

## 5LTM-500-11+55CM-450-44-O06-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: 331  $\mu\text{m}$
- Wavelength: 450 nm
- Working distance: 486 mm
- Depth of focus: 501 mm

- Macro Line Generator for extended depth of focus



## DESCRIPTION

The laser diode beam source type 5LTM-500-11+55CM-450-44-O06-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 15 %. The line width is constant along the laser line. Across the laser line the intensity distribution is approx. 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

5LTM-500-11+55CM-450-44-O06-A7.5-P-6

Series	5LTM	
Order Code	5LTM-500-11+55CM-450-44-O06-A7.5-P-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	450 +10/-10 nm	
Laser output power	44 mW	
Laser safety class	3B	
Focussing range	486-486 mm	
Working distance	486 mm	
Line length	4.8 mm	
Line width	0.331 mm	
Depth of focus	501 mm	
Edge intensity	15 %	
Diameter laser module	25/28 mm	
Module length	78.5 mm	
Installation length	594.5 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	<ul style="list-style-type: none"><li>▪ Semi-telecentric Micro Line</li><li>▪ Gaussian intensity distribution</li><li>▪ Constant line length ca. <b>2 mm</b></li></ul>
LASER MODULES SERIES LNC-5LTM-2	<ul style="list-style-type: none"><li>▪ Semi-telecentric Macro Line</li><li>▪ Gaussian intensity distribution</li><li>▪ Constant line length ca. <b>2 mm</b></li><li>▪ Extended depth of focus</li><li>▪ Low noise</li></ul>
LASER MODULES SERIES 13LTM	<ul style="list-style-type: none"><li>▪ Semi-telecentric Macro Line</li><li>▪ Uniform intensity distribution</li><li>▪ Constant line length <b>15 mm</b></li><li>▪ Extended depth of focus</li></ul>
LASER MODULES SERIES 5LTM-1+25CM	<ul style="list-style-type: none"><li>▪ <b>Compact</b> semi-telecentric Macro Line</li><li>▪ Gaussian intensity distribution</li><li>▪ Constant line length ca. <b>4.8 mm</b></li><li>▪ Extended depth of focus</li></ul>
LASER MODULES SERIES 5LTM-1	<ul style="list-style-type: none"><li>▪ Semi-telecentric Macro Line</li><li>▪ Gaussian intensity distribution</li><li>▪ Constant line length ca. <b>4.8 mm</b></li><li>▪ Extended depth of focus</li></ul>
LASER MODULES SERIES 5LTM-2+25CM	<ul style="list-style-type: none"><li>▪ <b>Compact</b> semi-telecentric Macro Line</li><li>▪ Gaussian intensity distribution</li><li>▪ Constant line length ca. <b>2 mm</b></li><li>▪ Extended depth of focus</li></ul>

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