

## 5LPM40-S150-1+25CM-405-10-Y07-A7.5-B-4

Compact Macro Line Generator with a large fan angle

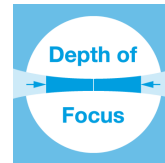


### FEATURES

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

- Line length: 101 mm
- Line width: 88  $\mu\text{m}$
- Wavelength: 405 nm
- Working distance: 142 mm
- Depth of focus: 40.6 mm

- Macro Line Generator for extended depth of focus



## DESCRIPTION

The laser diode beam source type 5LPM40-S150-1+25CM-405-10-Y07-A7.5-B-4 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 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

5LPM40-S150-1+25CM-405-10-Y07-A7.5-B-4

Series	5LPM
Order Code	5LPM40-S150-1+25CM-405-10-Y07-A7.5-B-4
Line profile	Gaussian Intensity Distribution
Line type	Laser Macro Line
Wavelength	405 +5/-5 nm
Laser output power	10 mW
Laser safety class	3B
Fan angle $\alpha$	40 deg
Focussing range	120-255 mm
Working distance	142 mm
Line length	101 mm
Line width	0.088 mm
Depth of focus	40.6 mm
Edge intensity	9 %
Diameter laser module	12 mm
Module length	83.1 mm
Installation length	255.1 mm
Cable length	1.5 m
Connector type	Lumberg SV40 IEC 61076-2-106
Supply voltage	12 $\pm$ 0.5 V
Max. current consumption	0.16 A
Working temperature	0 - 40 °C
Modulation inputs	TTL
Input resistance	110 kOhm
Max. modulation frequency	0.2 kHz
Modulation delay ON/OFF	500/500 $\mu$ s
Rise / Fall time	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/5LPM40-S150-1\\_25CM-405-10-Y07-A7\\_5-B-4](https://sukhamburg.com/products/details/5LPM40-S150-1_25CM-405-10-Y07-A7_5-B-4) from 4/25/2024

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