5LP40-S000+55CM-685-37-H13-A8-CS-7

Micro Line Generator with a large fan angle



FEATURES

Laser line with a large fan angle and Gaussian intensity distribution.

- Line length: 720 mm
- Line width: 388 μm
- Wavelength: 685 nm
- Working distance: 1000 mm
- Micro Line Generator for small laser line widths and high power density in the focal plane
- With RS232 interface



DESCRIPTION

The laser diode beam source type 5LP40-S000+55CM-685-37-H13-A8-CS-7 has a fan angle of 40°.

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 Gaussian.

The laser has integrated electronics <u>type CS</u> for control of the laser output power and serial interface (RS232). The output power can be controlled using the <u>modulation input</u> <u>ports (TTL and analog)</u> 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

5LP40-S000+55CM-685-37-H13-A8-CS-7

Series		5LP
Order Code	5LP40-S000+55CM-685-37-H13-A8-CS-7	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	685 +10/-10 nm	
Laser output power	37 mW	
Laser safety class	3В	
Fan angle α		40 deg
Focussing range	430-inf mm	
Working distance	1000 mm	
Line length	720 mm	
Line width	0.388 mm	
Rayleigh range	346 mm	
Edge intensity	14 %	
Diameter laser module	25/28 mm	
Module length	90.1 mm	
Installation length	1120.1 mm	
Cable length	1.5 m	
Connector type	Lumberg SV70 IEC 61076-2-106	
Supply voltage	5±0.2V	
Max. current consumption	0.25 A	
Working temperature	0 - 40 °C	
Modulation inputs	Analog	TTL
Input resistance	9 kOhm	9 kOhm
Max. modulation frequency	0.001 kHz	250 kHz
Modulation delay ON/OFF	3000/3000 μs	0.5/0.2 μs
Rise / Fall time	200000/200000 μs	0.8/0.4 µs
Interface		RS232

ACCESSORIES



DATA SHEET

50HD-15	Hex key WS 1.5
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
PS051007E	Power Supply 5 V for laser modules with RS232 interface

RELATED PRODUCTS

LASER MODULES SERIES 5LPM	 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+25CM	 Compact Micro Line, large fan angle Gaussian intensity distribution
LASER MODULES SERIES 5LM	 Micro Line, small fan angle Gaussian intensity distribution



DATA SHEET

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