#### 5LP40-S88+55CM-520-53-O11-A7.5-P-6

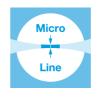
Micro Line Generator with a large fan angle



#### FEATURES

Laser line with a large fan angle and Gaussian intensity distribution.

- Line length: 56 mm
- Line width: 42 μm
- Wavelength: 520 nm
- Working distance: 82 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-S88+55CM-520-53-O11-A7.5-P-6 has a fan angle of  $40^{\circ}$ .

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 18 %. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics <u>type P</u> with micro-controller for control of the laser output power. The output power can be controlled using the <u>modulation input ports (TTL and analog)</u> 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-S88+55CM-520-53-O11-A7.5-P-6

Series		5LP
Order Code	5LP40-S88+55CM-520-53-O11-A7.5-P-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	520 +10/-5 nm	
Laser output power	53 mW	
Laser safety class	3В	
Fan angle α	40 deg	
Focussing range	70-125 mm	
Vorking distance82 mm		
Line length	56 mm	
Line width	0.042 mm	
Rayleigh range	5.41 mm	
Edge intensity	18 %	
Diameter laser module	25/28 mm	
Module length	90.1 mm	
Installation length	202.1 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

# ACCESSORIES

50HD-15

Hex key WS 1.5



## **DATA SHEET**

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**

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LASER MODULES Macro Line, large fan angle SERIES 5LPM Gaussian intensity distribution Extended depth of focus LASER MODULES Micro Line, large fan angle SERIES LNC-5LP Gaussian intensity distribution Low noise LASER MODULES Micro Line Generator, fan angle **SERIES 13LR**  Uniform intensity distribution LASER MODULES Micro Line, small fan angle SERIES 13LN Uniform intensity distribution Thin lines LASER MODULES Compact Micro Line, small fan angle SERIES 5LM+25CM Gaussian intensity distribution Compact Micro Line, large fan angle LASER MODULES SERIES 5LP+25CM Gaussian intensity distribution LASER MODULES Micro Line, small fan angle SERIES 5LM Gaussian intensity distribution



### **DATA SHEET**

This is a printout of the page <u>https://sukhamburg.com/products/details/5LP40-S88\_55CM-520-53-O11-A7\_5-P-6</u> from 4/25/2024

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