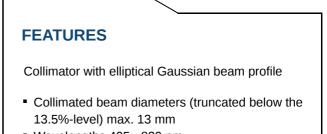
Laser Diode Collimator series 55CM/55CR

Collimator with elliptical Gaussian beam profile





- Wavelengths 405 830 nm
- Laser powers up to 109 mW
- Angled version: 55CR

DESCRIPTION

Laser diode collimators transform the divergent light of a laser diode into a collimated beam, while maintaining the Gaussian intensity distribution and the elliptical intensity profile.

The laser has integrated electronics for control of the laser output power. The output power can be controlled using the modulation input ports (TTL and analog) or manually using the potentiometer. Optionally the lasers can be equipped with <u>RS232 serial</u> interface for laser control and data read-out.

The collimation can be adjusted by using an eccentric key. Please note that this affects beam parameters like collimated beam diameter and beam divergence.

TECHNOTES

- Laser Modules with RS232 interface
 Features of Laser Modules with RS232 interface
- <u>Electronic features (9)</u>
 <u>Detailed electronic features for all electronics types</u>
 - Overview Electronics Types
 Overview over all Electronics Types



<u>Electronics Type C</u> <u>Electronic features for electronics type C</u>

- <u>Electronics Type P</u> <u>Electronic features for electronics type P</u>
- <u>Electronics Type H</u>
 <u>Electronic features for electronics type H</u>
- <u>Electronics Type HP</u>
 <u>Electronic features for electronics type HP</u>
- <u>Electronics Type CS with RS232 interface</u> <u>Electronic features for electronics type CS</u>
- <u>Electronics Type PS with RS232 interface</u> <u>Electronic features for electronics type PS</u>
- <u>Electronics Type S</u>
 <u>Electronic features for electronics type S</u>
- <u>Electronics Type B</u>
 <u>Electronic features for electronics type B</u>
- Laser Line Basics (7)
 Line geometry, intensity distribution, definition of line length and working distance, definition of line width and machine vision applications.
 - Laser Line geometries
 Fan angle vs. semi-telecentric.
 - Intensity distribution
 Gaussian intensity distribution and uniform intensity distribution along the laser line
 - Laser Line length and working distance
 Line length and working distance definition
 - Laser Line Width and Depth of Focus / Rayleigh Range
 Line width definition
 - Laser Speckle
 When do they appear and how to prevent them
 - Wavelengths of diode based lasers
 What wavelengths are available for diode based laser modules?
- <u>Cable orientation</u>
 <u>Straight and angled cable exit</u>
- <u>Machine vision applications of Laser Lines (1)</u>
 <u>Laser triangulation, laser light sectioning, particle measurement etc.</u>
 - Laser Diffraction Measurements

ACCESSORIES



SWITCHBOXES FOR LASER MODULES

POWER SUPPLIES FOR LASER MODULES

50HD-15 Hex key WS 1.5

9D-12

Screwdriver WS 1.2

RELATED PRODUCTS

LASER DIODE COLLIMATOR SERIES LNC-56CM/LNC-56CR

LASER DIODE COLLIMATOR SERIES 25CM

LASER DIODE COLLIMATOR SERIES 90CM/90CR

- Collimator
- Elliptical Gaussian beam profile
- Low noise
- Compact Collimator
- Elliptical Gaussian beam profile
- Collimator
- Large elliptical Gaussian beam profile

LASER DIODE COLLIMATOR SERIES 95CM/95CR

- Collimator
- Large circular Gaussian beam profile

This is a printout of the page https://sukhamburg.com/products/lasermodules/series/55.html from 4/26/2024

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