

13LN40-M60+90CM-685-17-H13-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: 18.4 mm
Line width: 5 µm
Wavelength: 685 nm
Working distance: 53 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-M60+90CM-685-17-H13-M60-C-6 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 are, outside this area the line width differs up to 30 %.

The laser has integrated electronics $\underline{type\ C}$ for control of the laser output power. The output power can be controlled using the $\underline{modulation\ input\ ports\ (TTL\ and\ analog)}$ 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-C-6

Series	13LN40		
Order Code	13LN40-M60+90CM-685-17-H13-M60-C-6		
Line profile	Constant Intensity Distribution		
Line type	Laser Micro Line		
Wavelength	685 +10/-10 nm		
Laser output power	17 mW		
Laser safety class	3В		
Fan angle α	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 SV50 II	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

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SERIES 13LNM Uniform intensity distribution

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Micro Line, small fan angle LASER MODULES **SERIES LNC-13LN**

Uniform intensity distribution

Thin lines Low noise

LASER MODULES

Micro Line Generator, fan angle **SERIES 13LR** Uniform intensity distribution

LASER MODULES Compact Micro Line, small fan angle

SERIES 5LM+25CM Gaussian intensity distribution

LASER MODULES Compact Micro Line, large fan angle

SERIES 5LP+25CM Gaussian intensity distribution

LASER MODULES ■ Micro Line, small fan angle

SERIES 5LM Gaussian intensity distribution

LASER MODULES ■ Micro Line, large fan angle

SERIES 5LP Gaussian intensity distribution



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