

## 5LMM15-S150-1+25CM-405-10-Y07-A7.5-B-4

Compact Macro Line Generator with a fan angle



### FEATURES

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

- Line length: 39.7 mm
- Line width: 88  $\mu\text{m}$
- Wavelength: 405 nm
- Working distance: 138 mm
- Depth of focus: 40.6 mm

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- Macro Line Generator for extended depth of focus



## DESCRIPTION

The laser diode beam source type 5LMM15-S150-1+25CM-405-10-Y07-A7.5-B-4 has a fan angle of  $15^\circ$  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

5LMM15-S150-1+25CM-405-10-Y07-A7.5-B-4

<b>Series</b>	5LMM
<b>Order Code</b>	5LMM15-S150-1+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>	15 deg
<b>Focussing range</b>	115-250 mm
<b>Working distance</b>	138 mm
<b>Line length</b>	39.7 mm
<b>Line width</b>	0.088 mm
<b>Depth of focus</b>	40.6 mm
<b>Edge intensity</b>	9 %
<b>Diameter laser module</b>	12 mm
<b>Module length</b>	66.1 mm
<b>Installation length</b>	234.1 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
PS120516E	Power Supply 12 V

## RELATED PRODUCTS

### LASER MODULES SERIES 5LMM+25CM

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

### LASER MODULES SERIES LNC-5LMM

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

### LASER MODULES SERIES 13LRM

- Macro Line Generator, fan angle
- Uniform 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 5LPM+25CM

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

### LASER MODULES SERIES 5LMM

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

### LASER MODULES SERIES 5LPM

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

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