5LTM-100-11+55CM-445-61-G02-A7.5-PS-7

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: 66 μm
- Wavelength: 445 nm
- Working distance: 91 mm
- Depth of focus: 19.8 mm
- Macro Line Generator for extended depth of focus
- With RS232 interface



DESCRIPTION

The laser diode beam source type 5LTM-100-11+55CM-445-61-G02-A7.5-PS-7 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 PS</u> with micro-controller for control of the laser output power and serial interface (RS232). 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-100-11+55CM-445-61-G02-A7.5-PS-7

| Series | | 5LTM |
|---------------------------|---------------------------------------|------------|
| Order Code | 5LTM-100-11+55CM-445-61-G02-A7.5-PS-7 | |
| 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 | 91-91 mm | |
| Working distance | 91 mm | |
| Line length | | 4.8 mm |
| Line width | 0.066 mm | |
| Depth of focus | 19.8 mm | |
| Edge intensity | 2 % | |
| Diameter laser module | 25/28 mm | |
| Module length | 78.5 mm | |
| Installation length | 199.5 mm | |
| Cable length | 1.5 m | |
| Connector type | Lumberg SV70 IEC 61076-2-106 | |
| Supply voltage | 5 ± 0.2 V | |
| Max. current consumption | 0.5A | |
| Working temperature | 15 - 40 °C | |
| Modulation inputs | Analog | TTL |
| Input resistance | 9 kOhm | 9 kOhm |
| Max. modulation frequency | 0.001 kHz | 250 kHz |
| Modulation delay ON/OFF | 3000/3000 µs | 0.6/0.2 μs |
| Rise / Fall time | 200000/200000 µs | 0.2/0.2 μs |
| Interface | | RS232 |

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 |
| PS051007E | Power Supply 5 V for laser modules with RS232 interface |

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 |

Extended depth of focus

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DATA SHEET

This is a printout of the page <u>https://sukhamburg.com/products/details/5LTM-100-11_55CM-445-61-G02-A7_5-PS-7</u> from 4/19/2024

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