

#### 13LT-1000+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: 43 μm
Wavelength: 450 nm
Working distance: 993 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-1000+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 <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.

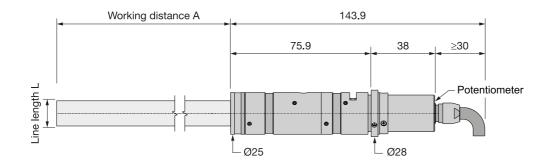


# **TECHNICAL DATA**

13LT-1000+90CM-450-28-O06-M60-PS-7

Series		13LT
Order Code	13LT-1000+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	3В	
Focussing range	993-993 mm	
Working distance	993 mm	
Line length	15 mm	
Line width	0.043 mm	
Rayleigh range	6.47 mm	
Edge intensity	75 %	
Diameter laser module	25/28 mm	
Module length	121.9 mm	
Installation length	1144.9 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**



## **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 LineGaussian 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

This is a printout of the page  $\underline{\text{https://sukhamburg.com/products/details/13LT-1000}}$  from  $\underline{\text{4/25/2024}}$ 

#### CONTACT

For more information please contact: Schäfter + Kirchhoff GmbH Kieler Str. 212 22525 Hamburg Germany

Tel: +49 40 85 39 97-0 Fax: +49 40 85 39 97-79

info@sukhamburg.de www.sukhamburg.com

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