

# VALO Femtosecond Series Accessories

## Ultrafast Mirrors | Ultrafast Polarizing Optics | Beam Attenuator

### Ultrafast Low-GDD Mirrors

**Application:** Undistorted Beam Steering of < 30 fs Pulses



The VALO Femtosecond Series Ultrafast Low-GDD Mirrors are specifically engineered to support the < 30 fs pulse durations of VALO Femtosecond Series Lasers. Unlike conventional mirrors, these are dispersion-optimized and do not degrade pulse duration or spectral bandwidth, ensuring the shortest possible pulses for demanding applications.

Ultrafast Low-GDD Mirrors	
PARAMETER	SPECIFICATION
Wavelength Range (nm)	970 - 1150
Reflectivity (s-pol) (%)	> 99.9
AOI (°)	45
GDD (s-pol) (fs <sup>2</sup> )	< 70
Flatness @ 633 nm (mm)	λ/10 (in 8 mm)
Available Diameters (mm)	12.7 / 25.4 / 50.8
Material	UV Fused Silica
Coating Type	IBS

### Ultrafast Low-GDD Polarizing Optics

**Applications:** Beam Splitting of Ultra-Broadband Pulses  
Adjustment of Beam Polarization



The VALO Femtosecond Series Beam Splitters and Waveplates are designed to support the full bandwidth of < 30 fs pulses generated by the VALO Femtosecond Series Lasers. Like the Ultrafast Low-GDD Mirrors, these polarizing optics are dispersion-optimized and preserve both pulse duration and spectral bandwidth, ensuring the shortest possible pulses reach the application.

Polarizing Beam Splitter	
PARAMETER	SPECIFICATION
Wavelength Range (nm)	970 – 1150
Dimensions (mm)	6.35 x 6.35 x 6.35

Half-Wave Plate	
PARAMETER	SPECIFICATION
Waveplate Type	Achromatic
Wavelength Range (nm)	970 – 1150
Diameter (mm)	12.7 (mounted) 8.0 (clear aperture)

### Ultrafast Low-GDD Beam Attenuator

**Application:** Variable Laser Power Adjustment of < 30 fs Pulses



The VALO Femtosecond Series Beam Attenuator is an ideal choice for continuous adjustment of the laser power. It is specifically designed for the VALO Femtosecond Series and supports the full bandwidth and < 30 fs pulse durations of the VALO Femtosecond Series lasers. It provides user-selectable s- or p-polarized output, includes an integrated beam dump, and can also operate as a polarizing beam splitter with two outputs whose power ratio can be adjusted by the user.

Manual Beam Attenuator	
PARAMETER	SPECIFICATION
Wavelength Range (nm)	970 – 1150
Adjustable Power Range (%)	1 - 100
Insertion Loss (%)	< 5

Specifications and technical data are subject to change without notice due to technical developments.



## Our Locations

**VALO Innovations GmbH, a part of HÜBNER Photonics  
(VALO Femtosecond Series)**  
Hannover, Germany  
Phone: +49 511 260 390 70  
E-mail: [info.valo@hubner-photonics.com](mailto:info.valo@hubner-photonics.com)

**HÜBNER Photonics GmbH  
(Sales in Germany, Switzerland, and Austria)**  
Kassel, Germany  
Phone: +49 561 994 060 - 0  
Fax: +49 561 994 060 - 13  
E-mail: [info.de@hubner-photonics.com](mailto:info.de@hubner-photonics.com)

**HÜBNER Photonics Inc.  
(Sales in USA, Canada, and Mexico)**  
San Jose, California, USA  
Phone: +1 (408) 708 4351  
Fax: +1 (408) 490 2774  
E-mail: [info.usa@hubner-photonics.com](mailto:info.usa@hubner-photonics.com)

**Cobolt AB, a part of HÜBNER Photonics  
(Sales in Norway, Sweden, Finland, and Denmark)**  
Solna, Sweden  
Phone: +46 8 545 912 30  
Fax: +46 8 545 912 31  
E-mail: [info.se@hubner-photonics.com](mailto:info.se@hubner-photonics.com)

**HA Photonics Pty Ltd  
(Sales in UK & Ireland - Goods shipped from Europe)**  
United Kingdom  
Phone: +44 7359440871  
E-mail: [info.uk@hubner-photonics.com](mailto:info.uk@hubner-photonics.com)

**In need of technical support/service?**  
Send us information about your issue:  
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