

13LTM-500-41+90CM-405-3-Y07-M60-C-6

Semi-telecentric Macro Line Generator Semi-telecentric Macro Line Generator



FEATURES

Semi-telecentric laser line with constant line length 15mm, approx. uniform intensity distribution and extended depth of focus.

Line length: 15 mm
Line width: 73 μm
Wavelength: 405 nm
Working distance: 488 mm
Depth of focus: 28.2 mm

Macro Line Generator for extended depth of focus



DESCRIPTION

The laser diode beam source type 13LTM-500-41+90CM-405-3-Y07-M60-C-6 produces a semi-telecentric laser line with 15 mm line length and extended depth of focus. The intensity profile is approx. uniform in line direction. More precisely, it is Gaussian clipped by an aperture with an edge intensity of 70 %. The line width is constant along the laser line. Across the laser line the intensity distribution is approx. Gaussian.

The laser has integrated electronics $\underline{type\ C}$ for control of the laser output power. The output power can be controlled using the $\underline{modulation\ input\ ports\ (TTL\ and\ analog)}$ or manually using the potentiometer.

For this laser type the working distance is fixed. A fine-adjustment of the distance between laser and target is recommended for fine-focusing in order to achieve minimal line width.

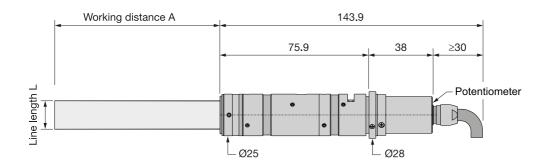


TECHNICAL DATA

13LTM-500-41+90CM-405-3-Y07-M60-C-6

Line type Laser Macro Line Wavelength 405 ±5/-5 nm Laser output power 3 mW Laser safety class 3R Focussing range 488-488 mm Working distance 488 mm Line length 15 mm Line width 0.073 mm Depth of focus 28.2 mm Edge intensity 70 % Diameter laser module 25/28 mm Module length 127.3 mm Installation length 645.3 mm Cable length 1.5 m Connector type Lumberg SV50 IEC 61076-2-106 Supply voltage 5 ± 0.2 V Max. current consumption 0.5 A Working temperature 0 - 40 °C Modulation inputs Analog TTL Input resistance 22 kOhm 22 kOhm Max. modulation frequency 100 kHz 100 kHz Modulation delay ON/OFF 1/0.5 μs 2/1 μs	Series 13LTM		
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Cable length $1.5 \mathrm{m}$ Connector typeLumberg SV50 IEC 61076-2-106Supply voltage $5 \pm 0.2 \mathrm{V}$ Max. current consumption $0.5 \mathrm{A}$ Working temperature $0 - 40 ^{\circ}\mathrm{C}$ Modulation inputsAnalogTTLInput resistance $22 \mathrm{kOhm}$ $22 \mathrm{kOhm}$ Max. modulation frequency $100 \mathrm{kHz}$ $100 \mathrm{kHz}$ Modulation delay ON/OFF $1/0.5 \mu \mathrm{s}$ $2/1 \mu \mathrm{s}$	Module length	127.3 mm	
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Modulation inputsAnalogTTLInput resistance22 kOhm22 kOhmMax. modulation frequency100 kHz100 kHzModulation delay ON/OFF1/0.5 μs2/1 μs	Max. current consumption	0.5 A	
Input resistance22 kOhm22 kOhmMax. modulation frequency100 kHz100 kHzModulation delay ON/OFF1/0.5 μs2/1 μs	Working temperature	0 - 40 °C	
Max. modulation frequency100 kHz100 kHzModulation delay ON/OFF1/0.5 μs2/1 μs	Modulation inputs	Analog	TTL
Modulation delay ON/OFF 1/0.5 μs 2/1 μs	Input resistance	22 kOhm	22 kOhm
	Max. modulation frequency	100 kHz	100 kHz
Rise / Fall time $3/2 \mu s$ $3/2 \mu s$	Modulation delay ON/OFF	1/0.5 µs	2/1 μs
<u>l</u>	Rise / Fall time	3/2 μs	3/2 µs

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



DOWNLOADS



ACCESSORIES

9D-12 Screwdriver WS 1.2

PS051003E Power Supply 5 V

RELATED PRODUCTS

LASER MODULES SERIES 13LT

- Semi-telecentric Micro Line
- Uniform intensity distribution
- Constant line length 15 mm

LASER MODULES

SERIES LNC-13LTM

- Semi-telecentric Macro Line
- Uniform intensity distribution
- Constant line length 15 mm
- Extended depth of focus
- Low noise

LASER MODULES SERIES 5LTM-1+25CM

- Compact semi-telecentric Macro Line
- Gaussian intensity distribution
- Constant line length ca. 4.8 mm
- Extended depth of focus



LASER MODULES
SERIES 5LTM-2+25CM

- Compact semi-telecentric Macro Line
- Gaussian intensity distribution
- Constant line length ca. 2 mm
- Extended depth of focus

LASER MODULES
SERIES 5LTM-1

- Semi-telecentric Macro Line
- Gaussian intensity distribution
- Constant line length ca. 4.8 mm
- Extended depth of focus

LASER MODULES SERIES 5LTM-2

- Semi-telecentric Macro Line
- Gaussian intensity distribution
- Constant line length ca. 2 mm
- Extended depth of focus

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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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