# 13LR25-M125+55CM-640-28-H22-T15-C-6

Laser Micro Line Generator with a fan angle

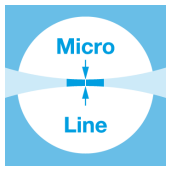


## FEATURES

Laser line with a fan angle and approx. uniform intensity distribution.

- Line length: 55 mm
- Line width: 31 µm
- Wavelength: 640 nm
- Working distance: 119 mm

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




## DESCRIPTION

The laser diode beam source type 13LR25-M125+55CM-640-28-H22-T15-C-6 has a fan angle of 25° with a constant line width and approx. uniform intensity distribution along the laser line.

The fine-structure is a chain of equidistant dots with a spacing of approx. the line width. 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.

The working distance can be adjusted by adjusting the focus setting. Please note that beam parameters like line length and line width increase proportionally to the working distance.

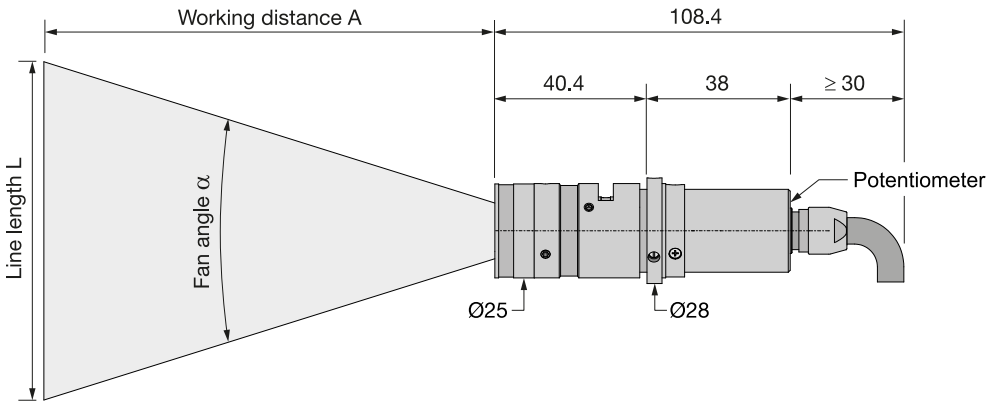
A fine-adjustment of the distance between laser and target is recommended for fine-focusing.

## TECHNICAL DATA

13LR25-M125+55CM-640-28-H22-T15-C-6

| | | |
|---|---|---|
| **Series** | | 13LR |
| **Order Code** | | 13LR25-M125+55CM-640-28-H22-T15-C-6 |
| **Line profile** | | Constant Intensity Distribution |
| **Line type** | | Laser Micro Line |
| **Wavelength** | | 640 +5/-5 nm |
| **Laser output power** | | 28 mW |
| **Laser safety class** | | 3B |
| **Fan angle α** | | 25 deg |
| **Focussing range** | | 100-205 mm |
| **Working distance** | | 119 mm |
| **Line length** | | 55 mm |
| **Line width** | | 0.031 mm |
| **Rayleigh range** | | 1.6 mm |
| **Edge intensity** | | 80 % |
| **Diameter laser module** | | 25/28 mm |
| **Module length** | | 78.4 mm |
| **Installation length** | | 227.4 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

930412000105.pdf

## ACCESSORIES

| | |
|---|---|
| **50HD-15** | Hex key WS 1.5 |
| **9D-12** | Screwdriver WS 1.2 |
| **13MK-25-36-10-F** | Mounting Console with flat base plate |
| **13MK-25-36-10-M** | Mounting Console with base plate with dovetail profile |
| **PS051003E** | Power Supply 5 V |

## RELATED PRODUCTS

**LASER MODULES SERIES 13LRM**

- Macro Line Generator, fan angle
- Uniform intensity distribution
- Extended depth of focus

**LASER MODULES SERIES 13LN**

- Micro Line, **small** fan angle
- Uniform intensity distribution
- Thin lines

| | |
|---|---|
| **LASER MODULES SERIES 5LM+25CM** | ▪ **Compact** Micro Line, **small** fan angle<br>▪ Gaussian intensity distribution |
| **LASER MODULES SERIES 5LP+25CM** | ▪ **Compact** Micro Line, **large** fan angle<br>▪ Gaussian intensity distribution |
| **LASER MODULES SERIES 5LM** | ▪ Micro Line, **small** fan angle<br>▪ Gaussian intensity distribution |
| **LASER MODULES SERIES 5LP** | ▪ Micro Line, **large** fan angle<br>▪ Gaussian intensity distribution |

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