

### 13LR12-S1000+55CM-635-10-H10-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: 201 mm
Line width: 285 μm
Wavelength: 635 nm
Working distance: 977 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-S1000+55CM-635-10-H10-T12-CS-7 has a fan angle of  $12^{\circ}$  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.



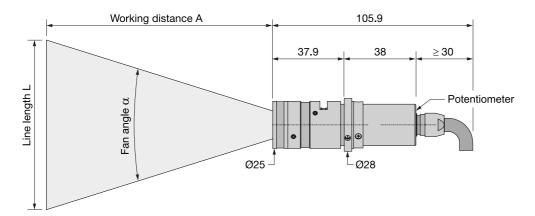
A fine-adjustment of the distance between laser and target is recommended for fine-focusing.

# **TECHNICAL DATA**

13LR12-S1000+55CM-635-10-H10-T12-CS-7

		Series 13LR	
Order Code	13LR12-S1000+55CM-635-10-H10-T12-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	3В		
Fan angle $\alpha$	12 deg		
Focussing range	815-1295 mm		
Working distance	977 mm		
Line length	201 mm		
Line width	0.285 mm		
Rayleigh range	201 mm		
Edge intensity	80 %		
Diameter laser module	25/28 mm		
Module length	75.9 mm		
Installation length	1082.9 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 RS232		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

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

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

profile

**PS051007E** Power Supply 5 V for laser modules with RS232

interface

### **RELATED PRODUCTS**

LASER MODULES SERIES 13LRM

- Macro Line Generator, fan angle
- Uniform intensity distribution
- Extended depth of focus

LASER MODULES SERIES 13LN

- Micro Line, **small** fan angle
- 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

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