#### 5LP40-S000+55CM-405-13-Y07-A7.5-C-6

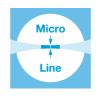
Micro Line Generator with a large fan angle



#### FEATURES

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

- Line length: 720 mm
- Line width: 274 μm
- Wavelength: 405 nm
- Working distance: 1000 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-S000+55CM-405-13-Y07-A7.5-C-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 9 %. 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 C</u> 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-S000+55CM-405-13-Y07-A7.5-C-6

Series		5LP
Order Code	5LP40-S000+55CM-405-13-Y07-A7.5-C-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	405 +5/-5 nm	
Laser output power	13 mW	
Laser safety class	3В	
Fan angle α	40 deg	
Focussing range	430-inf mm	
Working distance	istance 1000 mm	
Line length	720 mm	
Line width	0.274 mm	
Rayleigh range	290 mm	
Edge intensity	9 %	
Diameter laser module	25/28 mm	
Module length	90.1 mm	
Installation length	1120.1 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	0 - 40 °C	
Modulation inputs	Analog	TTL
Input resistance	22 kOhm	22 kOhm
Max. modulation frequency	100 kHz	100 kHz
Modulation delay ON/OFF	1/0.5 µs	2/1 μs
Rise / Fall time	3/2 µs	3/2 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**

LASER MODULES SERIES 5LPM

LASER MODULES SERIES LNC-5LP

LASER MODULES SERIES 13LR

LASER MODULES SERIES 13LN

LASER MODULES SERIES 5LM+25CM

LASER MODULES SERIES 5LP+25CM

LASER MODULES SERIES 5LM

	Gaussian intensity distribution Extended depth of focus
-	Micro Line, <b>large</b> fan angle Gaussian intensity distribution Low noise
	Micro Line Generator, fan angle Uniform intensity distribution
•	Micro Line, <b>small</b> fan angle Uniform intensity distribution Thin lines
	<b>Compact</b> Micro Line, <b>small</b> fan angle Gaussian intensity distribution
	<b>Compact</b> Micro Line, <b>large</b> fan angle Gaussian intensity distribution
	Micro Line, <b>small</b> fan angle Gaussian intensity distribution

Macro Line, large fan angle



### **DATA SHEET**

This is a printout of the page <u>https://sukhamburg.com/products/details/5LP40-S000\_55CM-405-13-Y07-A7\_5-C-6</u> from 5/3/2024

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