#### 5LTM-500-11+55CM-450-44-006-A7.5-PS-7

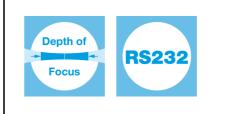
Semi-telecentric Macro Line Generator



#### 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: 331 μm
- Wavelength: 450 nm
- Working distance: 486 mm
- Depth of focus: 501 mm
- Macro Line Generator for extended depth of focus
- With RS232 interface



#### DESCRIPTION

The laser diode beam source type 5LTM-500-11+55CM-450-44-O06-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 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 <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-500-11+55CM-450-44-006-A7.5-PS-7

Series		5LTM
Order Code	5LTM-500-11+55CM-450-44-006-A7.5-PS-7	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	450 +10/-10 nm	
Laser output power	44 mW	
Laser safety class	3В	
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 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	<ul> <li>Semi-telecentric Micro Line</li> <li>Gaussian intensity distribution</li> <li>Constant line length ca. 2 mm</li> </ul>
LASER MODULES SERIES LNC-5LTM-2	<ul> <li>Semi-telecentric Macro Line</li> <li>Gaussian intensity distribution</li> <li>Constant line length ca. 2 mm</li> <li>Extended depth of focus</li> <li>Low noise</li> </ul>
LASER MODULES SERIES 13LTM	<ul> <li>Semi-telecentric Macro Line</li> <li>Uniform intensity distribution</li> <li>Constant line length 15 mm</li> <li>Extended depth of focus</li> </ul>
LASER MODULES SERIES 5LTM-1+25CM	<ul> <li>Compact semi-telecentric Macro Line</li> <li>Gaussian intensity distribution</li> <li>Constant line length ca. 4.8 mm</li> <li>Extended depth of focus</li> </ul>
LASER MODULES SERIES 5LTM-1	<ul> <li>Semi-telecentric Macro Line</li> <li>Gaussian intensity distribution</li> <li>Constant line length ca. 4.8 mm</li> <li>Extended depth of focus</li> </ul>
LASER MODULES SERIES 5LTM-2+25CM	<ul> <li>Compact semi-telecentric Macro Line</li> <li>Gaussian intensity distribution</li> <li>Constant line length ca. 2 mm</li> <li>Extended depth of focus</li> </ul>



## **DATA SHEET**

This is a printout of the page <u>https://sukhamburg.com/products/details/5LTM-500-11\_55CM-450-44-006-A7\_5-PS-7</u> from 5/4/2024

## CONTACT

For more information please contact: Schäfter + Kirchhoff GmbH Kieler Str. 212 22525 Hamburg Germany Tel: +49 40 85 39 97-0 Fax: +49 40 85 39 97-79

info@sukhamburg.de www.sukhamburg.com

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