

### 13LTM-500-41+90CM-450-13-O06-M60-PS-7

Semi-telecentric Macro Line Generator Semi-telecentric Macro Line Generator



#### **FEATURES**

Semi-telecentric laser line with constant line length 15mm, approx. uniform intensity distribution and extended depth of focus.

Line length: 15 mm
Line width: 81 μm
Wavelength: 450 nm
Working distance: 488 mm
Depth of focus: 31.3 mm

- Macro Line Generator for extended depth of focus
- With RS232 interface





### **DESCRIPTION**

The laser diode beam source type 13LTM-500-41+90CM-450-13-O06-M60-PS-7 produces a semi-telecentric laser line with 15 mm line length and extended depth of focus. The intensity profile is approx. uniform in line direction. More precisely, it is Gaussian clipped by an aperture with an edge intensity of 75 %. 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.



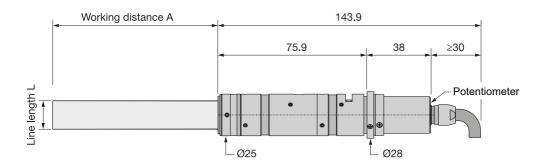
For this laser type the working distance is fixed. A fine-adjustment of the distance between laser and target is recommended for fine-focusing in order to achieve minimal line width.

# **TECHNICAL DATA**

13LTM-500-41+90CM-450-13-O06-M60-PS-7

Series	13LTM	
Order Code	13LTM-500-41+90CM-450-13-O06-M60-PS-7	
Line profile	Constant Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	450 +10/-10 nm	
Laser output power	13 mW	
Laser safety class	3B	
Focussing range	488-488 mm	
Working distance	488 mm	
Line length	15 mm	
Line width	0.081 mm	
Depth of focus	31.3 mm	
Edge intensity	75 %	
Diameter laser module	25/28 mm	
Module length	127.3 mm	
Installation length	645.3 mm	
Cable length	1.5 m	
Connector type	Lumberg SV70 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	0.001 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	

Dimensions (for a complete dimensional drawing please refer to the downloads section)



#### **DOWNLOADS**



## **ACCESSORIES**

**9D-12** Screwdriver WS 1.2

**PS051007E** Power Supply 5 V for laser modules with RS232

interface

### RELATED PRODUCTS

LASER MODULES SERIES 13LT

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

LASER MODULES

SERIES LNC-13LTM

- Semi-telecentric Macro Line
- Uniform intensity distribution
- Constant line length 15 mm
- Extended depth of focus
- Low noise

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-2+25CM

- Compact semi-telecentric Macro Line
- Gaussian intensity distribution
- Constant line length ca. 2 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

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

This is a printout of the page <a href="https://sukhamburg.com/products/details/13LTM-500-41">https://sukhamburg.com/products/details/13LTM-500-41</a> 90CM-450-13-006-M60-PS-7 from 5/8/2024

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