

# 13LR12-M125+55CM-635-10-H10-T15-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: 34 μm
Wavelength: 635 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-635-10-H10-T15-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.



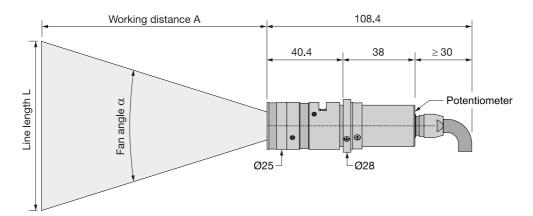
A fine-adjustment of the distance between laser and target is recommended for fine-focusing.

# **TECHNICAL DATA**

13LR12-M125+55CM-635-10-H10-T15-CS-7

Line profile         Constant Intensity Distribution           Line type         Laser Micro Line           Wavelength         635 + 10/-10 nm           Laser output power         10 mW           Laser safety class         3E           Fan angle α         12 deg           Focussing range         105-205 mm           Working distance         120 mm           Line length         26 mm           Line width         0.034 mm           Rayleigh range         2.01 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	eries 13LR			
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	Max. modulation frequency	0.001 kHz	250 kHz	
Rise / Fall time 200000/200000 μs 0.8/0.4 μs	Modulation delay ON/OFF	3000/3000 μs	0.5/0.2 μs	
	Rise / Fall time	200000/200000 μs	0.8/0.4 μs	
Interface RS232	Interface			

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-635-10-H10-T15-CS-7 from 4/26/2024

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