

13LR12-S000+55CM-445-71-G02-T15-PS-7

Laser Micro Line Generator with a fan angle



FEATURES

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

Line length: 409 mm
Line width: 365 μm
Wavelength: 445 nm
Working distance: 2000 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-S000+55CM-445-71-G02-T15-PS-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 PS</u> with micro-controller 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.



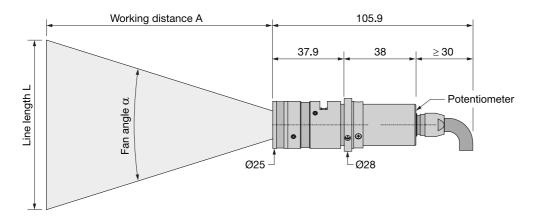
A fine-adjustment of the distance between laser and target is recommended for fine-focusing.

TECHNICAL DATA

13LR12-S000+55CM-445-71-G02-T15-PS-7

Series 13LR		
Order Code	13LR12-S000+55CM-445-71-G02-T15-PS-7	
Line profile	Constant Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	445 +15/-5 nm	
Laser output power	71 mW	
Laser safety class	3В	
Fan angle α	12 deg	
Focussing range	1300-inf mm	
Working distance	2000 mm	
Line length	409 mm	
Line width	0.365 mm	
Rayleigh range	469 mm	
Edge intensity	80 %	
Diameter laser module	25/28 mm	
Module length	75.9 mm	
Installation length	2105.9 mm	
Cable length	1.5 m	
Connector type	Lumberg SV70 IEC 61076-2-106	
Supply voltage	5 ± 0.2 V	
Max. current consumption	0.5 A	
Working temperature	15 - 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	0.6/0.2 μs
Rise / Fall time	200000/200000 μs	0.2/0.2 μs
nterface 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

This is a printout of the page https://sukhamburg.com/products/details/13LR12-S000 55CM-445-71-G02-T15-PS-7 from 4/16/2024

CONTACT

For more information please contact:

Schäfter + Kirchhoff GmbH

Kieler Str. 212 22525 Hamburg Germany

Tel: +49 40 85 39 97-0 Fax: +49 40 85 39 97-79

info@sukhamburg.de www.sukhamburg.com

LEGAL NOTICE

Copyright 2020 Schäfter+Kirchhoff GmbH. All rights reserved.

Text, image, graphic, sound, video and animation files and their arrangement on Schäfter+Kirchhoff GmbH webpages are protected by copyright and other protective laws. The content may not be copied for commercial use or reproduced, modified or used on other websites. [more]