

13M-M100+55CM-685-41-H13-T12-C-6

Laser Micro Focus Generator with elliptical Gaussian beam profile



FEATURES

Laser spot with elliptical Gaussian beam profile.

- Spot diameter: 0.012 x 0.026 mm
- Wavelength: 685 nm
- Working distance: 93 mm

- Micro Focus Generator for small spot widths and high power density in the focal plane



DESCRIPTION

The laser diode beam source type 13M-M100+55CM-685-41-H13-T12-C-6 produces an elliptical laser spot with elliptical Gaussian intensity distribution.

The laser has integrated electronics [type C](#) 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.

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

13M-M100+55CM-685-41-H13-T12-C-6

| | |
|------------|----------------------------------|
| Series | 13M |
| Order Code | 13M-M100+55CM-685-41-H13-T12-C-6 |

| | | |
|---------------------------|---------------------------------|---------|
| Line profile | Gaussian Intensity Distribution | |
| Wavelength | 685 +10/-10 nm | |
| Laser output power | 41 mW | |
| Laser safety class | 3B | |
| Focussing range | 80-110 mm | |
| Working distance | 93 mm | |
| Spot height | 0.026 mm | |
| Spot width | 0.012 mm | |
| Rayleigh range | 0.308 mm | |
| Diameter laser module | 25/28 mm | |
| Module length | 75.9 mm | |
| Installation length | 198.9 mm | |
| Cable length | 1.5 m | |
| Connector type | Lumberg SV50 IEC 61076-2-106 | |
| Supply voltage | 5 ± 0.2 V | |
| Max. current consumption | 0.25 A | |
| Working temperature | 0 - 40 °C | |
| Modulation inputs | Analog | TTL |
| Input resistance | 22 kOhm | 22 kOhm |
| Max. modulation frequency | 100 kHz | 100 kHz |
| Modulation delay ON/OFF | 1/0.5 µs | 2/1 µs |
| Rise / Fall time | 3/2 µs | 3/2 µs |

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 |
| PS051003E | Power Supply 5 V |

RELATED PRODUCTS

**LASER MODULES
SERIES 13MM**

- Macro Focus Generator
- **Circular** beam profile
- Extended depth of focus

**LASER MODULES
SERIES 13MC**

- Micro Focus Generator
- **Rotationally symmetric**, Gaussian beam profile

**LASER MODULES
SERIES LNC-13M**

- Micro Focus Generator
- Elliptical Gaussian beam profile
- Low noise

**LASER MODULES
SERIES 5MC**

- **Compact** Laser Micro Focus Generator
- **Rotationally symmetric**, Gaussian beam profile

**LASER MODULES
SERIES 5M**

- **Compact** Laser Micro Focus Generator
- Elliptical Gaussian beam profile

This is a printout of the page https://sukhamburg.com/products/details/13M-M100_55CM-685-41-H13-T12-C-6 from 4/25/2024

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

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. [\[more\]](#)