ/cm ² , 50 fs pulse, 800 nm typical
Time dispersion	t<4 fs for 100 fs Ti:Sapphire laser pulses
Polarization Contrast	>1:200

For Femtosecond Applications

Catalogue number	Wavelength, nm	Price, EUR
990-0071-343	343	600
990-0071-400	400	550
990-0071-400B	390-410	650
990-0071-515	515	550
990-0071-515B	505-525	650
990-0071-800	800	550
990-0071-800B	780-820	650
990-0071-1030	1030	550
990-0071-1030B	1010-1050	650

Zero order optically contacted half waveplate is housed in rotating holder 840-0197 (laser damage threshold: >10 mJ/cm², 50 fs pulse at 800 nm, typical).

For High Power Femtosecond Laser Applications

Catalogue number	Wavelength, nm	Price, EUR
990-0071-266H	266	690
990-0071-343H	343	665
990-0071-400H	400	615
990-0071-400HB	390-410	715
990-0071-515H	515	615
990-0071-515HB	505-525	715
990-0071-800H	800	615
990-0071-800HB	780-820	715
990-0071-1030H	1030	615
990-0071-1030HB	1010-1050	715

Zero Order Air-Spaced half waveplate is housed in rotating holder 840-0197 (laser damage threshold: >100 mJ/cm², 50 fs pulse at 800 nm, typical).

RELATED PRODUCTS

Neutral Density Filters

See page 1.13

Femtoline Zero Order Optically Contacted / Air-Spaced Plates

See page 5.18

Femtoline Thin Film Laser Polarizers

See page 5.16

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

See page 7.16

