

5LTM-150-22+55CM-445-59-G02-A7.5-PS-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: 61 μm
Wavelength: 445 nm
Working distance: 139 mm
Depth of focus: 11.2 mm

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





DESCRIPTION

The laser diode beam source type 5LTM-150-22+55CM-445-59-G02-A7.5-PS-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 PS</u> with micro-controller 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-150-22+55CM-445-59-G02-A7.5-PS-7

Line type Laser Macro L Wavelength 445 +15/-5 Laser output power 59 r Laser safety class Focussing range 139-139 r Working distance 139 r Line length 2.4 r Line width 0.061 r Depth of focus 11.2 r Edge intensity 3 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 61076-2-5 Supply voltage 5 ± 0. Max. current consumption 0 Working temperature 15 - 40 Modulation inputs Analog	Series 5LTM			
Line type Laser Macro L Wavelength 445 +15/-5 Laser output power 59 r Laser safety class Focussing range 139-139 r Working distance 139 r Line length 2,4 r Line width 0,061 r Depth of focus 11.2 r Edge intensity Diameter laser module 25/28 r Module length 78.5 r Installation length 247.5 r Cable length 1.2 Connector type Lumberg SV70 IEC 61076-2-2 Supply voltage 5 ± 0. Max. current consumption 0 Working temperature 15 - 40 Modulation inputs	Order Code	5LTM-150-22+55CM-445-59-G02-A7.5-PS-7		
Wavelength 445 ±15/-5 Laser output power 59 m Laser safety class 139-139 m Working distance 139 m Line length 2.4 m Line width 0.061 m Depth of focus 11.2 m Edge intensity 25/28 m Module length 78.5 m Installation length 247.5 m Cable length 1 Connector type Lumberg SV70 IEC 61076-2-2 m Supply voltage 5 ± 0 Max. current consumption 0 Working temperature 15 - 40 Modulation inputs Analog	Line profile	Gaussian Intensity Distribution		
Laser output power 59 m Laser safety class 139-139 m Working distance 139 m Line length 2.4 m Line width 0.061 m Depth of focus 11.2 m Edge intensity 2 Diameter laser module 25/28 m Module length 78.5 m Installation length 247.5 m Cable length 1 Connector type Lumberg SV70 IEC 61076-2-2 Supply voltage 5 ± 0. Max. current consumption 0. Working temperature 15 - 40 Modulation inputs Analog	Line type	Laser Macro Line		
Laser safety class Focussing range 139-139 in Working distance 139 in Line length 2.4 in Line width 0.061 in Depth of focus 11.2 in Edge intensity 25/28 in Module length 78.5 in Installation length 247.5 in Cable length 1.5 in Connector type Lumberg SV70 IEC 61076-2-2 Supply voltage 5 ± 0. Max. current consumption 0. Working temperature 15 - 40 Modulation inputs Analog 75 in Modulation inputs 139-139 in	Wavelength	445 +15/-5 nm		
Focussing range 139-139 ft Working distance 139 ft Line length 2.4 ft Line width 0.061 ft Depth of focus 11.2 ft Edge intensity 2 Diameter laser module 25/28 ft Module length 78.5 ft Installation length 247.5 ft Cable length 1.3 Connector type Lumberg SV70 IEC 61076-2-3 Supply voltage 5 ± 0. Max. current consumption 0. Working temperature 15 - 40 Modulation inputs Analog	Laser output power	59 mW		
Working distance 139 ft Line length 2.4 ft Line width 0.061 ft Depth of focus 11.2 ft Edge intensity 2 Diameter laser module 25/28 ft Module length 78.5 ft Installation length 247.5 ft Cable length 1.5 Connector type Lumberg SV70 IEC 61076-2-5 Supply voltage 5 ± 0. Max. current consumption 0. Working temperature 15 - 40 Modulation inputs Analog 7	Laser safety class	3В		
Line length2.4Line width0.061 mDepth of focus11.2 mEdge intensity2Diameter laser module25/28 mModule length78.5 mInstallation length247.5 mCable length1.5Connector typeLumberg SV70 IEC 61076-2-2Supply voltage5 ± 0.Max. current consumption0.Working temperature15 - 40Modulation inputsAnalog	Focussing range	139-139 mm		
Line width0.061 mDepth of focus11.2 mEdge intensity2Diameter laser module25/28 mModule length78.5 mInstallation length247.5 mCable length1.8 mConnector typeLumberg SV70 IEC 61076-2-3 mSupply voltage5 ± 0.Max. current consumption0.Working temperature15 - 40 mModulation inputsAnalog	Working distance	139 mm		
Depth of focus11.2 mEdge intensity2Diameter laser module25/28 mModule length78.5 mInstallation length247.5 mCable length1.3Connector typeLumberg SV70 IEC 61076-2-2Supply voltage5 ± 0.Max. current consumption0.Working temperature15 - 40Modulation inputsAnalog	Line length	2.4 mm		
Edge intensity Diameter laser module 25/28 in Module length 78.5 in Installation length Cable length Connector type Lumberg SV70 IEC 61076-2-5 Supply voltage 5 ± 0. Max. current consumption Working temperature 15 - 40 Modulation inputs	Line width	0.061 mm		
Diameter laser module25/28 mModule length78.5 mInstallation length247.5 mCable length1.3Connector typeLumberg SV70 IEC 61076-2-7Supply voltage5 ± 0.Max. current consumption0.Working temperature15 - 40Modulation inputsAnalog	Depth of focus	11.2 mm		
Module length78.5 mInstallation length247.5 mCable length1.5Connector typeLumberg SV70 IEC 61076-2-3Supply voltage5 ± 0.3Max. current consumption0.3Working temperature15 - 40Modulation inputsAnalog	Edge intensity	2%		
Installation length Cable length Connector type Lumberg SV70 IEC 61076-2-2 Supply voltage 5 ± 0. Max. current consumption Working temperature 15 - 40 Modulation inputs	Diameter laser module	25/28 mm		
Cable length1.3Connector typeLumberg SV70 IEC 61076-2-3Supply voltage 5 ± 0.3 Max. current consumption0.3Working temperature15 - 40Modulation inputsAnalog	Module length	78.5 mm		
Connector typeLumberg SV70 IEC 61076-2-3Supply voltage $5 \pm 0.$ Max. current consumption $0.$ Working temperature $15 - 40.$ Modulation inputsAnalog	Installation length	247.5 mm		
Supply voltage $5 \pm 0.$ Max. current consumption $0.$ Working temperature $15 - 40.$ Modulation inputsAnalog	Cable length	1.5 m		
Max. current consumption 0. Working temperature 15 - 40 Modulation inputs Analog 7	Connector type	Lumberg SV70 IEC 61076-2-106		
Working temperature 15 - 40 Modulation inputs Analog 7	Supply voltage	5 ± 0.2 V		
Modulation inputs Analog 7	Max. current consumption	0.5 A		
	Working temperature	15 - 40 °C		
Input resistance 9 kOhm 9 kO	Modulation inputs	Analog	TTL	
•	Input resistance	9 kOhm	9 kOhm	
Max. modulation frequency0.001 kHz250 km	Max. modulation frequency	0.001 kHz	250 kHz	
Modulation delay ON/OFF 3000/3000 μs 0.6/0.2	Modulation delay ON/OFF	3000/3000 μs	0.6/0.2 μs	
Rise / Fall time 200000/200000 μs 0.2/0.2	Rise / Fall time	200000/200000 μs	0.2/0.2 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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