

## 13LN40-M60+90CM-685-17-H13-M60-CS-7

Micro Line Generator with a fan angle



### FEATURES

Laser line with a fan angle, approx. uniform intensity distribution and very thin lines.

- Line length: 18.4 mm
- Line width: 5  $\mu\text{m}$
- Wavelength: 685 nm
- Working distance: 53 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 13LN40-M60+90CM-685-17-H13-M60-CS-7 has a fan angle of 4.4° and approx. uniform intensity distribution along the laser line.

More precisely, it is Gaussian clipped by an aperture with an edge intensity of 75 %. Across the laser line the intensity distribution is Gaussian. The line width is constant along 60 % of the central area, outside this area the line width differs up to 30 %.

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

13LN40-M60+90CM-685-17-H13-M60-CS-7

Series	13LN40	
Order Code	13LN40-M60+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	
Fan angle $\alpha$	4.4 deg	
Focussing range	53-53 mm	
Working distance	53 mm	
Line length	18.4 mm	
Line width	0.005 mm	
Rayleigh range	0.032 mm	
Edge intensity	75 %	
Diameter laser module	25/28 mm	
Module length	125.9 mm	
Installation length	208.9 mm	
Cable length	1.5 m	
Connector type	Lumberg SV70 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	9 kOhm	9 kOhm
Max. modulation frequency	0.001 kHz	250 kHz
Modulation delay ON/OFF	3000/3000 $\mu$ s	0.5/0.2 $\mu$ s
Rise / Fall time	200000/200000 $\mu$ s	0.8/0.4 $\mu$ s
Interface	RS232	

## DOWNLOADS



[951210000056.pdf](#)

## ACCESSORIES

9D-12

Screwdriver WS 1.2

PS051007E

Power Supply 5 V for laser modules with RS232 interface

## RELATED PRODUCTS

### LASER MODULES SERIES 13LNM

- Micro Line Generator, **small** fan angle
- Uniform intensity distribution
- Extended depth of focus

### LASER MODULES SERIES LNC-13LN

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

### LASER MODULES SERIES 13LR

- Micro Line Generator, fan angle
- Uniform intensity distribution

### LASER MODULES SERIES 5LM+25CM

- **Compact** Micro Line, **small** fan angle
- Gaussian intensity distribution

### LASER MODULES SERIES 5LP+25CM

- **Compact** Micro Line, **large** fan angle
- Gaussian intensity distribution

### LASER MODULES SERIES 5LM

- Micro Line, **small** fan angle
- Gaussian intensity distribution

### LASER MODULES SERIES 5LP

- Micro Line, **large** fan angle
- Gaussian intensity distribution

This is a printout of the page [https://sukhamburg.com/products/details/13LN40-M60\\_90CM-685-17-H13-M60-CS-7](https://sukhamburg.com/products/details/13LN40-M60_90CM-685-17-H13-M60-CS-7)  
from 4/26/2024

## 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](mailto:info@sukhamburg.de)

[www.sukhamburg.com](http://www.sukhamburg.com)

## LEGAL NOTICE

**Copyright 2020 Schäfter+Kirchhoff GmbH. All rights reserved.**

Text, image, graphic, sound, video and animation files and their arrangement on Schäfter+Kirchhoff GmbH webpages are protected by copyright and other protective laws. The content may not be copied for commercial use or reproduced, modified or used on other websites. [\[more\]](#)