

13LR12-M125+55CM-639-21-H18-T12-CS-7

Laser Micro Line Generator with a fan angle



FEATURES

Laser line with a fan angle and approx. uniform intensity distribution.

Line length: 26 mm
Line width: 43 μm
Wavelength: 639 nm
Working distance: 120 mm

- Micro Line Generator for small laser line widths and high power density in the focal plane
- With RS232 interface





DESCRIPTION

The laser diode beam source type 13LR12-M125+55CM-639-21-H18-T12-CS-7 has a fan angle of 12° with a constant line width and approx. uniform intensity distribution along the laser line.

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

The laser has integrated electronics <u>type CS</u> for control of the laser output power and serial interface (RS232). 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.



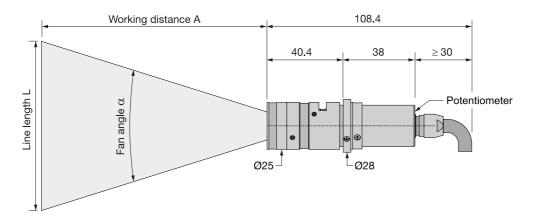
A fine-adjustment of the distance between laser and target is recommended for fine-focusing.

TECHNICAL DATA

13LR12-M125+55CM-639-21-H18-T12-CS-7

Order Code 1	3LR12-M125+55CM-639-21	L L 110 T12 CC 7	
	13LR12-M125+55CM-639-21-H18-T12-CS-7		
Line profile	Constant Intensity Distribution		
Line type	Laser Micro Line		
Wavelength	639 +10/-10 nm		
Laser output power	21 mW		
Laser safety class	3В		
Fan angle α	12 deg		
Focussing range	105-205 mm		
Working distance	120 mm		
Line length	26 mm		
Line width	0.043 mm		
Rayleigh range	3.15 mm		
Edge intensity	80 %		
Diameter laser module	25/28 mm		
Module length	78.4 mm		
Installation length	228.4 mm		
Cable length	1.5 m		
Connector type	Lumberg SV70 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	9 kOhm	9 kOhm	
Max. modulation frequency	0.001 kHz	250 kHz	
Modulation delay ON/OFF	3000/3000 μs	0.5/0.2 μs	
Rise / Fall time	200000/200000 μs	0.8/0.4 μs	
Interface	Interface RS232		

Dimensions (for a complete dimensional drawing please refer to the downloads section)



DOWNLOADS



ACCESSORIES

50HD-15 Hex key WS 1.5

9D-12 Screwdriver WS 1.2

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

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

profile

Power Supply 5 V for laser modules with RS232 PS051007E

interface

RELATED PRODUCTS

LASER MODULES Macro Line Generator, fan angle **SERIES 13LRM** Uniform intensity distribution

Extended depth of focus

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

Uniform intensity distribution

Thin lines



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

This is a printout of the page $\underline{\text{https://sukhamburg.com/products/details/13LR12-M125}}$ 55CM-639-21-H18-T12-CS-7 from 5/1/2024

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