5LPM40-S88-1+55CM-445-61-G02-A7.5-PS-7

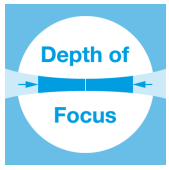
Macro Line Generator with a large fan angle

FEATURES

Laser line with a large fan angle, Gaussian intensity distribution and extended depth of focus.

- Line length: 56 mm
- Line width: 58 µm
- Wavelength: 445 nm
- Working distance: 77 mm
- Depth of focus: 15.4 mm

- Macro Line Generator for extended depth of focus
- With RS232 interface



DESCRIPTION

The laser diode beam source type 5LPM40-S88-1+55CM-445-61-G02-A7.5-PS-7 has a fan angle of 40° and an extended depth of focus.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 2 %. The line width is constant along the laser line. Across the laser line the intensity distribution is approx. Gaussian.

The laser has integrated electronics type PS with micro-controller for control of the laser output power and serial interface (RS232). 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

5LPM40-S88-1+55CM-445-61-G02-A7.5-PS-7

Series	5LPM	
Order Code	5LPM40-S88-1+55CM-445-61-G02-A7.5-PS-7	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	445 +15/-5 nm	
Laser output power	61 mW	
Laser safety class	3B	
Fan angle α	40 deg	
Focussing range	65-120 mm	
Working distance	77 mm	
Line length	56 mm	
Line width	0.058 mm	
Depth of focus	15.4 mm	
Edge intensity	2 %	
Diameter laser module	25/28 mm	
Module length	95.5 mm	
Installation length	202.5 mm	
Cable length	1.5 m	
Connector type	Lumberg SV70 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	0.001 kHz	250 kHz
Modulation delay ON/OFF	3000/3000 µs	0.6/0.2 µs
Rise / Fall time	200000/200000 µs	0.2/0.2 µs

Interface	RS232

ACCESSORIES

50HD-15	Hex key WS 1.5
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
PS051007E	Power Supply 5 V for laser modules with RS232 interface

RELATED PRODUCTS

LASER MODULES SERIES 5LPM	▪ Macro Line, **large** fan angle ▪ Gaussian intensity distribution ▪ Extended depth of focus
LASER MODULES SERIES LNC-5LPM	▪ Macro Line, **large** fan angle ▪ Gaussian intensity distribution ▪ Extended depth of focus ▪ Low noise
LASER MODULES SERIES 13LRM	▪ Macro Line Generator, fan angle ▪ Uniform intensity distribution ▪ Extended depth of focus
LASER MODULES SERIES 13LNM	▪ Micro Line Generator, **small** fan angle ▪ Uniform intensity distribution ▪ Extended depth of focus
LASER MODULES SERIES 5LMM+25CM	▪ **Compact** Micro Line, **small** fan angle ▪ Gaussian intensity distribution ▪ Extended depth of focus
LASER MODULES SERIES 5LPM+25CM	▪ **Compact** Macro Line, **large** fan angle ▪ Gaussian intensity distribution ▪ Extended depth of focus

This is a printout of the page https://sukhamburg.com/products/details/5LPM40-S88-1_55CM-445-61-G02-A7_5-PS-7 from 12/6/2023

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