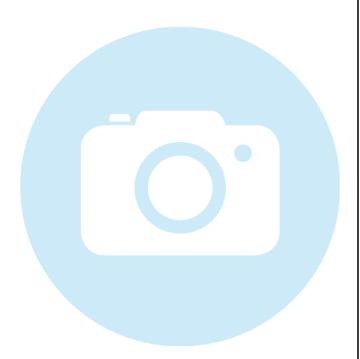


### 13LN165-S500+90CM-685-17-H13-M60-C-6

Micro Line Generator with a fan angle



#### **FEATURES**

Laser line with a fan angle, approx. uniform intensity distribution and very thin lines.

Line length: 40 mm
Line width: 31 μm
Wavelength: 685 nm
Working distance: 424 mm

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



### DESCRIPTION

The laser diode beam source type 13LN165-S500+90CM-685-17-H13-M60-C-6 has a fan angle of 3.4° and approx. uniform intensity distribution along the laser line.

More precisely, it is Gaussian clipped by an aperture with an edge intensity of 75 %. Across the laser line the intensity distribution is Gaussian. The line width is constant along 60 % of the central are, outside this area the line width differs up to 30 %.

The laser has integrated electronics  $\underline{type\ C}$  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.

For this laser type the working distance is fixed. A fine-adjustment of the distance between laser and target is recommended for fine-focusing in order to achieve minimal line width.



# **TECHNICAL DATA**

13LN165-S500+90CM-685-17-H13-M60-C-6

Series	13LN165	
Order Code	13LN165-S500+90CM-685-17-H13-M60-C-6	
Line profile	Constant Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	685 +10/-10 nm	
Laser output power	17 mW	
Laser safety class	3В	
Fan angle α	3.4 deg	
Focussing range	424-424 mm	
Working distance	424 mm	
Line length	40 mm	
Line width	0.031 mm	
Rayleigh range	2.22 mm	
Edge intensity	75 %	
Diameter laser module	25/28 mm	
Module length	121.9 mm	
Installation length	575.9 mm	
Cable length	1.5 m	
Connector type	Lumberg SV50 IEC 61076-2-106	
Supply voltage	5 ± 0.2 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	100 kHz	100 kHz
Modulation delay ON/OFF	1/0.5 μs	2/1 μs
Rise / Fall time	3/2 μs	3/2 μs

## **ACCESSORIES**

**9D-12** Screwdriver WS 1.2



PS051003E Power Supply 5 V

### **RELATED PRODUCTS**

LASER MODULES SERIES 13LNM Micro Line Generator, small fan angle

Uniform intensity distribution

Extended depth of focus

LASER MODULES SERIES LNC-13LN Micro Line, small fan angle

Uniform intensity distribution

Thin lines

Low noise

LASER MODULES SERIES 13LR Micro Line Generator, fan angle

Uniform intensity distribution

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

LASER MODULES SERIES 5LP Micro Line, large fan angle

Gaussian intensity distribution



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