

## 5LPM80-S88-1+25CM-405-10-Y07-A7.5-B-4

Compact Macro Line Generator with a large fan angle

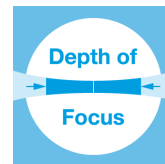


### FEATURES

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

- Line length: 140 mm
- Line width: 52  $\mu\text{m}$
- Wavelength: 405 nm
- Working distance: 77 mm
- Depth of focus: 14 mm

- 
- Macro Line Generator for extended depth of focus



## DESCRIPTION

The laser diode beam source type 5LPM80-S88-1+25CM-405-10-Y07-A7.5-B-4 has a fan angle of 84° and an extended depth of focus.

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 approx. Gaussian.

The laser has integrated electronics [type B](#) for control of the laser output power. The output power can be controlled using the [modulation input port \(TTL\)](#), 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

5LPM80-S88-1+25CM-405-10-Y07-A7.5-B-4

<b>Series</b>	5LPM
<b>Order Code</b>	5LPM80-S88-1+25CM-405-10-Y07-A7.5-B-4
<b>Line profile</b>	Gaussian Intensity Distribution
<b>Line type</b>	Laser Macro Line
<b>Wavelength</b>	405 +5/-5 nm
<b>Laser output power</b>	10 mW
<b>Laser safety class</b>	3B
<b>Fan angle <math>\alpha</math></b>	84 deg
<b>Focussing range</b>	65-120 mm
<b>Working distance</b>	77 mm
<b>Line length</b>	140 mm
<b>Line width</b>	0.052 mm
<b>Depth of focus</b>	14 mm
<b>Edge intensity</b>	9 %
<b>Diameter laser module</b>	12 mm
<b>Module length</b>	79.1 mm
<b>Installation length</b>	186.1 mm
<b>Cable length</b>	1.5 m
<b>Connector type</b>	Lumberg SV40 IEC 61076-2-106
<b>Supply voltage</b>	12 $\pm$ 0.5 V
<b>Max. current consumption</b>	0.16 A
<b>Working temperature</b>	0 - 40 °C
<b>Modulation inputs</b>	TTL
<b>Input resistance</b>	110 kOhm
<b>Max. modulation frequency</b>	0.2 kHz
<b>Modulation delay ON/OFF</b>	500/500 $\mu$ s
<b>Rise / Fall time</b>	10/20 $\mu$ s

## ACCESSORIES

60EX-4	Eccentric key with a stroke of $\pm 0.5$ mm.
60EX-4-L	Alternative eccentric key with long handle with a stroke of $\pm 0.5$ 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
PS120516E	Power Supply 12 V

## RELATED PRODUCTS

LASER MODULES SERIES 5LPM	<ul style="list-style-type: none"><li>▪ Macro Line, <b>large</b> fan angle</li><li>▪ Gaussian intensity distribution</li><li>▪ Extended depth of focus</li></ul>
LASER MODULES SERIES LNC-5LPM	<ul style="list-style-type: none"><li>▪ Macro Line, <b>large</b> fan angle</li><li>▪ Gaussian intensity distribution</li><li>▪ Extended depth of focus</li><li>▪ Low noise</li></ul>
LASER MODULES SERIES 13LRM	<ul style="list-style-type: none"><li>▪ Macro Line Generator, fan angle</li><li>▪ Uniform intensity distribution</li><li>▪ Extended depth of focus</li></ul>
LASER MODULES SERIES 13LNM	<ul style="list-style-type: none"><li>▪ Micro Line Generator, <b>small</b> fan angle</li><li>▪ Uniform intensity distribution</li><li>▪ Extended depth of focus</li></ul>
LASER MODULES SERIES 5LMM+25CM	<ul style="list-style-type: none"><li>▪ <b>Compact</b> Micro Line, <b>small</b> fan angle</li><li>▪ Gaussian intensity distribution</li><li>▪ Extended depth of focus</li></ul>
LASER MODULES SERIES 5LPM+25CM	<ul style="list-style-type: none"><li>▪ <b>Compact</b> Macro Line, <b>large</b> fan angle</li><li>▪ Gaussian intensity distribution</li><li>▪ Extended depth of focus</li></ul>

**LASER MODULES  
SERIES 5LMM**

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

This is a printout of the page [https://sukhamburg.com/products/details/5LPM80-S88-1\\_25CM-405-10-Y07-A7\\_5-B-4](https://sukhamburg.com/products/details/5LPM80-S88-1_25CM-405-10-Y07-A7_5-B-4) from 5/7/2024

## 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. [\[more\]](#)