

## 13LT-165+90CM-450-28-O06-M60-PS-7

Semi-telecentric Micro Line Generator



### FEATURES

Semi-telecentric laser line with constant line length 15mm and approx. uniform intensity distribution.

- Line length: 15 mm
- Line width: 9  $\mu\text{m}$
- Wavelength: 450 nm
- Working distance: 163 mm

- Micro Line Generator for small laser line widths and high power density in the focal plane
- With RS232 interface



## DESCRIPTION

The laser diode beam source type 13LT-165+90CM-450-28-O06-M60-PS-7 produces a semi-telecentric laser line with 15 mm line length. 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 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.

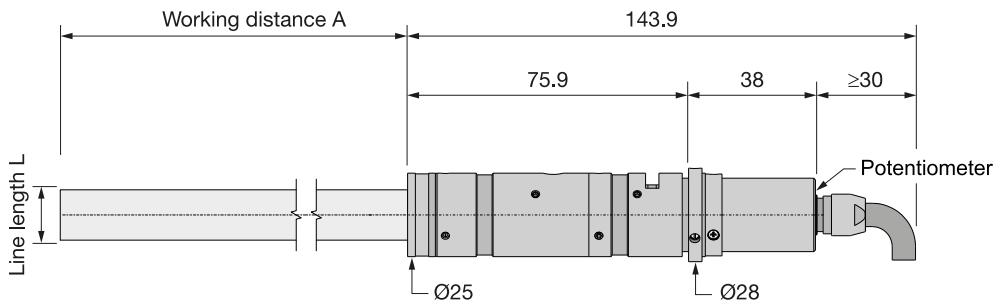
For this laser type the working distance is fixed. A fine-adjustment of the distance between laser and target is recommended for fine-focusing in order to achieve minimal line width.

## TECHNICAL DATA

13LT-165+90CM-450-28-O06-M60-PS-7

Series	13LT	
Order Code	13LT-165+90CM-450-28-O06-M60-PS-7	
Line profile	Constant Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	450 +10/-10 nm	
Laser output power	28 mW	
Laser safety class	3B	
Focussing range	163-163 mm	
Working distance	163 mm	
Line length	15 mm	
Line width	0.009 mm	
Rayleigh range	0.176 mm	
Edge intensity	75 %	
Diameter laser module	25/28 mm	
Module length	121.9 mm	
Installation length	314.9 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



[951210000053.pdf](#)

## ACCESSORIES

9D-12

Screwdriver WS 1.2

PS051007E

Power Supply 5 V for laser modules with RS232 interface

## RELATED PRODUCTS

### LASER MODULES SERIES 13LTM

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

### LASER MODULES SERIES LNC-13LT

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

### LASER MODULES SERIES 5LT-1+25CM

- **Compact** semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. **4.8 mm**

**LASER MODULES  
SERIES 5LT-2+25CM**

- **Compact** semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. **2 mm**

**LASER MODULES  
SERIES 5LT-1**

- Semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. **4.8 mm**

**LASER MODULES  
SERIES 5LT-2**

- Semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. **2 mm**

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