

5M-S50+25CM-785-90-Q06-A8-S-6

Compact Laser Micro Focus Generator with elliptical Gaussian beam profile



FEATURES

Compact Laser spot with elliptical Gaussian beam profile.

- Spot diameter: 0.013 x 0.023 mm
- Wavelength: 785 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-785-90-Q06-A8-S-6 produces an elliptical laser spot with elliptical Gaussian intensity distribution.

The laser has integrated electronics [type S](#) 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

5M-S50+25CM-785-90-Q06-A8-S-6

Series

5M

Order Code	5M-S50+25CM-785-90-Q06-A8-S-6	
Line profile	Gaussian Intensity Distribution	
Wavelength	785 +10/-10 nm	
Laser output power	90 mW	
Laser safety class	3B	
Focussing range	35-70 mm	
Working distance	46 mm	
Spot height	0.023 mm	
Spot width	0.013 mm	
Rayleigh range	0.354 mm	
Diameter laser module	12 mm	
Module length	60.7 mm	
Installation length	136.7 mm	
Cable length	1.5 m	
Connector type	Lumberg SV50 IEC 61076-2-106	
Supply voltage	5 ± 0.25 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	50 kHz	1000 kHz
Modulation delay ON/OFF	4/0.5 µs	0.05/0.05 µs
Rise / Fall time	5/4 µs	0.1/0.02 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
PS051003E	Power Supply 5 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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