13LR25-S250+55CM-660-100-M25-T12-PS-7

Laser Micro Line Generator with a fan angle



FEATURES

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

- Line length: 109 mm
- Line width: 65 µm
- Wavelength: 660 nm
- Working distance: 249 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 13LR25-S250+55CM-660-100-M25-T12-PS-7 has a fan angle of 25° with a constant line width and approx. uniform intensity distribution along the laser line.

The fine-structure is a chain of equidistant dots 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 type PS with micro-controller for control of the laser output power and serial interface (RS232). The output power can be controlled using the modulation input ports (TTL and analog) 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.

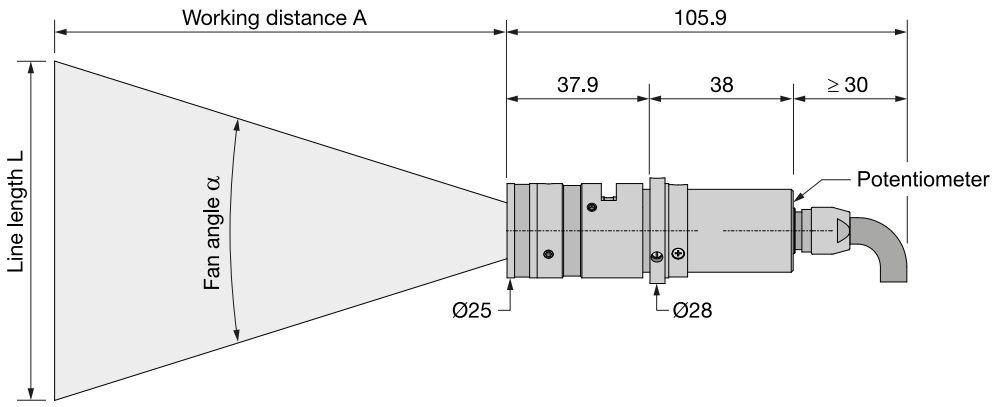
A fine-adjustment of the distance between laser and target is recommended for fine-focusing.

TECHNICAL DATA

13LR25-S250+55CM-660-100-M25-T12-PS-7

Series		13LR
Order Code		13LR25-S250+55CM-660-100-M25-T12-PS-7
Line profile		Constant Intensity Distribution
Line type		Laser Micro Line
Wavelength		660 +4/-6 nm
Laser output power		100 mW
Laser safety class		3B
Fan angle α		25 deg
Focussing range		205-415 mm
Working distance		249 mm
Line length		109 mm
Line width		0.065 mm
Rayleigh range		8.36 mm
Edge intensity		80 %
Diameter laser module		25/28 mm
Module length		75.9 mm
Installation length		354.9 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		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	0.5/0.2 µs
Rise / Fall time	200000/200000 µs	0.8/0.4 µs
Interface		RS232

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



DOWNLOADS

930412000125.pdf

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 SERIES 5LM+25CM	▪ **Compact** Micro Line, **small** fan angle ▪ Gaussian intensity distribution
LASER MODULES SERIES 5LP+25CM	▪ **Compact** Micro Line, **large** fan angle ▪ Gaussian intensity distribution
LASER MODULES SERIES 5LM	▪ Micro Line, **small** fan angle ▪ Gaussian intensity distribution
LASER MODULES SERIES 5LP	▪ Micro Line, **large** fan angle ▪ Gaussian intensity distribution

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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

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