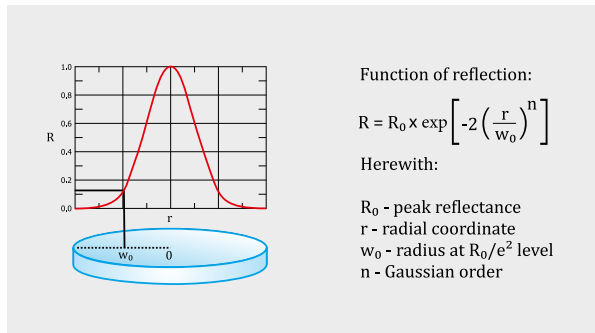
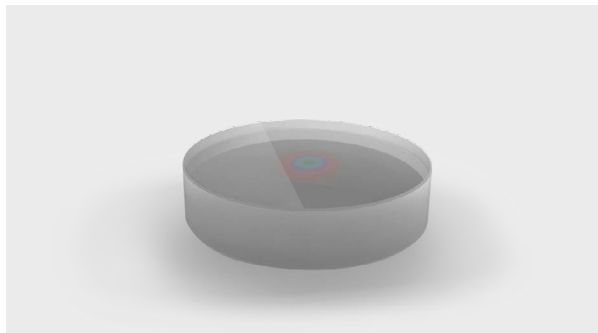


Variable reflectivity mirrors



4Lasers variable reflectivity mirrors provide a circularly symmetric reflectance profile according to the super-Gaussian function with order of 2. These mirrors are favorable in high-power unstable laser resonators for their wide filling of the active medium and

weak diffraction on hard-edge aperture. Therefore, super-Gaussian variable reflectivity mirrors contribute to better near- and far-field beam quality. It is worth to mention that variable reflectivity mirrors can be designed to have various reflectance profiles, such as linear,

parabolic, Gaussian.

Main features

- Mirror substrates fabricated from high-quality UV grade fused silica
- Standard substrate dimensions are $\varnothing 25,4 \times 5$ mm
- Central reflectance from 15% to 35% at 1064 nm wavelength
- Custom reflectance profiles, substrates material and dimensions are available upon request

Application examples

- Laser cavity output coupler for unstable laser resonator

Standard products

MATERIAL	DIMENSIONS	WAVELENGTH	CENTRAL REFLECTANCE	SKU	PRICE
UVFS	$\varnothing 25,4 \times 5$ mm	1064 nm	15%	6539	495 €
			20%	6540	495 €
			25%	6541	495 €
			30%	6542	495 €
			35%	6543	495 €

Standard specifications

VARIABLE REFLECTIVITY MIRRORS	
Radius w_0	2 mm
Gaussian order n	2
Substrate material	UV grade fused silica
Clear aperture	>85%
Face dimensions tolerance	+0/-0,15 mm
Thickness tolerance	$\pm 0,25$ mm
Parallelism error	<30 arcsec
Protective chamfers	<0,35 mm at 45°
Surface quality	20-10 S-D
Surface flatness	< $\lambda/8 @ 632,8$ nm
Rear surface	Antireflective coated
Laser induced damage threshold	>6 J/cm ² @1064 nm, 10 ns