

## 13LNM40-S250-7+90CM-635-3-H10-M60-C-6

Macro Line Generator with a fan angle

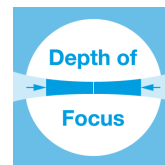


### FEATURES

Laser line with a fan angle, approx. uniform intensity distribution and extended depth of focus.

- Line length: 75 mm
- Line width: 33  $\mu\text{m}$
- Wavelength: 635 nm
- Working distance: 227 mm
- Depth of focus: 3.61 mm

- Macro Line Generator for extended depth of focus



## DESCRIPTION

The laser diode beam source type 13LNM40-S250-7+90CM-635-3-H10-M60-C-6 has a fan angle of 14.3°, approx. uniform intensity distribution along the laser line and extended depth of focus.

More precisely, it is Gaussian clipped by an aperture with an edge intensity of 84 %. 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

13LNM40-S250-7+90CM-635-3-H10-M60-C-6

|                           |                                       |             |
|---------------------------|---------------------------------------|-------------|
| Series                    | 13LNM40                               |             |
| Order Code                | 13LNM40-S250-7+90CM-635-3-H10-M60-C-6 |             |
| Line profile              | Constant Intensity Distribution       |             |
| Line type                 | Laser Macro Line                      |             |
| Wavelength                | 635 +10/-10 nm                        |             |
| Laser output power        | 3 mW                                  |             |
| Laser safety class        | 3R                                    |             |
| Fan angle $\alpha$        | 14.3 deg                              |             |
| Focussing range           | 227-227 mm                            |             |
| Working distance          | 227 mm                                |             |
| Line length               | 75 mm                                 |             |
| Line width                | 0.033 mm                              |             |
| Depth of focus            | 3.61 mm                               |             |
| Edge intensity            | 84 %                                  |             |
| Diameter laser module     | 25/28 mm                              |             |
| Module length             | 134.4 mm                              |             |
| Installation length       | 391.4 mm                              |             |
| Cable length              | 1.5 m                                 |             |
| Connector type            | Lumberg SV50 IEC 61076-2-106          |             |
| Supply voltage            | 5 $\pm$ 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 $\mu$ s                         | 2/1 $\mu$ s |
| Rise / Fall time          | 3/2 $\mu$ s                           | 3/2 $\mu$ s |

## DOWNLOADS

[951210000051.pdf](#)

## ACCESSORIES

9D-12

Screwdriver WS 1.2

PS051003E

Power Supply 5 V

## RELATED PRODUCTS

### LASER MODULES SERIES 13LN

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

### LASER MODULES SERIES LNC-13LNM

- Macro Line Generator, **small** fan angle
- Uniform intensity distribution
- Extended depth of focus
- Low noise

### LASER MODULES SERIES 13LRM

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

### LASER MODULES SERIES 5LMM+25CM

- **Compact** Micro Line, **small** fan angle
- Gaussian intensity distribution
- Extended depth of focus

### LASER MODULES SERIES 5LPM+25CM

- **Compact** Macro Line, **large** fan angle
- Gaussian intensity distribution
- Extended depth of focus

### LASER MODULES SERIES 5LMM

- Macro Line, **small** fan angle
- Gaussian intensity distribution
- Extended depth of focus

### LASER MODULES SERIES 5LPM

- Macro Line, **large** fan angle
- Gaussian intensity distribution
- Extended depth of focus

This is a printout of the page [https://sukhamburg.com/products/details/13LNM40-S250-7\\_90CM-635-3-H10-M60-C-6](https://sukhamburg.com/products/details/13LNM40-S250-7_90CM-635-3-H10-M60-C-6) from 5/2/2024

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