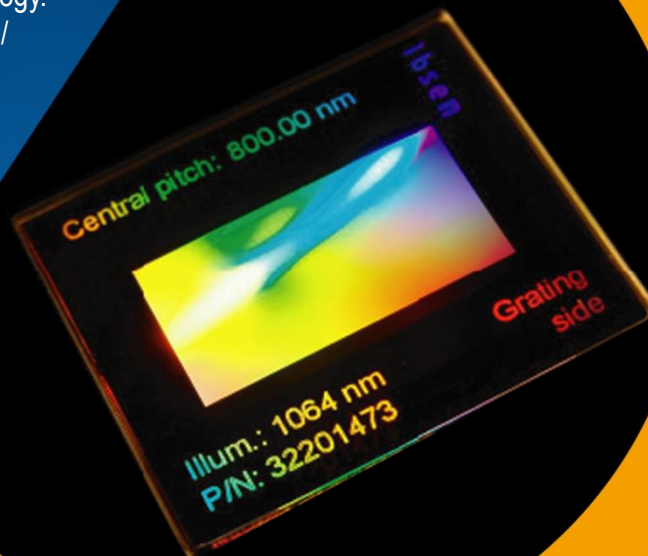


Ibsen Fused silica transmission grating technology offers unbeatable energy/power damage threshold combined with high-efficiency spectral performance



As femtosecond laser systems advance to ever increasing energy levels, demands to the energy/power handling capabilities of pulse compression gratings increase. Ibsen manufactures 100% fused silica pulse compression gratings that offer unbeatable energy/power handling capacity, combined with high-efficiency, low wavefront distortion performance.

Pulse compression gratings from Ibsen build on Ibsen's world leading position in fused silica transmission gratings, utilizing state-of-the-art interferometric patterning technologies and advanced reactive ion etching technology. Gratings are manufactured on custom/OEM basis, but an increasing number of gratings are stock available, such as the grating described in this product sheet



Pulse Compression Grating

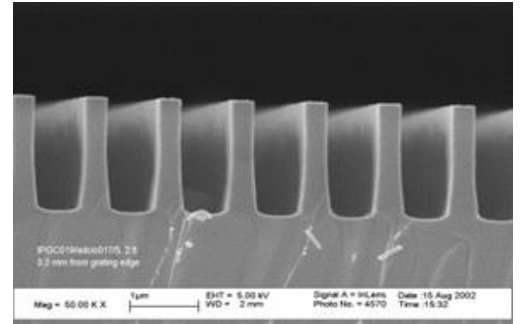
966 l/mm for 550-1100 nm

PCG-966/800-960

966 l/mm for 550-1100 nm

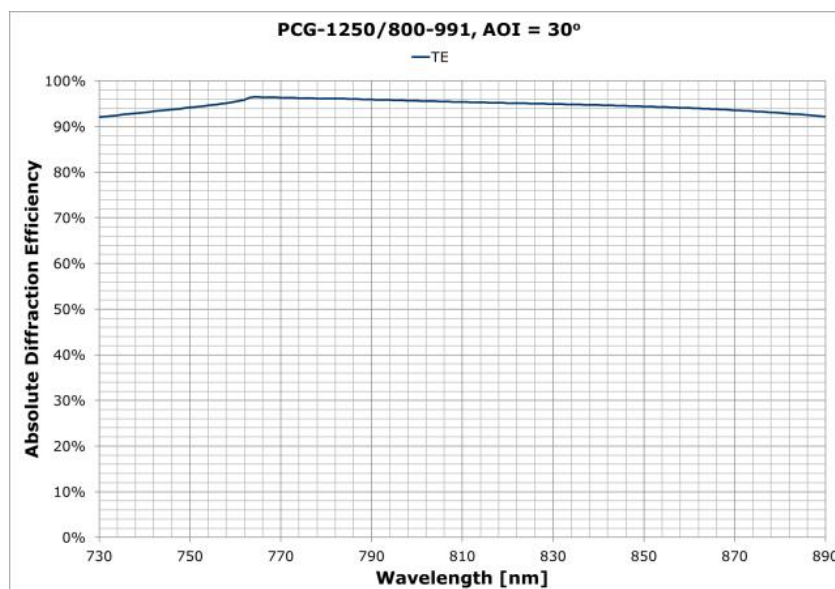
PCG-966/800-960

Benefits	
Highest energy/power damage threshold	
Environmentally and thermally stable	
High diffraction efficiency	
High tolerance to incidence angle	
Low transmitted wavefront distortion	



