

### 5LTM-75-11+55CM-445-61-G02-A7.5-P-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: 49 µm
Wavelength: 445 nm
Working distance: 68 mm
Depth of focus: 11.2 mm

Macro Line Generator for extended depth of focus



## **DESCRIPTION**

The laser diode beam source type 5LTM-75-11+55CM-445-61-G02-A7.5-P-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 2 %. The line width is constant along the laser line. Across the laser line the intensity distribution is approx. Gaussian.

The laser has integrated electronics <u>type P</u> with micro-controller for control of the laser output power. The output power can be controlled using the <u>modulation input ports (TTL and analog)</u> 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-75-11+55CM-445-61-G02-A7.5-P-6

| Series                    | ries 5LTM                           |            |
|---------------------------|-------------------------------------|------------|
| Order Code                | 5LTM-75-11+55CM-445-61-G02-A7.5-P-6 |            |
| Line profile              | Gaussian Intensity Distribution     |            |
| Line type                 | Laser Macro Line                    |            |
| Wavelength                | 445 +15/-5 nm                       |            |
| Laser output power        | 61 mW                               |            |
| Laser safety class        | 3B                                  |            |
| Focussing range           | 68-68 mm                            |            |
| Working distance          | 68 mm                               |            |
| Line length               | 4.8 mm                              |            |
| Line width                | 0.049 mm                            |            |
| Depth of focus            | 11.2 mm                             |            |
| Edge intensity            | 2 %                                 |            |
| Diameter laser module     | 25/28 mm                            |            |
| Module length             | 78.5 mm                             |            |
| Installation length       | 176.5 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**

**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 distributionConstant 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



This is a printout of the page <a href="https://sukhamburg.com/products/details/5LTM-75-11">https://sukhamburg.com/products/details/5LTM-75-11</a> 55CM-445-61-G02-A7 5-P-6 from 5/5/2024

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