5LT-500-2+55CM-450-57-O06-A7.5-P-6

Semi-telecentric Micro Line Generator

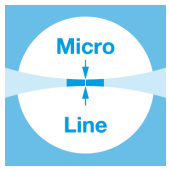


FEATURES

Semi-telecentric laser line with constant line length of 2.4 mm.

- Line length: 2.4 mm
- Line width: 64 µm
- Wavelength: 450 nm
- Working distance: 491 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-500-2+55CM-450-57-O06-A7.5-P-6 produces a semi-telecentric laser line with 2.4 mm line length. In this case the line length is given on the 13.5%-level. The intensity profile is Gaussian in line direction and the line is truncated at 4.8 mm. 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-500-2+55CM-450-57-O06-A7.5-P-6

Series	5LT	
Order Code	5LT-500-2+55CM-450-57-O06-A7.5-P-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	450 +10/-10 nm	
Laser output power	57 mW	
Laser safety class	3B	
Focussing range	491-491 mm	
Working distance	491 mm	
Line length	2.4 mm	
Line width	0.064 mm	
Rayleigh range	14.1 mm	
Edge intensity	15 %	
Diameter laser module	25/28 mm	
Module length	73.1 mm	
Installation length	594.1 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

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

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 13LT
- Semi-telecentric Micro Line
- Uniform intensity distribution
- Constant line length **15 mm**

LASER MODULES SERIES 5LT-1+25CM
- **Compact** semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. **4.8 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+25CM
- **Compact** semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. **2 mm**

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