

## 13LTM-250-41+90CM-520-15-O11-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: 47 μm
Wavelength: 520 nm
Working distance: 238 mm
Depth of focus: 9.05 mm

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





# **DESCRIPTION**

The laser diode beam source type 13LTM-250-41+90CM-520-15-O11-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 77 %. 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.



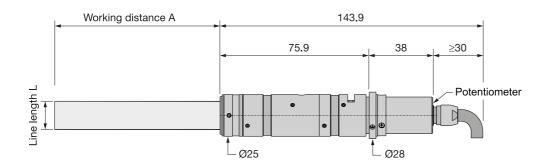
For this laser type the working distance is fixed. A fine-adjustment of the distance between laser and target is recommended for fine-focusing in order to achieve minimal line width.

# **TECHNICAL DATA**

13LTM-250-41+90CM-520-15-O11-M60-PS-7

Line type         Laser Macro Line           Wavelength         520 +10/-5 nm           Laser output power         15 mW           Laser safety class         3B           Focussing range         238-238 mm           Working distance         238 mm           Line length         15 mm           Line width         0.047 mm           Depth of focus         9.05 mm           Edge intensity         77 %           Diameter laser module         25/28 mm           Module length         127.3 mm           Installation length         395.3 mm           Cable length         1.5 m           Connector type         Lumberg SV70 IEC 61076-2-106           Supply voltage         5 ± 0.2 V           Max. current consumption         0.5A           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	Series 13LTM		
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	Modulation delay ON/OFF	3000/3000 μs	0.6/0.2 μs
Interface RS232	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

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