

## 13LTM-500-41+90CM-639-3-H18-M60-C-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: 115 µm
Wavelength: 639 nm
Working distance: 488 mm
Depth of focus: 44.5 mm

Macro Line Generator for extended depth of focus



# **DESCRIPTION**

The laser diode beam source type 13LTM-500-41+90CM-639-3-H18-M60-C-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 87 %. 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 C</u> 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.

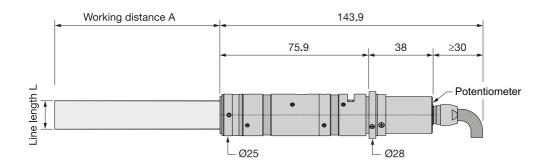


# **TECHNICAL DATA**

13LTM-500-41+90CM-639-3-H18-M60-C-6

| eries 13LTM               |                                     |         |
|---------------------------|-------------------------------------|---------|
| Order Code                | 13LTM-500-41+90CM-639-3-H18-M60-C-6 |         |
| Line profile              | Constant Intensity Distribution     |         |
| Line type                 | Laser Macro Line                    |         |
| Wavelength                | 639 +10/-10 nm                      |         |
| Laser output power        | 3 mW                                |         |
| Laser safety class        | 3R                                  |         |
| Focussing range           | 488-488 mm                          |         |
| Working distance          | 488 mm                              |         |
| Line length               | 15 mm                               |         |
| Line width                | 0.115 mm                            |         |
| Depth of focus            | 44.5 mm                             |         |
| Edge intensity            | 87 %                                |         |
| 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       | 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**



# **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

This is a printout of the page <a href="https://sukhamburg.com/products/details/13LTM-500-41">https://sukhamburg.com/products/details/13LTM-500-41</a> 90CM-639-3-H18-M60-C-6 from 5/11/2024

#### **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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