

5M-A6+55CM-445-76-G02-A7.5-P-6

Compact Laser Micro Focus Generator with elliptical Gaussian beam profile



FEATURES

Compact Laser spot with elliptical Gaussian beam profile.

- Spot diameter: 0.001 x 0.002 mm
- Wavelength: 445 nm
- Working distance: 3 mm

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



DESCRIPTION

The laser diode beam source type 5M-A6+55CM-445-76-G02-A7.5-P-6 produces an elliptical laser spot with elliptical Gaussian intensity distribution.

The laser has integrated electronics [type P](#) with micro-controller 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-A6+55CM-445-76-G02-A7.5-P-6

Series

5M

Order Code	5M-A6+55CM-445-76-G02-A7.5-P-6	
Line profile	Gaussian Intensity Distribution	
Wavelength	445 +15/-5 nm	
Laser output power	76 mW	
Laser safety class	3B	
Focussing range	2-6 mm	
Working distance	3 mm	
Spot height	0.002 mm	
Spot width	0.001 mm	
Rayleigh range	0.004 mm	
Diameter laser module	25/28 mm	
Module length	76.4 mm	
Installation length	109.4 mm	
Cable length	1.5 m	
Connector type	Lumberg SV50 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	0.01 kHz	250 kHz
Modulation delay ON/OFF	3000/3000 µs	0.5/0.2 µs
Rise / Fall time	40000/40000 µs	0.5/0.5 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

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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