

13LRM12-S250-1.5+55CM-660-60-M25-T12-P-6

Laser Macro Line Generator with a fan angle



FEATURES

Laser line with a fan angle, approx. uniform intensity distributionand extended depth of focus.

Line length: 52 mm
Line width: 159 µm
Wavelength: 660 nm
Working distance: 236 mm
Depth of focus: 81.7 mm

Macro Line Generator for extended depth of focus



DESCRIPTION

The laser diode beam source type 13LRM12-S250-1.5+55CM-660-60-M25-T12-P-6 has a fan angle of 12° with a constant line width and approx. uniform intensity distribution along the laser line as well an extended depth of focus.

The fine-structure is a <u>chain of equidistant dots</u> with a spacing of approx. 1/2 the line width. The line width is constant along the laser line. Across the laser line the intensity distribution is approx. Gaussian.

The laser has integrated electronics <u>type P</u> with micro-controller for control of the laser output power. 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

13LRM12-S250-1.5+55CM-660-60-M25-T12-P-6

| Series | 13LRM | |
|---------------------------|--|------------|
| Order Code | 13LRM12-S250-1.5+55CM-660-60-M25-T12-P-6 | |
| Line profile | Constant Intensity Distribution | |
| Line type | Laser Macro Line | |
| Wavelength | 660 +4/-6 nm | |
| Laser output power | 60 mW | |
| Laser safety class | 3В | |
| Fan angle α | 12 deg | |
| Focussing range | 195-355 mm | |
| Working distance | 236 mm | |
| Line length | 52 mm | |
| Line width | 0.159 mm | |
| Depth of focus | 81.7 mm | |
| Edge intensity | 80 % | |
| Diameter laser module | 25/28 mm | |
| Module length | 86.8 mm | |
| Installation length | 352.8 mm | |
| Cable length | 1.5 m | |
| Connector type | Lumberg SV50 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 | 0.01 kHz | 250 kHz |
| Modulation delay ON/OFF | 3000/3000 μs | 0.5/0.2 μs |
| Rise / Fall time | 40000/40000 μs | 0.5/0.5 μs |
| | | |



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

PS051003E Power Supply 5 V

RELATED PRODUCTS

LASER MODULES SERIES 13LR Micro Line Generator, fan angle

Uniform intensity distribution

LASER MODULES
SERIES 13LNM

Micro Line Generator, small fan angle

Uniform intensity distribution

Extended depth of focus

LASER MODULES SERIES 5LMM+25CM Compact Micro Line, small fan angle

Gaussian intensity distribution

Extended depth of focus

LASER MODULES SERIES 5LPM+25CM Compact Macro Line, large fan angle

Gaussian intensity distribution

Extended depth of focus

LASER MODULES SERIES 5LMM ■ Macro Line, small fan angle

Gaussian intensity distribution

Extended depth of focus

LASER MODULES SERIES 5LPM ■ Macro Line, large fan angle

Gaussian intensity distribution

Extended depth of focus



This is a printout of the page $\underline{\text{https://sukhamburg.com/products/details/13LRM12-S250-1} \underline{5}\underline{55CM-660-60-M25-T12-P-6}$ from 4/25/2024

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]