

5LT-75-2+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: 9 µm
Wavelength: 405 nm
Working distance: 74 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-75-2+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 $\underline{type\ P}$ with micro-controller 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-75-2+55CM-405-88-X15-A7.5-P-6

Series		5LT
Order Code	5LT-75-2+55CM-405-88-X15-A7.5-P-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	405 +5/-5 nm	
Laser output power	88 mW	
Laser safety class	3В	
Focussing range	74-74 mm	
Working distance	74 mm	
Line length	2.4 mm	
Line width	0.009 mm	
Rayleigh range	0.317 mm	
Edge intensity	10 %	
Diameter laser module	25/28 mm	
Module length	73.1 mm	
Installation length	177.1 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	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
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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 Semi-telecentric Macro Line **SERIES 5LTM-2** Gaussian intensity distribution

Constant line length ca. 2 mm

Extended depth of focus

LASER MODULES Semi-telecentric Macro Line **SERIES LNC-5LTM-2**

Gaussian intensity distribution

Constant line length ca. 2 mm Extended depth of focus

Low noise

LASER MODULES Semi-telecentric Micro Line **SERIES 13LT**

Uniform intensity distribution

Constant line length 15 mm

LASER MODULES Compact semi-telecentric Micro Line

SERIES 5LT-1+25CM Gaussian intensity distribution

Constant line length ca. 4.8 mm

LASER MODULES ■ Semi-telecentric Micro Line **SERIES 5LT-1**

Gaussian intensity distribution

Constant line length ca. 4.8 mm

LASER MODULES Compact semi-telecentric Micro Line

SERIES 5LT-2+25CM Gaussian intensity distribution

■ Constant line length ca. 2 mm



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