

## 5LP80-S150+25CM-405-13-Y07-A7.5-B-4

Compact Micro Line Generator with a large fan angle



### FEATURES

Compact laser line with a large fan angle and Gaussian intensity distribution.

- Line length: 250 mm
- Line width: 41  $\mu\text{m}$
- Wavelength: 405 nm
- Working distance: 147 mm

- Micro Line Generator for small laser line widths and high power density in the focal plane



## DESCRIPTION

The laser diode beam source type 5LP80-S150+25CM-405-13-Y07-A7.5-B-4 has a fan angle of 84°.

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 [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

5LP80-S150+25CM-405-13-Y07-A7.5-B-4

Series	5LP
Order Code	5LP80-S150+25CM-405-13-Y07-A7.5-B-4
Line profile	Gaussian Intensity Distribution
Line type	Laser Micro Line
Wavelength	405 +5/-5 nm
Laser output power	13 mW
Laser safety class	3B
Fan angle $\alpha$	84 deg
Focussing range	125-260 mm
Working distance	147 mm
Line length	250 mm
Line width	0.041 mm
Rayleigh range	6.53 mm
Edge intensity	9 %
Diameter laser module	12 mm
Module length	73.7 mm
Installation length	250.7 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+25CM

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

### LASER MODULES SERIES LNC-5LP

- Micro Line, **large** fan angle
- Gaussian intensity distribution
- Low noise

### LASER MODULES SERIES 13LR

- Micro Line Generator, fan angle
- Uniform intensity distribution

### LASER MODULES SERIES 13LN

- Micro Line, **small** fan angle
- Uniform intensity distribution
- Thin lines

### LASER MODULES SERIES 5LM+25CM

- **Compact** Micro Line, **small** fan angle
- Gaussian intensity distribution

### LASER MODULES SERIES 5LP

- Micro Line, **large** fan angle
- Gaussian intensity distribution

### LASER MODULES SERIES 5LM

- Micro Line, **small** fan angle
- Gaussian intensity distribution

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