

## 13LTM-4000-41+90CM-660-21-M25-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: 956  $\mu\text{m}$
- Wavelength: 660 nm
- Working distance: 3988 mm
- Depth of focus: 2940 mm

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



## DESCRIPTION

The laser diode beam source type 13LTM-4000-41+90CM-660-21-M25-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 64 %. 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 PS](#) with micro-controller for control of the laser output power and serial interface (RS232). The output power can be controlled using the [modulation input ports \(TTL and analog\)](#) or manually using the potentiometer.

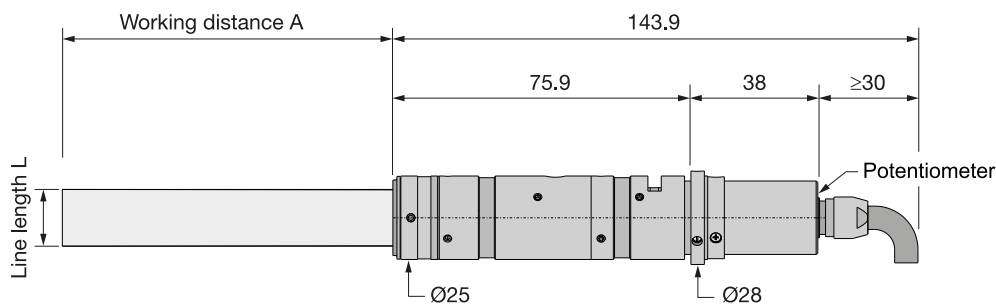
For this laser type the working distance is fixed. A fine-adjustment of the distance between laser and target is recommended for fine-focusing in order to achieve minimal line width.

## TECHNICAL DATA

13LTM-4000-41+90CM-660-21-M25-M60-PS-7

<b>Series</b>	13LTM	
<b>Order Code</b>	13LTM-4000-41+90CM-660-21-M25-M60-PS-7	
<b>Line profile</b>	Constant Intensity Distribution	
<b>Line type</b>	Laser Macro Line	
<b>Wavelength</b>	660 +4/-6 nm	
<b>Laser output power</b>	21 mW	
<b>Laser safety class</b>	3B	
<b>Focussing range</b>	3988-3988 mm	
<b>Working distance</b>	3988 mm	
<b>Line length</b>	15 mm	
<b>Line width</b>	0.956 mm	
<b>Depth of focus</b>	2940 mm	
<b>Edge intensity</b>	64 %	
<b>Diameter laser module</b>	25/28 mm	
<b>Module length</b>	127.3 mm	
<b>Installation length</b>	4145.3 mm	
<b>Cable length</b>	1.5 m	
<b>Connector type</b>	Lumberg SV70 IEC 61076-2-106	
<b>Supply voltage</b>	5 ± 0.2 V	
<b>Max. current consumption</b>	0.25 A	
<b>Working temperature</b>	15 - 40 °C	
<b>Modulation inputs</b>	Analog	TTL
<b>Input resistance</b>	9 kOhm	9 kOhm
<b>Max. modulation frequency</b>	0.001 kHz	250 kHz
<b>Modulation delay ON/OFF</b>	3000/3000 µs	0.5/0.2 µs
<b>Rise / Fall time</b>	200000/200000 µs	0.8/0.4 µs
<b>Interface</b>	RS232	

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



## DOWNLOADS



[951210000045.pdf](#)

## 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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