

## 13MM-M125-4+55CM-520-33-O11-T15-PS-7

Laser Macro Focus Generator with approx. circular beam profile



### FEATURES

Laser spot with approx. circular beam profile and extended depth of focus.

- Spot diameter: 0.034 x 0.027 mm
- Wavelength: 520 nm
- Working distance: 111 mm
- Depth of focus: 2.26 mm

- Macro Focus Generator for extended depth of focus
- With RS232 interface



## DESCRIPTION

The laser diode beam source type 13MM-M125-4+55CM-520-33-O11-T15-PS-7 produces a circular laser spot with extended depth of focus. The beam profile is approx. Gaussian. More precisely it has an elliptical intensity distribution clipped by a circular aperture.

The laser has integrated electronics [type PS](#) with micro-controller for control of the laser output power and serial interface (RS232). The output power can be controlled using the [modulation input ports \(TTL and analog\)](#) or manually using the potentiometer.

The working distance can be adjusted by adjusting the focus setting. Please note that the spot diameter increases proportionally to the working distance. A fine-adjustment of the distance between laser and target is recommended for fine-focusing.

## TECHNICAL DATA

13MM-M125-4+55CM-520-33-O11-T15-PS-7

Series	13MM	
Order Code	13MM-M125-4+55CM-520-33-O11-T15-PS-7	
Line profile	Gaussian Intensity Distribution	
Wavelength	520 +10/-5 nm	
Laser output power	33 mW	
Laser safety class	3B	
Focussing range	110-205 mm	
Working distance	111 mm	
Spot height	0.027 mm	
Spot width	0.034 mm	
Depth of focus	2.26 mm	
Diameter laser module	25/28 mm	
Module length	84.3 mm	
Installation length	225.3 mm	
Cable length	1.5 m	
Connector type	Lumberg SV70 IEC 61076-2-106	
Supply voltage	5 ± 0.2 V	
Max. current consumption	0.5 A	
Working temperature	15 - 40 °C	
Modulation inputs	Analog	TTL
Input resistance	9 kOhm	9 kOhm
Max. modulation frequency	0.001 kHz	250 kHz
Modulation delay ON/OFF	3000/3000 µs	0.6/0.2 µs
Rise / Fall time	200000/200000 µs	0.2/0.2 µs
Interface	RS232	

## ACCESSORIES

50HD-15	Hex key WS 1.5
9D-12	Screwdriver WS 1.2
13MK-25-36-10-F	Mounting Console with flat base plate

13MK-25-36-10-M	Mounting Console with base plate with dovetail profile
PS051007E	Power Supply 5 V for laser modules with RS232 interface

## RELATED PRODUCTS

LASER MODULES SERIES 13M	<ul style="list-style-type: none"><li>▪ Micro Focus Generator</li><li>▪ Elliptical Gaussian beam profile</li></ul>
LASER MODULES SERIES LNC-13MM	<ul style="list-style-type: none"><li>▪ Macro Focus Generator</li><li>▪ <b>Circular</b> beam profile</li><li>▪ Extended depth of focus</li><li>▪ Low noise</li></ul>
LASER MODULES SERIES 13MMC	<ul style="list-style-type: none"><li>▪ Laser Macro Focus Generator</li><li>▪ <b>Rotationally symmetric</b> beam profile</li><li>▪ Extended depth of focus</li></ul>
LASER MODULES SERIES 5MM	<ul style="list-style-type: none"><li>▪ <b>Compact</b> Laser Macro Focus Generator</li><li>▪ <b>Circular</b> beam profile and</li><li>▪ Extended depth of focus</li></ul>

This is a printout of the page [https://sukhamburg.com/products/details/13MM-M125-4\\_55CM-520-33-O11-T15-PS-7](https://sukhamburg.com/products/details/13MM-M125-4_55CM-520-33-O11-T15-PS-7) from 5/4/2024

## CONTACT

For more information please contact:

Schäfter + Kirchhoff GmbH

Kieler Str. 212

22525 Hamburg

Germany

Tel: +49 40 85 39 97-0

Fax: +49 40 85 39 97-79

[info@sukhamburg.de](mailto:info@sukhamburg.de)

[www.sukhamburg.com](http://www.sukhamburg.com)

## LEGAL NOTICE

**Copyright 2020 Schäfter+Kirchhoff GmbH. All rights reserved.**

Text, image, graphic, sound, video and animation files and their arrangement on Schäfter+Kirchhoff GmbH webpages are protected by copyright and other protective laws. The content may not be copied for commercial use or reproduced, modified or used on other websites. [\[more\]](#)