13LRM12-S500-1.5+55CM-785-56-Q06-T12-CS-7

Laser Macro Line Generator with a fan angle

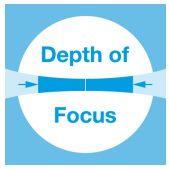


FEATURES

Laser line with a fan angle, approx. uniform intensity distributionand extended depth of focus.

- Line length: 103 mm
- Line width: 379 µm
- Wavelength: 785 nm
- Working distance: 484 mm
- Depth of focus: 389 mm

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





DESCRIPTION

The laser diode beam source type 13LRM12-S500-1.5+55CM-785-56-Q06-T12-CS-7 has a fan angle of 12° with a constant line width and approx. uniform intensity distribution along the laser line as well an extended depth of focus.

The fine-structure is a chain of equidistant dots with a spacing of approx. 1/2 the line width. The line width is constant along the laser line. Across the laser line the intensity distribution is approx. Gaussian.

The laser has integrated electronics type CS for control of the laser output power and serial interface (RS232). The output power can be controlled using the modulation input ports (TTL and analog) or manually using the potentiometer.

The working distance can be adjusted by adjusting the focus setting. Please note that beam parameters like line length and line width increase proportionally to the working distance.

A fine-adjustment of the distance between laser and target is recommended for fine-focusing.

TECHNICAL DATA

13LRM12-S500-1.5+55CM-785-56-Q06-T12-CS-7

Series		13LRM
Order Code		13LRM12-S500-1.5+55CM-785-56-Q06-T12-CS-7
Line profile		Constant Intensity Distribution
Line type		Laser Macro Line
Wavelength		785 +10/-10 nm
Laser output power		56 mW
Laser safety class		3B
Fan angle α		12 deg
Focussing range		355-780 mm
Working distance		484 mm
Line length		103 mm
Line width		0.379 mm
Depth of focus		389 mm
Edge intensity		80 %
Diameter laser module		25/28 mm
Module length		86.8 mm
Installation length		600.8 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
Interface		RS232

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ACCESSORIES

50HD-15	Hex key WS 1.5
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 13LR	▪ Micro Line Generator, fan angle ▪ Uniform intensity distribution
LASER MODULES SERIES 13LNM	▪ Micro Line Generator, **small** fan angle ▪ Uniform intensity distribution ▪ Extended depth of focus
LASER MODULES SERIES 5LMM+25CM	▪ **Compact** Micro Line, **small** fan angle ▪ Gaussian intensity distribution ▪ Extended depth of focus
LASER MODULES SERIES 5LPM+25CM	▪ **Compact** Macro Line, **large** fan angle ▪ Gaussian intensity distribution ▪ Extended depth of focus
LASER MODULES SERIES 5LMM	▪ Macro Line, **small** fan angle ▪ Gaussian intensity distribution ▪ Extended depth of focus
LASER MODULES SERIES 5LPM	▪ Macro Line, **large** fan angle ▪ Gaussian intensity distribution ▪ Extended depth of focus

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