

5M-S50+55CM-445-76-G02-A7.5-PS-7

Compact Laser Micro Focus Generator with elliptical Gaussian beam profile



FEATURES

Compact Laser spot with elliptical Gaussian beam profile.

- Spot diameter: 0.009 x 0.018 mm
- Wavelength: 445 nm
- Working distance: 46 mm

- Micro Focus Generator for small spot widths and high power density in the focal plane
- With RS232 interface



DESCRIPTION

The laser diode beam source type 5M-S50+55CM-445-76-G02-A7.5-PS-7 produces an elliptical laser spot with elliptical Gaussian intensity distribution.

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

5M-S50+55CM-445-76-G02-A7.5-PS-7

Series	5M	
Order Code	5M-S50+55CM-445-76-G02-A7.5-PS-7	
Line profile	Gaussian Intensity Distribution	
Wavelength	445 +15/-5 nm	
Laser output power	76 mW	
Laser safety class	3B	
Focussing range	35-70 mm	
Working distance	46 mm	
Spot height	0.018 mm	
Spot width	0.009 mm	
Rayleigh range	0.259 mm	
Diameter laser module	25/28 mm	
Module length	73.1 mm	
Installation length	149.1 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

60EX-4	Eccentric key with a stroke of ± 0.5 mm.
60EX-4-L	Alternative eccentric key with long handle with a stroke of ± 0.5 mm.
9D-12	Screwdriver WS 1.2

RELATED PRODUCTS

**LASER MODULES
SERIES 5MM**

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

**LASER MODULES
SERIES 13MC**

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

**LASER MODULES
SERIES 5MC**

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

**LASER MODULES
SERIES 13M**

- Micro Focus Generator
- Elliptical Gaussian beam profile

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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

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