

#### 13LTM-2000-41+90CR-660-21-M25-M60-P-6

Semi-telecentric Macro Line Generator Semi-telecentric Macro Line Generator



#### **FEATURES**

Semi-telecentric laser line with constant line length 15mm, approx. uniform intensity distribution and extended depth of focus.

Line length: 15 mm
Line width: 478 µm
Wavelength: 660 nm
Working distance: 1988 mm
Depth of focus: 735 mm

Macro Line Generator for extended depth of focus



#### **DESCRIPTION**

The laser diode beam source type 13LTM-2000-41+90CR-660-21-M25-M60-P-6 produces a semi-telecentric laser line with 15 mm line length and extended depth of focus. The intensity profile is approx. uniform in line direction. More precisely, it is Gaussian clipped by an aperture with an edge intensity of 64 %. The line width is constant along the laser line. Across the laser line the intensity distribution is approx. Gaussian.

The laser has integrated electronics <u>type P</u> with micro-controller for control of the laser output power. The output power can be controlled using the <u>modulation input ports (TTL and analog)</u> 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**

13LTM-2000-41+90CR-660-21-M25-M60-P-6

Series	13LTM	
Order Code	13LTM-2000-41+90CR-660-21-M25-M60-P-6	
Line profile	Constant Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	660 +4/-6 nm	
Laser output power	21 mW	
Laser safety class	3В	
Focussing range	1988-1988 mm	
Working distance	1988 mm	
Line length	15 mm	
Line width	0.478 mm	
Depth of focus	735 mm	
Edge intensity	64 %	
Diameter laser module	25/28 mm	
Module length	111.3 mm	
Installation length	2099.3 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	15 - 40 °C	
Modulation inputs	Analog	TTL
Input resistance	9 kOhm	9 kOhm
Max. modulation frequency	0.01 kHz	250 kHz
Modulation delay ON/OFF	3000/3000 μs	0.5/0.2 μs
Rise / Fall time	40000/40000 μs	0.5/0.5 μs
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## **DOWNLOADS**





#### **ACCESSORIES**

**9D-12** Screwdriver WS 1.2

PS051003E Power Supply 5 V

#### **RELATED PRODUCTS**

LASER MODULES SERIES 13LT Semi-telecentric Micro LineUniform intensity distribution

Constant line length 15 mm

LASER MODULES

SERIES LNC-13LTM Semi-telecentric Macro LineUniform intensity distribution

Constant line length 15 mmExtended depth of focus

Low noise

LASER MODULES SERIES 5LTM-1+25CM ■ Compact semi-telecentric Macro Line

Gaussian intensity distribution

Constant line length ca. 4.8 mm

Extended depth of focus

LASER MODULES SERIES 5LTM-2+25CM Compact semi-telecentric Macro Line

Gaussian intensity distribution

Constant line length ca. 2 mm

Extended depth of focus

LASER MODULES SERIES 5LTM-1 Semi-telecentric Macro Line

Gaussian intensity distribution

Constant line length ca. 4.8 mm

Extended depth of focus

LASER MODULES SERIES 5LTM-2 Semi-telecentric Macro Line

Gaussian intensity distribution

Constant line length ca. 2 mm

Extended depth of focus



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