

13LRM40-M125-1.5+55CR-635-8-H10-T12-C-6

Laser Macro Line Generator with a fan angle



FEATURES

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

Line length: 0 mm
Line width: 77 μm
Wavelength: 635 nm
Working distance: 111 mm
Depth of focus: 19.7 mm

Macro Line Generator for extended depth of focus



DESCRIPTION

The laser diode beam source type 13LRM40-M125-1.5+55CR-635-8-H10-T12-C-6 has a fan angle of 40° with a constant line width and approx. uniform intensity distribution along the laser line as well an extended depth of focus.

The fine-structure is a <u>chain of equidistant dots</u> with a spacing of approx. 1/2 the line width. The line width is constant along the laser line. Across the laser line the intensity distribution is approx. Gaussian.

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.

The working distance can be adjusted by adjusting the focus setting. Please note that beam parameters like line length and line width increase proportionally to the working distance.



A fine-adjustment of the distance between laser and target is recommended for fine-focusing.

TECHNICAL DATA

13LRM40-M125-1.5+55CR-635-8-H10-T12-C-6

Series	13LRM		
Order Code	13LRM40-M125-1.5+55CR-635-8-H10-T12-C-6		
Line profile	Constant Intensity Distribution		
Line type	Laser Macro Line		
Wavelength	635 +10/-10 nm		
Laser output power	8 mW		
Laser safety class	3B		
Fan angle α	40 deg		
Focussing range	95-195 mm		
Working distance	111 mm		
Line length	0 mm		
Line width	0.077 mm		
Depth of focus	19.7 mm		
Edge intensity	80 %		
Diameter laser module	25/28 mm		
Module length	75.3 mm		
Installation length	186.3 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	



ACCESSORIES

50HD-15 Hex key WS 1.5

9D-12 Screwdriver WS 1.2

13MK-25-36-10-F Mounting Console with flat base plate

Mounting Console with base plate with dovetail 13MK-25-36-10-M

profile

PS051003E Power Supply 5 V

RELATED PRODUCTS

SERIES 5LMM+25CM

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

LASER MODULES Micro Line Generator, small fan angle

SERIES 13LNM Uniform intensity distribution

Extended depth of focus

■ Compact Micro Line, small fan angle LASER MODULES

Gaussian intensity distribution

Extended depth of focus

LASER MODULES Compact Macro Line, large fan angle

SERIES 5LPM+25CM Gaussian intensity distribution

Extended depth of focus

Macro Line, small fan angle LASER MODULES **SERIES 5LMM**

Gaussian intensity distribution

Extended depth of focus

LASER MODULES Macro Line, large fan angle

SERIES 5LPM Gaussian intensity distribution

Extended depth of focus



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