

## 13LT-165+90CM-685-17-H13-M60-CS-7

Semi-telecentric Micro Line Generator

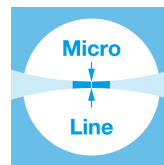


### FEATURES

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

- Line length: 15 mm
- Line width: 12  $\mu\text{m}$
- Wavelength: 685 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-685-17-H13-M60-CS-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 CS](#) 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.

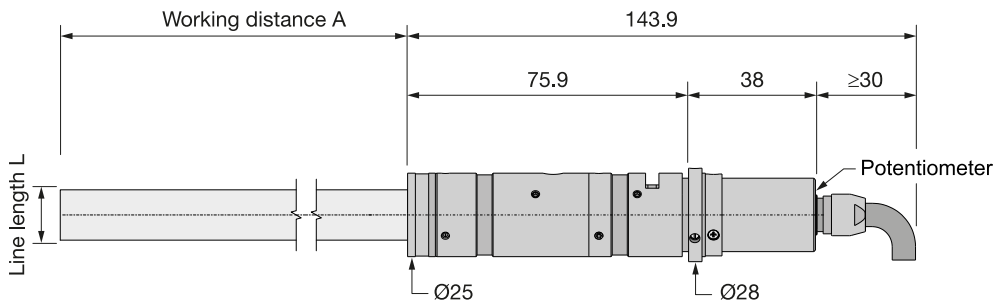
For this laser type the working distance is fixed. A fine-adjustment of the distance between laser and target is recommended for fine-focusing in order to achieve minimal line width.

## TECHNICAL DATA

13LT-165+90CM-685-17-H13-M60-CS-7

|                           |                                   |            |
|---------------------------|-----------------------------------|------------|
| Series                    | 13LT                              |            |
| Order Code                | 13LT-165+90CM-685-17-H13-M60-CS-7 |            |
| 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           | 163-163 mm                        |            |
| Working distance          | 163 mm                            |            |
| Line length               | 15 mm                             |            |
| Line width                | 0.012 mm                          |            |
| Rayleigh range            | 0.242 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  | 0.25 A                            |            |
| Working temperature       | 0 - 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                      | 0.5/0.2 µs |
| Rise / Fall time          | 200000/200000 µs                  | 0.8/0.4 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**

This is a printout of the page [https://sukhamburg.com/products/details/13LT-165\\_90CM-685-17-H13-M60-CS-7](https://sukhamburg.com/products/details/13LT-165_90CM-685-17-H13-M60-CS-7) from 5/6/2024

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