

## 5LTM-150-11+55CM-785-59-Q06-A8-CS-7

Semi-telecentric Macro Line Generator



#### **FEATURES**

Semi-telecentric laser line with constant line length of 4.8 mm and extended depth of focus.

Line length: 4.8 mm
Line width: 170 μm
Wavelength: 785 nm
Working distance: 139 mm
Depth of focus: 78.7 mm

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





### **DESCRIPTION**

The laser diode beam source type 5LTM-150-11+55CM-785-59-Q06-A8-CS-7 produces a semi-telecentric laser line with 4.8 mm line length and extended depth of focus. The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 3 %. 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-150-11+55CM-785-59-Q06-A8-CS-7

Line profileGaussian Intensity DistributLine typeLaser Macro LWavelength785 +10/-10Laser output power59 mLaser safety class139-139 mFocussing range139-139 mWorking distance139 mLine length4.8 mLine width0.17 mDepth of focus78.7 mEdge intensity3Diameter laser module25/28 mModule length78.5 mInstallation length247.5 mCable length1.9Connector typeLumberg SV70 IEC 61076-2-1Supply voltage5 ± 0.	Series 5LTM		
Line typeLaser Macro LWavelength785 +10/-10Laser output power59 mLaser safety class59 mFocussing range139-139 mWorking distance139 mLine length4.8 mLine width0.17 mDepth of focus78.7 mEdge intensity3Diameter laser module25/28 mModule length78.5 mInstallation length247.5 mCable length1.9Connector typeLumberg SV70 IEC 61076-2-1Supply voltage5 ± 0.	Order Code 5LTM-150-11+55CM-785-5	5LTM-150-11+55CM-785-59-Q06-A8-CS-7	
Wavelength         785 +10/-10           Laser output power         59 m           Laser safety class         139-139 m           Working distance         139 m           Line length         4.8 m           Line width         0.17 m           Depth of focus         78.7 m           Edge intensity         3           Diameter laser module         25/28 m           Module length         78.5 m           Installation length         247.5 m           Cable length         1.9           Connector type         Lumberg SV70 IEC 61076-2-1           Supply voltage         5 ± 0.	Line profile Gaussian Inter	Gaussian Intensity Distribution	
Laser output power         59 m           Laser safety class         139-139 m           Working distance         139 m           Line length         4.8 m           Line width         0.17 m           Depth of focus         78.7 m           Edge intensity         3           Diameter laser module         25/28 m           Module length         78.5 m           Installation length         247.5 m           Cable length         1.5           Connector type         Lumberg SV70 IEC 61076-2-1           Supply voltage         5 ± 0.	Line type	Laser Macro Line	
Laser safety class           Focussing range         139-139 m           Working distance         139 m           Line length         4.8 m           Line width         0.17 m           Depth of focus         78.7 m           Edge intensity         3           Diameter laser module         25/28 m           Module length         78.5 m           Installation length         247.5 m           Cable length         1.9           Connector type         Lumberg SV70 IEC 61076-2-1           Supply voltage         5 ± 0.	Wavelength	785 +10/-10 nm	
Focussing range         139-139 m           Working distance         139 m           Line length         4.8 m           Line width         0.17 m           Depth of focus         78.7 m           Edge intensity         3           Diameter laser module         25/28 m           Module length         78.5 m           Installation length         247.5 m           Cable length         1.5           Connector type         Lumberg SV70 IEC 61076-2-1           Supply voltage         5 ± 0.	Laser output power	59 mW	
Working distance         139 m           Line length         4.8 m           Line width         0.17 m           Depth of focus         78.7 m           Edge intensity         3           Diameter laser module         25/28 m           Module length         78.5 m           Installation length         247.5 m           Cable length         1.5           Connector type         Lumberg SV70 IEC 61076-2-1           Supply voltage         5 ± 0.	Laser safety class	3B	
Line length4.8 mLine width0.17 mDepth of focus78.7 mEdge intensity3Diameter laser module25/28 mModule length78.5 mInstallation length247.5 mCable length1.9Connector typeLumberg SV70 IEC 61076-2-1Supply voltage5 ± 0.	Focussing range	139-139 mm	
Line width0.17 mDepth of focus78.7 mEdge intensity3Diameter laser module25/28 mModule length78.5 mInstallation length247.5 mCable length1.9Connector typeLumberg SV70 IEC 61076-2-3Supply voltage5 ± 0.	Working distance 139 mm		
Depth of focus  Edge intensity  Diameter laser module  Module length  78.5 r  Installation length  Cable length  1.5  Connector type  Lumberg SV70 IEC 61076-2-1  Supply voltage	length 4.8 mm		
Edge intensity  Diameter laser module  25/28 r  Module length  78.5 r  Installation length  247.5 r  Cable length  1.5  Connector type  Lumberg SV70 IEC 61076-2-3  Supply voltage  5 ± 0.	Line width	0.17 mm	
Diameter laser module  Module length  78.5 r  Installation length  Cable length  1.5  Connector type  Lumberg SV70 IEC 61076-2-1  Supply voltage  5 ± 0.	Depth of focus	78.7 mm	
Module length 78.5 r  Installation length 247.5 r  Cable length 1.5  Connector type Lumberg SV70 IEC 61076-2-1  Supply voltage 5 ± 0.	ge intensity 3 %		
Installation length  Cable length  Connector type  Lumberg SV70 IEC 61076-2-1  Supply voltage  5 ± 0.	Diameter laser module	25/28 mm	
Cable length  Connector type  Lumberg SV70 IEC 61076-2-1  Supply voltage  5 ± 0.	Module length	78.5 mm	
Connector type  Lumberg SV70 IEC 61076-2-1  Supply voltage  5 ± 0.	Installation length	247.5 mm	
Supply voltage 5 ± 0.	Cable length	1.5 m	
	Connector type Lumberg SV70 IB	Lumberg SV70 IEC 61076-2-106	
Max. current consumption 0.2	Supply voltage	5 ± 0.2 V	
	Max. current consumption	0.25 A	
Working temperature 0 - 40	Working temperature	0 - 40 °C	
Modulation inputs Analog T	Modulation inputs Analog	TTL	
Input resistance 9 kOhm 9 kO	Input resistance 9 kOhm	9 kOhm	
Max. modulation frequency0.001 kHz250 k	Max. modulation frequency 0.001 kHz	250 kHz	
Modulation delay ON/OFF         3000/3000 μs         0.5/0.2	Modulation delay ON/OFF 3000/3000 μs	0.5/0.2 μs	
Rise / Fall time         200000/200000 μs         0.8/0.4	Rise / Fall time         200000/200000 μs	0.8/0.4 μs	
Interface RS2			

### **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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