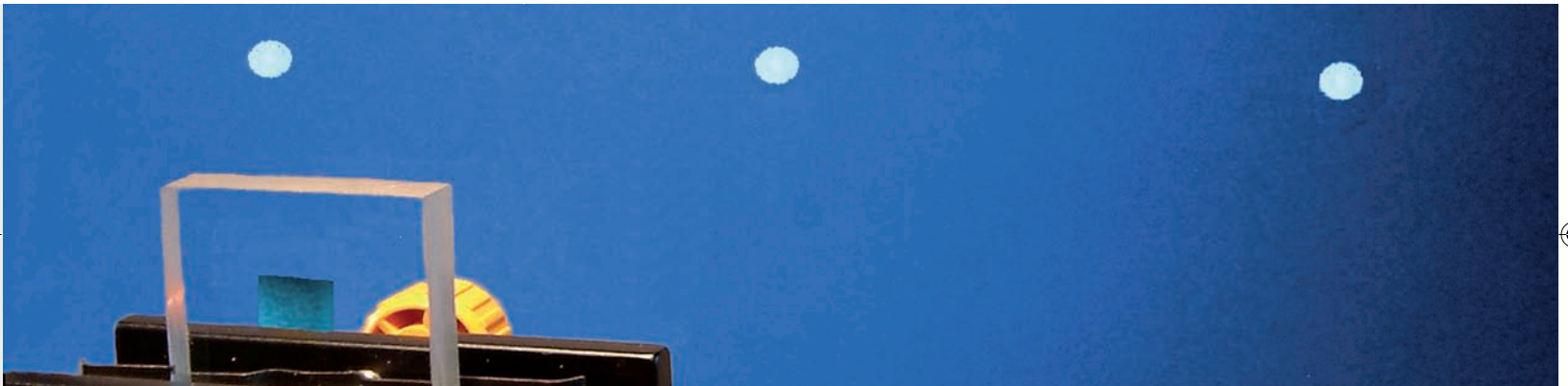




Diffraction Dielectric Polarizers



Illumination with defined polarization orientation is necessary for applications like resolution enhanced projection systems, measurement technique and material processing.

Diffraction polarizers by Jenoptik use especially designed nanostructures for producing high efficiency and polarization contrast. Because of their diffractive principle and their small size, Jenoptik polarizers are well suited for the integration in sensor systems and combination with other microoptics.

Features:

- High polarization contrast
- High efficiency
- Flat geometry
- Wavelengths from UV to IR
- High damage threshold and life time
- Custom design with short delivery time

Applications:

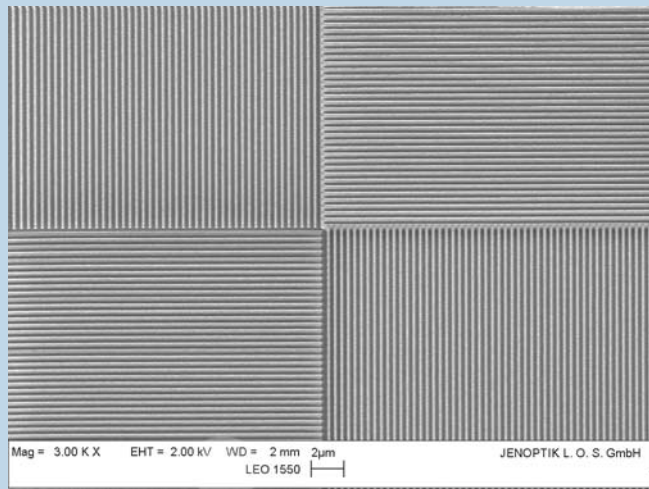
- Polarized mask illumination
- Measurement systems
- Optical sensors
- Laser materials processing

Diffraction Dielectric Polarizers

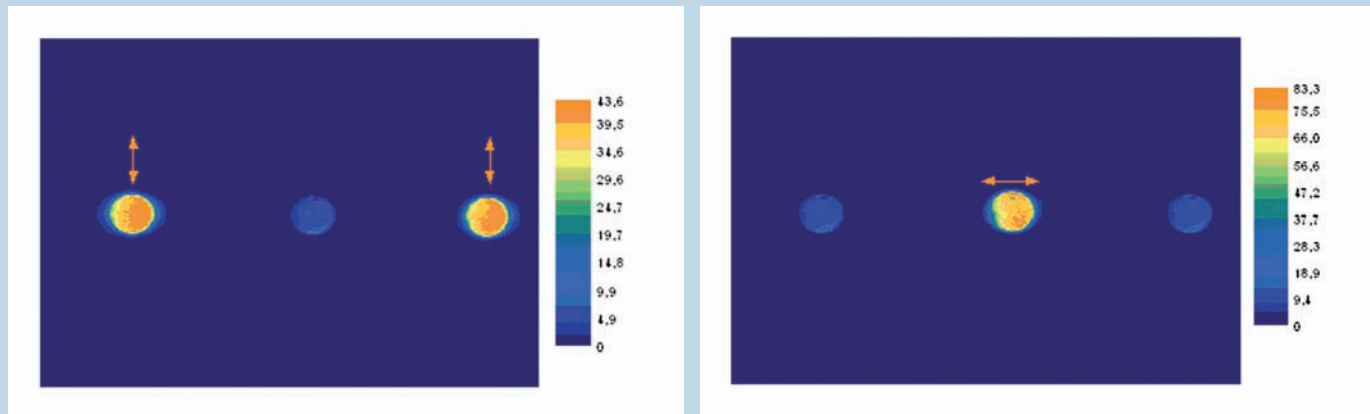
Specifications

Efficiency:	> 80 %
Polarization contrast:	> 80 : 1
Wavelengths:	193 nm to 2.5 μm
Max NA @ 193nm:	0.4
Materials:	UV-grade Fused Silica
AR-Coating:	Laser line
Product number:	029131

Microscopic structure of a diffractive polarizer array



Example: Polarizing beamsplitter for an excimer laser with $\lambda = 193 \text{ nm}$



TE-illuminated

TM-illuminated

False colour image of the far field intensity with differently polarized illumination

It is our policy to constantly improve the design and specifications. Accordingly, the details represented herein cannot be regarded as final and binding.



JENOPTIK | Optical Systems
Microoptics Business Unit
JENOPTIK Laser, Optik, Systeme GmbH
Goeschwitzer Strasse 25 | 07745 Jena | Germany
Phone +49 3641 65-2442 | Fax -2443
microoptics@jenoptik.com | www.jenoptik-los.com

MEMS Optical, Inc.
205 Import Circle | Huntsville | AL 35806 | USA
Phone +1 256 859-1886 | Fax +1 256 859-5890
info@memsoptical.com | www.memsoptical.com

029131-003-99-14-0908-en