

## 5LT-50-2+55CM-405-88-X15-A7.5-P-6

Semi-telecentric Micro Line Generator



### FEATURES

Semi-telecentric laser line with constant line length of 2.4 mm.

- Line length: 2.4 mm
- Line width: 6  $\mu\text{m}$
- Wavelength: 405 nm
- Working distance: 45 mm

- Micro Line Generator for small laser line widths and high power density in the focal plane



## DESCRIPTION

The laser diode beam source type 5LT-50-2+55CM-405-88-X15-A7.5-P-6 produces a semi-telecentric laser line with 2.4 mm line length. In this case the line length is given on the 13.5%-level. The intensity profile is Gaussian in line direction and the line is truncated at 4.8 mm. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics [type P](#) with micro-controller for control of the laser output power. The output power can be controlled using the [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

5LT-50-2+55CM-405-88-X15-A7.5-P-6

<b>Series</b>	5LT	
<b>Order Code</b>	5LT-50-2+55CM-405-88-X15-A7.5-P-6	
<b>Line profile</b>	Gaussian Intensity Distribution	
<b>Line type</b>	Laser Micro Line	
<b>Wavelength</b>	405 +5/-5 nm	
<b>Laser output power</b>	88 mW	
<b>Laser safety class</b>	3B	
<b>Focussing range</b>	45-45 mm	
<b>Working distance</b>	45 mm	
<b>Line length</b>	2.4 mm	
<b>Line width</b>	0.006 mm	
<b>Rayleigh range</b>	0.141 mm	
<b>Edge intensity</b>	10 %	
<b>Diameter laser module</b>	25/28 mm	
<b>Module length</b>	73.1 mm	
<b>Installation length</b>	148.1 mm	
<b>Cable length</b>	1.5 m	
<b>Connector type</b>	Lumberg SV50 IEC 61076-2-106	
<b>Supply voltage</b>	5 ± 0.2 V	
<b>Max. current consumption</b>	0.5 A	
<b>Working temperature</b>	15 - 40 °C	
<b>Modulation inputs</b>	Analog	TTL
<b>Input resistance</b>	9 kOhm	9 kOhm
<b>Max. modulation frequency</b>	0.01 kHz	250 kHz
<b>Modulation delay ON/OFF</b>	3000/3000 µs	0.5/0.2 µs
<b>Rise / Fall time</b>	40000/40000 µs	0.5/0.5 µs

## DOWNLOADS



[930412000106.pdf](#)

## ACCESSORIES

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 5LTM-2

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

### LASER MODULES SERIES LNC-5LTM-2

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

### LASER MODULES SERIES 13LT

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

### LASER MODULES SERIES 5LT-1+25CM

- **Compact** semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. **4.8 mm**

### LASER MODULES SERIES 5LT-1

- Semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. **4.8 mm**

### LASER MODULES SERIES 5LT-2+25CM

- **Compact** semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. **2 mm**

This is a printout of the page [https://sukhamburg.com/products/details/5LT-50-2\\_55CM-405-88-X15-A7\\_5-P-6](https://sukhamburg.com/products/details/5LT-50-2_55CM-405-88-X15-A7_5-P-6) from 6/4/2023

## 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](mailto:info@sukhamburg.de)

[www.sukhamburg.com](http://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. [\[more\]](#)