5LP40-S50+25CM-639-17-H18-A8-S-6

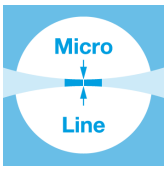
Compact Micro Line Generator with a large fan angle

FEATURES

Compact laser line with a large fan angle and Gaussian intensity distribution.

- Line length: 28 mm
- Line width: 21 µm
- Wavelength: 639 nm
- Working distance: 46 mm

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



DESCRIPTION

The laser diode beam source type 5LP40-S50+25CM-639-17-H18-A8-S-6 has a fan angle of 40°.

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 type S 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.

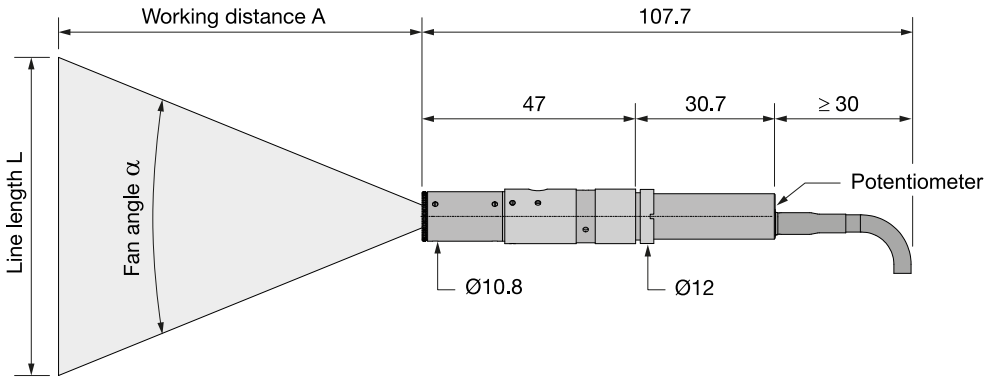
The working distance can be adjusted by adjusting the focus setting. Please note that beam parameters like line length and line width increase proportionally to the working distance. A fine-adjustment of the distance between laser and target is recommended for fine-focusing.

TECHNICAL DATA

5LP40-S50+25CM-639-17-H18-A8-S-6

Series		5LP
Order Code		5LP40-S50+25CM-639-17-H18-A8-S-6
Line profile		Gaussian Intensity Distribution
Line type		Laser Micro Line
Wavelength		639 +10/-10 nm
Laser output power		17 mW
Laser safety class		3B
Fan angle α		40 deg
Focussing range		35-70 mm
Working distance		46 mm
Line length		28 mm
Line width		0.021 mm
Rayleigh range		1.14 mm
Edge intensity		40 %
Diameter laser module		12 mm
Module length		77.7 mm
Installation length		153.7 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

Dimensions (for a complete dimensional drawing please refer to the downloads section)



DOWNLOADS

921120000622.pdf

ACCESSORIES

60EX-4	Eccentric key with a stroke of ± 0.5 mm.
60EX-4-L	Alternative eccentric key with long handle with a stroke of ± 0.5 mm.
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 5LPM+25CM

- **Compact** Macro Line, **large** fan angle
- Gaussian intensity distribution
- Extended depth of focus

LASER MODULES SERIES LNC-5LP

- Micro Line, **large** fan angle
- Gaussian intensity distribution
- Low noise

LASER MODULES SERIES 13LR	▪ Micro Line Generator, fan angle ▪ Uniform intensity distribution
LASER MODULES SERIES 13LN	▪ Micro Line, **small** fan angle ▪ Uniform intensity distribution ▪ Thin lines
LASER MODULES SERIES 5LM+25CM	▪ **Compact** Micro Line, **small** fan angle ▪ Gaussian intensity distribution
LASER MODULES SERIES 5LP	▪ Micro Line, **large** fan angle ▪ Gaussian intensity distribution
LASER MODULES SERIES 5LM	▪ Micro Line, **small** fan angle ▪ Gaussian intensity distribution

This is a printout of the page https://sukhamburg.com/products/details/5LP40-S50_25CM-639-17-H18-A8-S-6 from 3/28/2024

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

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]