

MOTORIZED VARIABLE ATTENUATOR FOR LINEARLY POLARIZED LASER BEAM – 990-0071M



This motorized variable attenuator/beamsplitter consists of special design opto-mechanical adapter for polarizer at 56° 840-0117A or 840-0118A and precision opto-mechanical holder 840-0193. 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 motorized rotation stage 960-0161.

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 840-0193 allows to adjust Angle of Incidence of the Thin Film Brewster type polarizer by $\pm 2^\circ$ and to get the maximum polarization contrast.

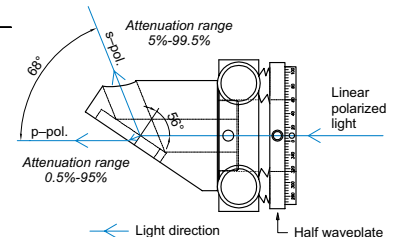
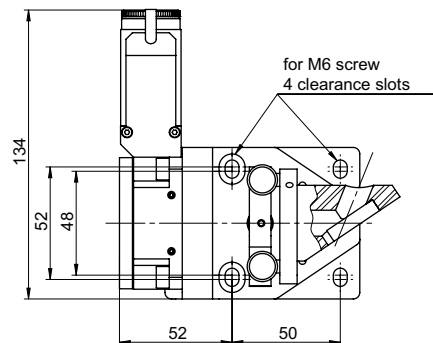
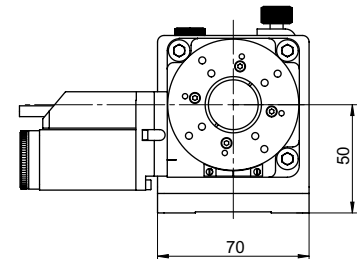
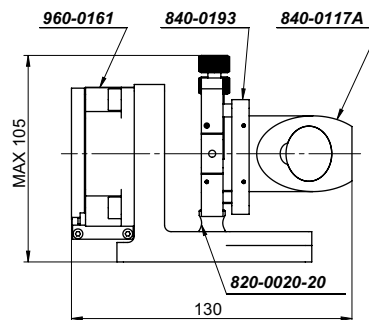
Ordering information

Please note: these motorized variable attenuators for linearly polarized laser beam are provided without controller and power supply. If you would like to order the complete solution (controller 980-1045 and power supply: PS12-1.5-4), please add CP to code and 695 EUR to price.

Example:

990-0071-266M – motorized attenuator without controller and power supply.
Price – 1435 EUR

990-0071-266M+CP – motorized attenuator with controller and power supply.
Price – 2130 EUR



For Nd:YAG Laser Applications

Wavelength, nm	Catalogue number	Price, EUR
266	990-0071-266HM *	1500
355	990-0071-355M	1290
532	990-0071-532M	1260
1064	990-0071-1064M	1260

Multi order half waveplate is housed in Motorized Rotation Stage 960-0161 and Polarizer with adapter in Kinematic Optical Mount 840-0193 for Nd:YAG laser application (laser damage threshold: 5 J/cm², 10 ns pulses, 10 Hz at 1064 nm, typical).

* With Zero Order Air-Spaced half waveplate.

For Femtosecond Applications

Wavelength, nm	Catalogue number	Price, EUR
266	990-0071-266M	1435
343	990-0071-343M	1410
400	990-0071-400M	1360
390 – 410	990-0071-400BM	1460
515	990-0071-515M	1360
505 – 525	990-0071-515BM	1460
800	990-0071-800M	1360
780 – 820	990-0071-800BM	1460
1030	990-0071-1030M	1360
1010 – 1050	990-0071-1030BM	1460

Zero order optically contacted half waveplate is housed in Motorized Rotation Stage 960-0161 and Polarizer with adapter in Kinematic Optical Mount 840-0193 for femtosecond laser application (laser damage threshold: >10 mJ/cm², 50 fsec pulse, 800 nm typical).

For High Power Femtosecond Laser Applications

Wavelength, nm	Catalogue number	Price, EUR
266	990-0071-266HM	1500
343	990-0071-343HM	1475
400	990-0071-400HM	1425
390 – 410	990-0071-400HBM	1525
515	990-0071-515HM	1425
505 – 525	990-0071-515HBM	1525
800	990-0071-800HM	1425
780 – 820	990-0071-800HBM	1525
1030	990-0071-1030HM	1425
1010 – 1050	990-0071-1030HBM	1525

Zero Order Air-Spaced half waveplate is housed in Motorized Rotation Stage 960-0161 and Polarizer with adapter in Kinematic Optical Mount 840-0193 for high power femtosecond laser application (laser damage threshold: >100 mJ/cm², 50 fsec pulse, 800 nm typical).