

## 13LNM40-M100-7+90CM-639-6-H18-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: 30 mm
Line width: 13 µm
Wavelength: 639 nm
Working distance: 83.5 mm
Depth of focus: 0.581 mm

Macro Line Generator for extended depth of focus



## **DESCRIPTION**

The laser diode beam source type 13LNM40-M100-7+90CM-639-6-H18-M60-C-6 has a fan angle of 10°, 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 87 %. Across the laser line the intensity distribution is 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**

13LNM40-M100-7+90CM-639-6-H18-M60-C-6

Series	13LNM40		
Order Code	13LNM40-M100-7+90CM-639-6-H18-M60-C-6		
Line profile	Constant Intensity Distribution		
Line type	Laser Macro Line		
Wavelength	639 +10/-10 nm		
Laser output power	6 mW		
Laser safety class	3В		
Fan angle α	10 deg		
Focussing range	83.5-83.5 mm		
Working distance	83.5 mm		
Line length	30 mm		
Line width	0.013 mm		
Depth of focus	0.581 mm		
Edge intensity	87 %		
Diameter laser module	25/28 mm		
Module length	134.4 mm		
Installation length	247.9 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	



## **DOWNLOADS**



## **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



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