

#### 5LT-100-1+25CM-639-18-H18-A8-S-6

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: 43 µm
Wavelength: 639 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-639-18-H18-A8-S-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 40 %. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics  $\underline{type\ S}$  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-100-1+25CM-639-18-H18-A8-S-6

Series		5LT
Order Code	5LT-100-1+25CM-639-18-H18-A8-S-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	639 +10/-10 nm	
Laser output power	18 mW	
Laser safety class	3B	
Focussing range	96-96 mm	
Working distance	96 mm	
Line length	4.8 mm	
Line width	0.043 mm	
Rayleigh range	4.54 mm	
Edge intensity	40 %	
Diameter laser module	12 mm	
Module length	60.7 mm	
Installation length	186.7 mm	
Cable length	1.5 m	
Connector type	Lumberg SV50 IEC 61076-2-106	
Supply voltage	5 ± 0.25 V	
Max. current consumption	0.25 A	
Working temperature	0 - 40 °C	
Modulation inputs	Analog	TTL
Input resistance	22 kOhm	22 kOhm
Max. modulation frequency	50 kHz	1000 kHz
Modulation delay ON/OFF	4/0.5 μs	0.05/0.05 μs
Rise / Fall time	5/4 μs	0.1/0.02 μs
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## **DOWNLOADS**





#### **ACCESSORIES**

**9D-12** Screwdriver WS 1.2

**PS051003E** Power Supply 5 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 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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#### 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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