

For All Transversale Modes with $M^2 < 20$

Shape Your Laser Beam into a Ring Profile

Laser beams with a ring-shaped profile are required in ophthalmology, laser welding, and the material ablation of thin films.

The ring profile must be produced. Often, classic axicons are used for this purpose: conical lenses and rotation-symmetrical prisms. These elements convert a laser beam with a Gaussian profile into a Bessel beam. Axicons are very difficult to produce for very large or very small fan angles, an optimal ring profile generally cannot be achieved.

LASER COMPONENTS now introduces Holo/OR diffractive optics with an axicon structure. The advantages are immense: Irrespective of the fan angle, the ring profile is always perfect because the beam profile is produced using a grating.

Suited for all lasers with $M^2 < 20$, these elements may consist of thin fused silica or ZnSe. They are suited, for example, for single-mode fiber lasers, CO₂ lasers, and solid-state lasers. The incident beam can exhibit any TEM_{xy} mode. There are more than fifteen standard designs available with a peak-to-peak ring angle of 0.05° to 30° at 1064 nm, for example.

More Information

www.lasercomponents.com/lc/product/diffractive-optical-elements-for-beam-shaping/

Trade Shows

Photonex Scotland Roadshow, June 08, 2016, Heriot-Watt University UK, **Booth S22**
 Optical Interference Coatings (OIC), June 19-24, 2016, Tuscon, AZ, USA
 Sensors Expo & Conference, June 22-23, 2016, San Jose, US, USA, **Booth 1040**
 Automatica, June 21-24, 2016, Messe München, **Booth B5.503**
 Photon16, September 06-07, 2016, University of Leeds UK, **Booth 5**
 ECOC 2016, September 19-21, 2016, Düsseldorf, **Booth 102**
 SPIE Security + Defence 2016, September 27-28, 2016 Edinburgh, UK, **Booth 405**
 Photonex Coventry 2016, October 1-13, 2016, Ricoh Arena UK, **Booth D15**
 VISION 2016, November 08-10, 2016, Messe Stuttgart, **Booth 1C33**
 Electronica 2016, November 08-11, 2016, Messe München, **Booth B1.306**

The Company

LASER COMPONENTS specializes in the development, manufacture, and sale of components and services in the laser and optoelectronics industry. At LASER COMPONENTS, we have been serving customers since 1982 with sales branches in five different countries. We have been producing in house since 1986 with production facilities in Germany, Canada, and the United States. In-house production makes up approximately half of our sales revenue. A family-run business, we have more than 200 employees worldwide.