

5LT-100-1+55CM-445-76-G02-A7.5-P-6

Semi-telecentric Micro Line Generator



FEATURES

Semi-telecentric laser line with constant line length of 4.8 mm.

- Line length: 4.8 mm
- Line width: 36 μm
- Wavelength: 445 nm
- Working distance: 96 mm

- Micro Line Generator for small laser line widths and high power density in the focal plane



DESCRIPTION

The laser diode beam source type 5LT-100-1+55CM-445-76-G02-A7.5-P-6 produces a semi-telecentric laser line with 4.8 mm line length. 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 Gaussian.

The laser has integrated electronics [type P](#) with micro-controller 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.

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

5LT-100-1+55CM-445-76-G02-A7.5-P-6

| | | |
|---------------------------|------------------------------------|------------|
| Series | 5LT | |
| Order Code | 5LT-100-1+55CM-445-76-G02-A7.5-P-6 | |
| Line profile | Gaussian Intensity Distribution | |
| Line type | Laser Micro Line | |
| Wavelength | 445 +15/-5 nm | |
| Laser output power | 76 mW | |
| Laser safety class | 3B | |
| Focussing range | 96-96 mm | |
| Working distance | 96 mm | |
| Line length | 4.8 mm | |
| Line width | 0.036 mm | |
| Rayleigh range | 4.69 mm | |
| Edge intensity | 2 % | |
| Diameter laser module | 25/28 mm | |
| Module length | 73.1 mm | |
| Installation length | 199.1 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 |

DOWNLOADS

[930412000106.pdf](#)

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 5LTM-1

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

LASER MODULES SERIES LNC-5LTM-1

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

LASER MODULES SERIES 13LT

- Semi-telecentric Micro Line
- Uniform intensity distribution
- Constant line length **15 mm**

LASER MODULES SERIES 5LT-2+25CM

- **Compact** semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. **2 mm**

LASER MODULES SERIES 5LT-1

- Semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. **4.8 mm**

LASER MODULES SERIES 5LT-2

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

This is a printout of the page https://sukhamburg.com/products/details/5LT-100-1_55CM-445-76-G02-A7_5-P-6 from 5/6/2024

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