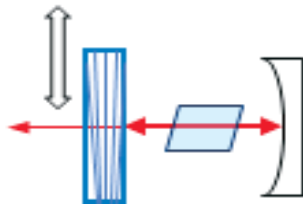


BragGrate™ - Tuner

Transversally Chirped Bragg Gratings TCBG

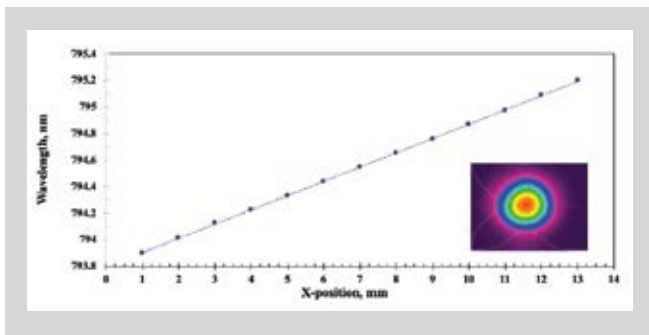
Product Description

The BragGrate™ Tuner is a reflecting volume Bragg grating with chirped period in one direction across its aperture, recorded in a bulk of photosensitive silicate glass. BragGrate™ Tuners can be used as an output coupler or HR mirror in a laser resonator. It enables both spectral stabilization and tuning of the laser radiation. High laser damage threshold makes these gratings suitable for usage in high power and high energy pulsed lasers. Tunable lasers based on TCBG are simple, compact, and robust. Simple linear translation of grating without angular adjustment is needed for wavelength tuning. Lasers with TCBG can operate in SLM regime.



Applications

- Tunable Output coupler
- Tunable Total Mirror
- Tunable Filter
- Spectral Beam Combination



Tuning Range of BragGrate™ Tuner at 795 nm

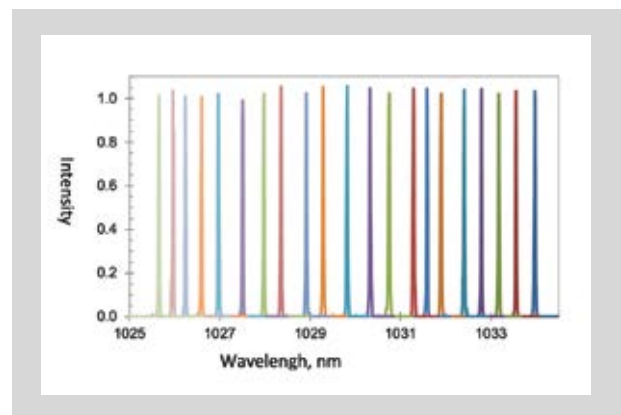
Specifications

Spectral Range: 600–2500 nm
Diffraction Efficiency: 5–99%
Spectral Bandwidth (FWHM): 50– 500 GHz
Tuning Range: 1– 30 nm
Chirp: Linear Across full aperture
Typical Aperture: 5x20 mm; 20x20 mm
Multiplexed Gratings for Idle/Signal Control

Advantages & Features

- Tuning range above 20nm
- High power/High optical radiation
- High operation temperatures
- Superior environmental stability
- Continuous tuning, no mode hop
- Wide range SF tuning
- Compact/Simple cavity design

The key advantage of the BragGrate™ Tuner is high LIDT, which makes these elements applicable for tunable pulsed lasers (Q-switched, OPO, OPA etc.).



Performance of fiber Laser with TCBG