

### 5LPM40-S000-1+55CM-685-24-H13-A8-C-6

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 width: 989 µm
Wavelength: 685 nm
Working distance: 1000 mm
Depth of focus: 1500 mm

Line length: 720 mm

Macro Line Generator for extended depth of focus



### **DESCRIPTION**

The laser diode beam source type 5LPM40-S000-1+55CM-685-24-H13-A8-C-6 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 15 %. The line width is constant along the laser line. Across the laser line the intensity distribution is approx. 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**

5LPM40-S000-1+55CM-685-24-H13-A8-C-6

Series 5LPM			
Order Code	5LPM40-S000-1+55CM-685-24-H13-A8-C-6		
Line profile	Gaussian Intensity Distribution		
Line type	Laser Macro Line		
Wavelength	685 +10/-10 nm		
Laser output power	24 mW		
Laser safety class	3В		
Fan angle α	40 deg		
Focussing range	450-inf mm		
Working distance	1000 mm		
Line length	720 mm		
Line width	0.989 mm		
Depth of focus	1500 mm		
Edge intensity	15 %		
Diameter laser module	25/28 mm		
Module length	95.5 mm		
Installation length	1125.5 mm		
Cable length	1.5 m		
Connector type	Lumberg SV50 II	Lumberg SV50 IEC 61076-2-106	
Supply voltage	5 ± 0.2 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	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



**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 Macro Line, large fan angle
 Coussian intensity distribution

Gaussian intensity distributionExtended depth of focus

LASER MODULES SERIES LNC-5LPM

Macro Line, large fan angleGaussian intensity distribution

Extended depth of focus

Low noise

LASER MODULES
SERIES 13LRM

Macro Line Generator, fan angleUniform 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 <a href="https://sukhamburg.com/products/details/5LPM40-S000-1\_55CM-685-24-H13-A8-C-6">https://sukhamburg.com/products/details/5LPM40-S000-1\_55CM-685-24-H13-A8-C-6</a> from 4/26/2024

### 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]