

## 5M-S50+25CM-405-14-Y07-A7.5-B-4

Compact Laser Micro Focus Generator with elliptical Gaussian beam profile



### FEATURES

Compact Laser spot with elliptical Gaussian beam profile.

- Spot diameter: 0.006 x 0.014 mm
- Wavelength: 405 nm
- Working distance: 46 mm

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



## DESCRIPTION

The laser diode beam source type 5M-S50+25CM-405-14-Y07-A7.5-B-4 produces an elliptical laser spot with elliptical Gaussian intensity distribution.

The laser has integrated electronics [type B](#) for control of the laser output power. The output power can be controlled using the [modulation input port \(TTL\)](#), 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+25CM-405-14-Y07-A7.5-B-4

Series

5M

Order Code	5M-S50+25CM-405-14-Y07-A7.5-B-4
Line profile	Gaussian Intensity Distribution
Wavelength	405 +5/-5 nm
Laser output power	14 mW
Laser safety class	3B
Focussing range	35-70 mm
Working distance	46 mm
Spot height	0.014 mm
Spot width	0.006 mm
Rayleigh range	0.148 mm
Diameter laser module	12 mm
Module length	60.7 mm
Installation length	136.7 mm
Cable length	1.5 m
Connector type	Lumberg SV40 IEC 61076-2-106
Supply voltage	12 ± 0.5 V
Max. current consumption	0.16 A
Working temperature	0 - 40 °C
Modulation inputs	TTL
Input resistance	110 kOhm
Max. modulation frequency	0.2 kHz
Modulation delay ON/OFF	500/500 µs
Rise / Fall time	10/20 µs

## 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
PS120516E	Power Supply 12 V

## 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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