

5LPM40-S150-1+25CM-640-18-H22-A8-S-6

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: 139 µm
Wavelength: 640 nm
Working distance: 142 mm
Depth of focus: 64.2 mm

Macro Line Generator for extended depth of focus



DESCRIPTION

The laser diode beam source type 5LPM40-S150-1+25CM-640-18-H22-A8-S-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 14 %. The line width is constant along the laser line. Across the laser line the intensity distribution is approx. Gaussian.

The laser has integrated electronics $\underline{type\ S}$ for control of the laser output power. The output power can be controlled using the $\underline{modulation\ input\ ports\ (TTL\ and\ analog)}$ 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-640-18-H22-A8-S-6

Series	5LPM	
Order Code	5LPM40-S150-1+25CM-640-18-H22-A8-S-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	640 +5/-5 nm	
Laser output power	18 mW	
Laser safety class	3В	
Fan angle α	40 deg	
Focussing range	120-255 mm	
Working distance	142 mm	
Line length	101 mm	
Line width	0.139 mm	
Depth of focus	64.2 mm	
Edge intensity	14 %	
Diameter laser module	12 mm	
Module length	83.1 mm	
Installation length	255.1 mm	
Cable length	1.5 m	
Connector type	Lumberg SV50 IEC 61076-2-106	
Supply voltage	5 ± 0.25 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	50 kHz	1000 kHz
Modulation delay ON/OFF	4/0.5 μs	0.05/0.05 μs
Rise / Fall time	5/4 μs	0.1/0.02 μs



ACCESSORIES

60EX-4 Eccentric key with a stroke of ± 0.5 mm.

60EX-4-L Alternative eccentric key with long handle with a

stroke of ± 0.5 mm.

9D-12 Screwdriver WS 1.2

13MK-25-36-10-F Mounting Console with flat base plate

Mounting Console with base plate with dovetail 13MK-25-36-10-M

profile

PS051003E Power Supply 5 V

RELATED PRODUCTS

LASER MODULES • Macro Line, large fan angle **SERIES 5LPM** Gaussian intensity distribution

Extended depth of focus

LASER MODULES • Macro Line, large fan angle **SERIES LNC-5LPM** Gaussian intensity distribution

Extended depth of focus

Low noise

LASER MODULES Macro Line Generator, fan angle **SERIES 13LRM**

Uniform intensity distribution

Extended depth of focus

LASER MODULES Micro Line Generator, small fan angle

SERIES 13LNM Uniform intensity distribution

Extended depth of focus

LASER MODULES ■ Compact Micro Line, small fan angle

SERIES 5LMM+25CM Gaussian intensity distribution

Extended depth of focus

LASER MODULES Compact Macro Line, large fan angle

SERIES 5LPM+25CM Gaussian intensity distribution

Extended depth of focus



LASER MODULES
SERIES 5LMM

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

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