

### 5LTM-100-22+55CM-635-5-H10-A8-CS-7

Semi-telecentric Macro Line Generator



#### **FEATURES**

Semi-telecentric laser line with constant line length of 2.4 mm and extended depth of focus.

Line length: 2.4 mm
Line width: 53 µm
Wavelength: 635 nm
Working distance: 91 mm
Depth of focus: 7.07 mm

- Macro Line Generator for extended depth of focus
- With RS232 interface





## **DESCRIPTION**

The laser diode beam source type 5LTM-100-22+55CM-635-5-H10-A8-CS-7 produces a semi-telecentric laser line with 2.4 mm line length. In this case the line length is given on the 13.5%-level. The intensity profile is Gaussian in line direction and the line is truncated at 4.8 mm. 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 CS</u> for control of the laser output power and serial interface (RS232). 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**

5LTM-100-22+55CM-635-5-H10-A8-CS-7

Order Code         5LTM-100-22+55CM-635-5-H10-A8-CS-7           Line profile         Gaussian Intensity Distribution           Line type         Laser Macro Line           Wavelength         635 +10/-10 nm           Laser output power         5 mW           Laser safety class         3R           Focussing range         91-91 mm           Working distance         91 mm           Line length         2.4 mm           Line width         0.053 mm           Depth of focus         7.07 mm           Edge intensity         33 %           Diameter laser module         25/28 mm           Module length         78.5 mm           Installation length         1.9 mm           Cable length         1.5 m           Connector type         Lumberg SV70 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         9 kOhm         9 kOhm           Max. modulation frequency         0.001 kHz         250 kHz           Modulation delay ON/OFF         3000/3000 μs         0.5/0.2 μs	Series 5LTM			
Line type         Laser Macro Line           Wavelength         635 +10/-10 nm           Laser output power         5 mW           Laser safety class         3R           Focussing range         91-91 mm           Working distance         91 mm           Line length         2.4 mm           Line width         0.053 mm           Depth of focus         7.07 mm           Edge intensity         33 %           Diameter laser module         25/28 mm           Module length         78.5 mm           Installation length         199.5 mm           Cable length         1.5 m           Connector type         Lumberg SV70 IEC 61076-2-106           Supply voltage         5 ± 0.2 V           Max. current consumption         0.25A           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	Order Code	5LTM-100-22+55CM-635-5-H10-A8-CS-7		
Wavelength         635 +10/-10 nm           Laser output power         5 mW           Laser safety class         3R           Focussing range         91-91 mm           Working distance         91 mm           Line length         2.4 mm           Line width         0.053 mm           Depth of focus         7.07 mm           Edge intensity         33 %           Diameter laser module         25/28 mm           Module length         78.5 mm           Installation length         1.9 mm           Cable length         1.5 m           Connector type         Lumberg SV70 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         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	Line profile	Gaussian Intensity Distribution		
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Laser safety class         3R           Focussing range         91-91 mm           Working distance         91 mm           Line length         2.4 mm           Line width         0.053 mm           Depth of focus         7.07 mm           Edge intensity         33 %           Diameter laser module         25/28 mm           Module length         78.5 mm           Installation length         199.5 mm           Cable length         1.5 m           Connector type         Lumberg SV70 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         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	Wavelength	635 +10/-10 nm		
Focussing range         91-91 mm           Working distance         91 mm           Line length         2.4 mm           Line width         0.053 mm           Depth of focus         7.07 mm           Edge intensity         33 %           Diameter laser module         25/28 mm           Module length         78.5 mm           Installation length         199.5 mm           Cable length         1.5 m           Connector type         Lumberg SV70 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         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	Laser output power	5 mW		
Working distance         91 mm           Line length         2.4 mm           Line width         0.053 mm           Depth of focus         7.07 mm           Edge intensity         33 %           Diameter laser module         25/28 mm           Module length         78.5 mm           Installation length         199.5 mm           Cable length         1.5 m           Connector type         Lumberg SV70 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         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	Laser safety class	3R		
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Installation length         199.5 mm           Cable length         1.5 m           Connector type         Lumberg SV70 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         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	Diameter laser module	25/28 mm		
Cable length1.5 mConnector typeLumberg SV70 IEC 61076-2-106Supply voltage5 ± 0.2 VMax. current consumption0.25 AWorking temperature0 - 40 °CModulation inputsAnalogTTLInput resistance9 kOhm9 kOhmMax. modulation frequency0.001 kHz250 kHzModulation delay ON/OFF3000/3000 μs0.5/0.2 μsRise / Fall time200000/200000 μs0.8/0.4 μs	Module length	78.5 mm		
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Cable length	1.5 m		
Max. current consumption0.25 AWorking temperature0 - 40 °CModulation inputsAnalogTTLInput resistance9 kOhm9 kOhmMax. modulation frequency0.001 kHz250 kHzModulation delay ON/OFF3000/3000 μs0.5/0.2 μsRise / Fall time200000/200000 μs0.8/0.4 μs	Connector type	Lumberg SV70 II	Lumberg SV70 IEC 61076-2-106	
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	Supply voltage	5 ± 0.2 V		
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	Max. current consumption	0.25 A		
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Modulation delay ON/OFF         3000/3000 μs         0.5/0.2 μs           Rise / Fall time         200000/200000 μs         0.8/0.4 μs	Input resistance	9 kOhm	9 kOhm	
Rise / Fall time         200000/200000 μs         0.8/0.4 μs	Max. modulation frequency	0.001 kHz	250 kHz	
	Modulation delay ON/OFF	3000/3000 μs	0.5/0.2 μs	
Interface RS232	Rise / Fall time	200000/200000 μs	0.8/0.4 μs	
	Interface	RS232		

### **ACCESSORIES**

**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 5LT-2 Semi-telecentric Micro Line

Gaussian intensity distribution

Constant line length ca. 2 mm

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

Gaussian intensity distribution

Constant line length ca. 2 mm

Extended depth of focus

Low noise

LASER MODULES SERIES 13LTM Semi-telecentric Macro Line

Uniform intensity distribution

Constant line length 15 mm

Extended depth of focus

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-1 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



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#### CONTACT

For more information please contact: Schäfter + Kirchhoff GmbH Kieler Str. 212 22525 Hamburg Germany

Tel: +49 40 85 39 97-0 Fax: +49 40 85 39 97-79

info@sukhamburg.de www.sukhamburg.com

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