Parameter	Specification
Material	Fused silica and high-power, dielectric AR coating materials
Grating area	30 mm x 15 mm
Substrate size	32 mm x 25 mm x 2 mm
Grating resolution	966 l/mm
Dispersion at 800 nm	0.061 deg/nm
Nominal wavelength	800 nm
Angle of incidence (AOI)	20 deg
Diffraction efficiency (TM)	> 70% @ 800
Back-side AR coating	High power, dielectric AR coating applied
Energy/power damage threshold	http://ibsen.com/products/transmission-gratings/high-power-gratings

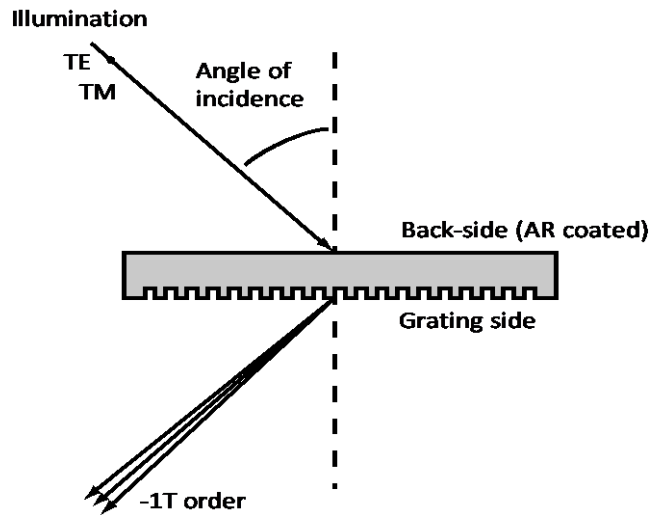
Typical Grating Performance



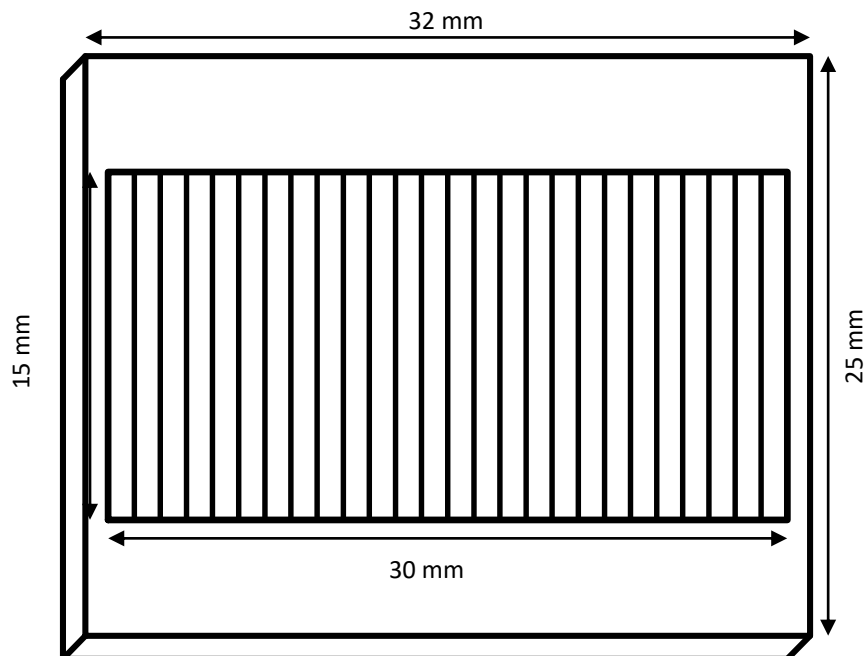
966 l/mm for 800 nm

PCG-966/800-960

Configuration / definitions



Drawing



Specifications are subject to change without notice.

The above grating is an example of Ibsen's capabilities. Ibsen operates as grating partner for our customers, from being an integrated part of the grating and device / instrument design phase, to the manufacturing of prototypes, to volume manufacturing of OEM gratings.