

5LPM40-S000-1+25CM-785-59-Q06-A8-S-6

Compact Macro Line Generator with a large fan angle



FEATURES

Compact laser line with a large fan angle, Gaussian intensity distribution, and extended depth of focus.

Line length: 720 mm
Line width: 1140 µm
Wavelength: 785 nm
Working distance: 1000 mm
Depth of focus: 1500 mm

Macro Line Generator for extended depth of focus



DESCRIPTION

The laser diode beam source type 5LPM40-S000-1+25CM-785-59-Q06-A8-S-6 has a fan angle of 40° and an 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 S</u> 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.



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

5LPM40-S000-1+25CM-785-59-Q06-A8-S-6

Series	5LPM		
Order Code	5LPM40-S000-1+25CM-785-59-Q06-A8-S-6		
Line profile	Gaussian Intensity Distribution		
Line type	Laser Macro Line		
Wavelength	785 +10/-10 nm		
Laser output power	59 mW		
Laser safety class	3В		
Fan angle α	40 deg		
Focussing range	450-inf mm		
Working distance	1000 mm		
Line length	720 mm		
Line width	1.14 mm		
Depth of focus	1500 mm		
Edge intensity	3%		
Diameter laser module	12 mm		
Module length	83.1 mm		
Installation length	1113.1 mm		
Cable length	1.5 m		
Connector type	Lumberg SV50 IEC 61076-2-106		
Supply voltage	5 ± 0.25 V		
Max. current consumption	0.25 A		
Working temperature		0 - 40 °C	
Modulation inputs	Analog	TTL	
Input resistance	22 kOhm	22 kOhm	
Max. modulation frequency	50 kHz	1000 kHz	
Modulation delay ON/OFF	4/0.5 μs	0.05/0.05 μs	
Rise / Fall time	5/4 μs	0.1/0.02 μs	



ACCESSORIES

60EX-4 Eccentric key with a stroke of ± 0.5 mm.

60EX-4-L Alternative eccentric key with long handle with a

stroke of ± 0.5 mm.

9D-12 Screwdriver WS 1.2

13MK-25-36-10-F Mounting Console with flat base plate

Mounting Console with base plate with dovetail 13MK-25-36-10-M

profile

PS051003E Power Supply 5 V

RELATED PRODUCTS

LASER MODULES • Macro Line, large fan angle **SERIES 5LPM** Gaussian intensity distribution

Extended depth of focus

LASER MODULES • Macro Line, large fan angle **SERIES LNC-5LPM** Gaussian intensity distribution

Extended depth of focus

Low noise

LASER MODULES Macro Line Generator, fan angle **SERIES 13LRM**

Uniform intensity distribution

Extended depth of focus

LASER MODULES Micro Line Generator, small fan angle

SERIES 13LNM Uniform intensity distribution

Extended depth of focus

LASER MODULES ■ Compact Micro Line, small fan angle

SERIES 5LMM+25CM Gaussian intensity distribution

Extended depth of focus

LASER MODULES Compact Macro Line, large fan angle

SERIES 5LPM+25CM Gaussian intensity distribution

Extended depth of focus



LASER MODULES
SERIES 5LMM

- Macro Line, small fan angle
- Gaussian intensity distribution
- Extended depth of focus

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