

## 13LT-1000+90CM-685-17-H13-M60-C-6

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: 62  $\mu\text{m}$
- Wavelength: 685 nm
- Working distance: 993 mm

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



## DESCRIPTION

The laser diode beam source type 13LT-1000+90CM-685-17-H13-M60-C-6 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 C](#) for control of the laser output power. The output power can be controlled using the [modulation input ports \(TTL and analog\)](#) or manually using the potentiometer.

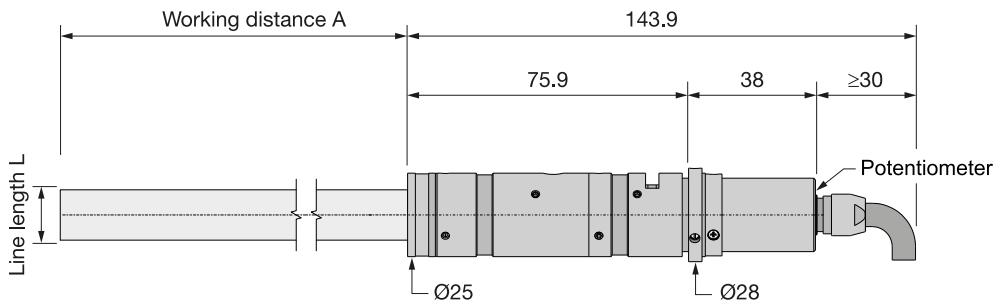
For this laser type the working distance is fixed. A fine-adjustment of the distance between laser and target is recommended for fine-focusing in order to achieve minimal line width.

## TECHNICAL DATA

13LT-1000+90CM-685-17-H13-M60-C-6

Series	13LT	
Order Code	13LT-1000+90CM-685-17-H13-M60-C-6	
Line profile	Constant Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	685 +10/-10 nm	
Laser output power	17 mW	
Laser safety class	3B	
Focussing range	993-993 mm	
Working distance	993 mm	
Line length	15 mm	
Line width	0.062 mm	
Rayleigh range	8.9 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 SV50 IEC 61076-2-106	
Supply voltage	5 ± 0.2 V	
Max. current consumption	0.25 A	
Working temperature	0 - 40 °C	
Modulation inputs	Analog	TTL
Input resistance	22 kOhm	22 kOhm
Max. modulation frequency	100 kHz	100 kHz
Modulation delay ON/OFF	1/0.5 µs	2/1 µs
Rise / Fall time	3/2 µs	3/2 µs

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



## DOWNLOADS



[951210000053.pdf](#)

## ACCESSORIES

9D-12

Screwdriver WS 1.2

PS051003E

Power Supply 5 V

## 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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