

5MC-S50+29CM-635-4-B08-M12-S-6

Compact Laser Micro Focus Generator with rotationally symmetric beam profile



FEATURES

Compact laser spot with rotationally symmetric, Gaussian beam profile.

- Spot diameter: 0.014 x 0.014 mm
- Wavelength: 635 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 5MC-S50+29CM-635-4-B08-M12-S-6 produces a rotationally symmetric circular laser spot with 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

5MC-S50+29CM-635-4-B08-M12-S-6

Series

5MC

| | | |
|---------------------------|---------------------------------|--------------|
| Order Code | 5MC-S50+29CM-635-4-B08-M12-S-6 | |
| Line profile | Gaussian Intensity Distribution | |
| Wavelength | 635 +5/-5 nm | |
| Laser output power | 4 mW | |
| Laser safety class | 3R | |
| Focussing range | 35-70 mm | |
| Working distance | 46 mm | |
| Spot height | 0.014 mm | |
| Spot width | 0.014 mm | |
| Rayleigh range | 0.501 mm | |
| Diameter laser module | 12 mm | |
| Module length | 65.2 mm | |
| Installation length | 141.2 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 5M**

- **Compact** Laser Micro Focus Generator
- Elliptical Gaussian beam profile

**LASER MODULES
SERIES 13MC**

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

**LASER MODULES
SERIES 13M**

- Micro Focus Generator
- Elliptical Gaussian beam profile

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