

5M-A18+55CM-685-39-H13-A8-C-6

Compact Laser Micro Focus Generator with elliptical Gaussian beam profile



FEATURES

Compact Laser spot with elliptical Gaussian beam profile.

- Spot diameter: 0.003 x 0.007 mm
- Wavelength: 685 nm
- Working distance: 16.5 mm

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



DESCRIPTION

The laser diode beam source type 5M-A18+55CM-685-39-H13-A8-C-6 produces an elliptical laser spot with elliptical Gaussian intensity distribution.

The laser has integrated electronics [type C](#) 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-A18+55CM-685-39-H13-A8-C-6

Series

5M

| | | |
|---------------------------|---------------------------------|---------|
| Order Code | 5M-A18+55CM-685-39-H13-A8-C-6 | |
| Line profile | Gaussian Intensity Distribution | |
| Wavelength | 685 +10/-10 nm | |
| Laser output power | 39 mW | |
| Laser safety class | 3B | |
| Focussing range | 15-35 mm | |
| Working distance | 16.5 mm | |
| Spot height | 0.007 mm | |
| Spot width | 0.003 mm | |
| Rayleigh range | 0.023 mm | |
| Diameter laser module | 25/28 mm | |
| Module length | 76.4 mm | |
| Installation length | 122.9 mm | |
| Cable length | 1.5 m | |
| Connector type | Lumberg SV50 IEC 61076-2-106 | |
| Supply voltage | 5 ± 0.2 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 | 100 kHz | 100 kHz |
| Modulation delay ON/OFF | 1/0.5 µs | 2/1 µs |
| Rise / Fall time | 3/2 µs | 3/2 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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