13LRM12-M125-1.5+55CM-830-23-H19-T12-C-6

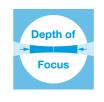
Laser Macro Line Generator with a fan angle



FEATURES

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

- Line length: 26 mm
- Line width: 100 μm
- Wavelength: 830 nm
- Working distance: 111 mm
- Depth of focus: 25.7 mm
- Macro Line Generator for extended depth of focus



DESCRIPTION

The laser diode beam source type 13LRM12-M125-1.5+55CM-830-23-H19-T12-C-6 has a fan angle of 12° 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 <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.

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

13LRM12-M125-1.5+55CM-830-23-H19-T12-C-6

Series		13LRM
Order Code	13LRM12-M125-1.5+55CM-830-23-H19-T12-C-6	
Line profile	Constant Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	830 +10/-10 nm	
Laser output power	23 mW	
Laser safety class		3B
Fan angle α	12 deg	
Focussing range		95-195 mm
Working distance		111 mm
Line length		26 mm
Line width	0.1 mm	
Depth of focus	25.7 mm	
Edge intensity	80 %	
Diameter laser module	25/28 mm	
Module length	86.8 mm	
Installation length	227.8 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

50HD-15	Hex key WS 1.5
9D-12	Screwdriver WS 1.2
13MK-25-36-10-F	Mounting Console with flat base plate
13MK-25-36-10-M	Mounting Console with base plate with dovetail profile
PS051003E	Power Supply 5 V

RELATED PRODUCTS

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



DATA SHEET

This is a printout of the page <u>https://sukhamburg.com/products/details/13LRM12-M125-1_5_55CM-830-23-H19-T12-</u> <u>C-6</u> from 5/6/2024

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