

5M-S150+55CM-450-57-O06-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: 0.019 x 0.052 mm
- Wavelength: 450 nm
- Working distance: 147 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-S150+55CM-450-57-O06-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-S150+55CM-450-57-O06-A7.5-PS-7

| | | |
|---------------------------|-----------------------------------|------------|
| Series | 5M | |
| Order Code | 5M-S150+55CM-450-57-O06-A7.5-PS-7 | |
| Line profile | Gaussian Intensity Distribution | |
| Wavelength | 450 +10/-10 nm | |
| Laser output power | 57 mW | |
| Laser safety class | 3B | |
| Focussing range | 125-260 mm | |
| Working distance | 147 mm | |
| Spot height | 0.052 mm | |
| Spot width | 0.019 mm | |
| Rayleigh range | 1.27 mm | |
| Diameter laser module | 25/28 mm | |
| Module length | 73.1 mm | |
| Installation length | 250.1 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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