

5LT-150-1+55CM-405-14-Y07-A7.5-C-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: 41 μm
- Wavelength: 405 nm
- Working distance: 145 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-150-1+55CM-405-14-Y07-A7.5-C-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 9 %. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

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.

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-150-1+55CM-405-14-Y07-A7.5-C-6

Series	5LT	
Order Code	5LT-150-1+55CM-405-14-Y07-A7.5-C-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	405 +5/-5 nm	
Laser output power	14 mW	
Laser safety class	3B	
Focussing range	145-145 mm	
Working distance	145 mm	
Line length	4.8 mm	
Line width	0.041 mm	
Rayleigh range	6.53 mm	
Edge intensity	9 %	
Diameter laser module	25/28 mm	
Module length	73.1 mm	
Installation length	248.1 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	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

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[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**

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