

### 5LTM-150-11+55CM-685-24-H13-A8-C-6

Semi-telecentric Macro Line Generator



#### **FEATURES**

Semi-telecentric laser line with constant line length of 4.8 mm and extended depth of focus.

Line length: 4.8 mm
Line width: 148 µm
Wavelength: 685 nm
Working distance: 139 mm
Depth of focus: 68.7 mm

Macro Line Generator for extended depth of focus



### **DESCRIPTION**

The laser diode beam source type 5LTM-150-11+55CM-685-24-H13-A8-C-6 produces a semi-telecentric laser line with 4.8 mm line length and extended depth of focus. The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 15 %. The line width is constant along the laser line. Across the laser line the intensity distribution is approx. Gaussian.

The laser has integrated electronics  $\underline{type\ C}$  for control of the laser output power. The output power can be controlled using the  $\underline{modulation\ input\ ports\ (TTL\ and\ analog)}$  or manually using the potentiometer.

For this laser type the working distance is fixed. A fine-adjustment of the distance between laser and target is recommended for fine-focusing in order to achieve minimal line width.



# **TECHNICAL DATA**

5LTM-150-11+55CM-685-24-H13-A8-C-6

| Series 5LTM               |                                    |                              |  |
|---------------------------|------------------------------------|------------------------------|--|
| Order Code                | 5LTM-150-11+55CM-685-24-H13-A8-C-6 |                              |  |
| Line profile              | Gaussian Intensity Distribution    |                              |  |
| Line type                 | Laser Macro Line                   |                              |  |
| Wavelength                | 685 +10/-10 nm                     |                              |  |
| Laser output power        |                                    | 24 mW                        |  |
| Laser safety class        | 3B                                 |                              |  |
| Focussing range           | 139-139 mm                         |                              |  |
| Working distance          | 139 mm                             |                              |  |
| Line length               | 4.8 mm                             |                              |  |
| Line width                | 0.148 mm                           |                              |  |
| Depth of focus            | 68.7 mm                            |                              |  |
| Edge intensity            | 15 %                               |                              |  |
| Diameter laser module     | 25/28 mm                           |                              |  |
| Module length             | 78.5 mm                            |                              |  |
| Installation length       | 247.5 mm                           |                              |  |
| Cable length              | 1.5 m                              |                              |  |
| Connector type            | Lumberg SV50 II                    | 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**

**9D-12** Screwdriver WS 1.2

**13MK-25-36-10-F** Mounting Console with flat base plate



**13MK-25-36-10-M** Mounting Console with base plate with dovetail

profile

**PS051003E** Power Supply 5 V

### **RELATED PRODUCTS**

LASER MODULES SERIES 5LT-2

- Semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. 2 mm

LASER MODULES
SERIES LNC-5LTM-2

- Semi-telecentric Macro Line
- Gaussian intensity distribution
- Constant line length ca. 2 mm
- Extended depth of focus
- Low noise

LASER MODULES SERIES 13LTM

- Semi-telecentric Macro Line
- Uniform intensity distribution
- Constant line length 15 mm
- Extended depth of focus

LASER MODULES SERIES 5LTM-1+25CM

- Compact semi-telecentric Macro Line
- Gaussian intensity distribution
- Constant line length ca. 4.8 mm
- Extended depth of focus

LASER MODULES
SERIES 5LTM-1

- Semi-telecentric Macro Line
- Gaussian intensity distribution
- Constant line length ca. 4.8 mm
- Extended depth of focus

LASER MODULES SERIES 5LTM-2+25CM

- Compact semi-telecentric Macro Line
- Gaussian intensity distribution
- Constant line length ca. 2 mm
- Extended depth of focus



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