

### For CO<sub>2</sub> Lasers

## Non-polarizing Beam Splitter

Classic 50:50 beam splitters change the polarization of the incoming light. Circularly-polarized laser radiation is divided into elliptically-polarized partial beams – corresponding to the different reflection values for p-polarization and s-polarization.

LASER COMPONENTS now offers beam splitters for CO<sub>2</sub> lasers that maintain the polarization state of the laser beam for both the reflected and the transmitted partial beam: They are called “non-polarizing beam splitters.”

The coating is applied to ZnSe “laser grade” substrates at high precision  $R_{s,p} [10.6 \mu\text{m}] = 50\% \pm 1\%$ . The coating consists of several layers, one of which is germanium; thus, the beam splitter is impenetrable for light in the visible range.

Non-polarizing beam splitters are suited for a laser power of  $<500 \text{ W/cm}^2$ . Different standard components with a diameter of between 25.0 mm and 2” are available in stock and can be provided quickly for your tests.

### More Information

[www.lasercomponents.com/de-en/news/to-prevent-your-co2-laser-beam-from-polarizing-randomly/](http://www.lasercomponents.com/de-en/news/to-prevent-your-co2-laser-beam-from-polarizing-randomly/)

### Trade Shows

**The Vision Show**, May 03-05, 2016, Hynes Convention Center Boston Massachusetts USA, **Booth 656**  
**analytica**, May 10-13, 2016, Messe München, **Booth A2.500**

**Sensor + Test**, May 10-12, 2016, Messe Nürnberg, **Hall 1, Booth 256**

**LaSys**, May 31-June 02, 2016, Messe Stuttgart, **Booth 4A16**

**AngaCom**, June 07-09, 2016, Messe Köln, **Hall 10.2, Booth J35**

**Optatec**, June 07-09, 2016, Messezentrum Frankfurt/Main, **Hall 3, Booth E01**

**Photonex Scotland Roadshow**, June 08, 2016, Heriot-Watt University UK, **Booth S22**

**Sensors Expo & Conference**, June 22-23, 2016, San Jose USA, **Booth 1240**

**Automatica**, June 21-24, 2016, Messe München, **Booth B5.503**

**Photon 16**, September 06-07, 2016, University of Leeds UK, **Booth 5**

**ECOC 2016**, September 19-21, 2016, Düsseldorf, **Booth 102**

**SPIE Security+Defense 2016**, September 27-28, 2016, Edinburgh, **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,

### 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.