

### 13LTM-500-41+90CM-660-21-M25-M60-P-6

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: 120 μm
Wavelength: 660 nm
Working distance: 488 mm
Depth of focus: 46 mm

Macro Line Generator for extended depth of focus



## **DESCRIPTION**

The laser diode beam source type 13LTM-500-41+90CM-660-21-M25-M60-P-6 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 <u>type P</u> with micro-controller for control of the laser output power. 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.

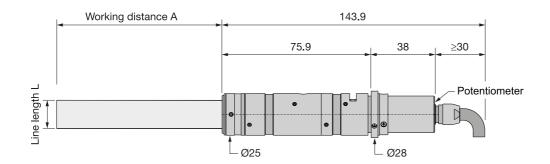


# **TECHNICAL DATA**

13LTM-500-41+90CM-660-21-M25-M60-P-6

Series 13LTM		
Order Code	13LTM-500-41+90CM-660-21-M25-M60-P-6	
Line profile	Constant Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	660 +4/-6 nm	
Laser output power	21 mW	
Laser safety class	3В	
Focussing range	488-488 mm	
Working distance	488 mm	
Line length	15 mm	
Line width	0.12 mm	
Depth of focus	46 mm	
Edge intensity	64 %	
Diameter laser module	25/28 mm	
Module length	127.3 mm	
Installation length	645.3 mm	
Cable length	1.5 m	
Connector type	Lumberg SV50 IEC 61076-2-106	
Supply voltage	5 ± 0.2 V	
Max. current consumption	0.25 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

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



### **DOWNLOADS**



### **ACCESSORIES**

**9D-12** Screwdriver WS 1.2

PS051003E Power Supply 5 V

#### **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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