13LN40-M125+90CM-639-8-H18-M60-C-6

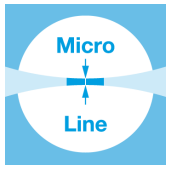
Micro Line Generator with a fan angle

FEATURES

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

- Line length: 38 mm
- Line width: 9 µm
- Wavelength: 639 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 13LN40-M125+90CM-639-8-H18-M60-C-6 has a fan angle of 11.2° and approx. uniform intensity distribution along the laser line.

More precisely, it is Gaussian clipped by an aperture with an edge intensity of 87 %. Across the laser line the intensity distribution is Gaussian. The line width is constant along 60 % of the central are, outside this area the line width differs up to 30 %.

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

13LN40-M125+90CM-639-8-H18-M60-C-6

Series	13LN40	
Order Code	13LN40-M125+90CM-639-8-H18-M60-C-6	
Line profile	Constant Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	639 +10/-10 nm	
Laser output power	8 mW	
Laser safety class	3B	
Fan angle α	11.2 deg	
Focussing range	119-119 mm	
Working distance	119 mm	
Line length	38 mm	
Line width	0.009 mm	
Rayleigh range	0.13 mm	
Edge intensity	87 %	
Diameter laser module	25/28 mm	
Module length	125.9 mm	
Installation length	274.9 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

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ACCESSORIES

9D-12	Screwdriver WS 1.2
PS051003E	Power Supply 5 V

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

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