

5LT-50-1+55CM-405-14-Y07-A7.5-C-6

Semi-telecentric Micro Line Generator



FEATURES

Semi-telecentric laser line with constant line length of 4.8 mm.

Line length: 4.8 mm
Line width: 14 μm
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-50-1+55CM-405-14-Y07-A7.5-C-6 produces a semi-telecentric laser line with 4.8 mm line length. The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 9 %. The line width is constant along the laser line. Across the laser line the intensity distribution is 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

5LT-50-1+55CM-405-14-Y07-A7.5-C-6

Series		5LT
Order Code	5LT-50-1+55CM-405-14-Y07-A7.5-C-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	405 +5/-5 nm	
Laser output power	14 mW	
Laser safety class	3В	
Focussing range	45-45 mm	
Working distance	45 mm	
Line length	4.8 mm	
Line width	0.014 mm	
Rayleigh range	0.726 mm	
Edge intensity	9 %	
Diameter laser module	25/28 mm	
Module length	73.1 mm	
Installation length	148.1 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
Rise / Fall time	3/2 μs	3/2 μs

DOWNLOADS





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-1 ■ Semi-telecentric Macro Line

Gaussian intensity distribution

Constant line length ca. 4.8 mm

Extended depth of focus

LASER MODULES SERIES LNC-5LTM-1 Semi-telecentric Macro Line

Gaussian intensity distribution

Constant line length ca. 4.8 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-2+25CM Compact semi-telecentric Micro Line

Gaussian intensity distribution

Constant line length ca. 2 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 Semi-telecentric Micro Line

Gaussian intensity distribution

Constant line length ca. 2 mm



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