

#### 5LT-100-1+25CM-405-14-Y07-A7.5-B-4

Semi-telecentric compact Micro Line Generator



#### **FEATURES**

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

Line length: 4.8 mm
Line width: 27 μm
Wavelength: 405 nm
Working distance: 96 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-100-1+25CM-405-14-Y07-A7.5-B-4 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  $\underline{type\ B}$  for control of the laser output power. The output power can be controlled using the  $\underline{modulation\ input\ port\ (TTL)}$  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-100-1+25CM-405-14-Y07-A7.5-B-4

Series	5LT
Order Code	5LT-100-1+25CM-405-14-Y07-A7.5-B-4
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	96-96 mm
Working distance	96 mm
Line length	4.8 mm
Line width	0.027 mm
Rayleigh range	2.9 mm
Edge intensity	9 %
Diameter laser module	12 mm
Module length	60.7 mm
Installation length	186.7 mm
Cable length	1.5 m
Connector type	Lumberg SV40 IEC 61076-2-106
Supply voltage	12 ± 0.5 V
Max. current consumption	0.16 A
Working temperature	0 - 40 °C
Modulation inputs	TTL
Input resistance	110 kOhm
Max. modulation frequency	0.2 kHz
Modulation delay ON/OFF	500/500 μs
Rise / Fall time	10/20 μs

## **DOWNLOADS**





#### **ACCESSORIES**

**9D-12** Screwdriver WS 1.2

**PS120516E** Power Supply 12 V

#### **RELATED PRODUCTS**

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 13LT Semi-telecentric Micro LineUniform 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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