

5LPM80-S150-1+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: 250 mm
- Line width: 170 μm
- Wavelength: 785 nm
- Working distance: 142 mm
- Depth of focus: 78.7 mm

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- Macro Line Generator for extended depth of focus



DESCRIPTION

The laser diode beam source type 5LPM80-S150-1+25CM-785-59-Q06-A8-S-6 has a fan angle of 84° 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 [type S](#) for control of the laser output power. 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

5LPM80-S150-1+25CM-785-59-Q06-A8-S-6

Series	5LPM	
Order Code	5LPM80-S150-1+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	3B	
Fan angle α	84 deg	
Focussing range	120-255 mm	
Working distance	142 mm	
Line length	250 mm	
Line width	0.17 mm	
Depth of focus	78.7 mm	
Edge intensity	3 %	
Diameter laser module	12 mm	
Module length	79.1 mm	
Installation length	251.1 mm	
Cable length	1.5 m	
Connector type	Lumberg SV50 IEC 61076-2-106	
Supply voltage	5 \pm 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 μ s	0.05/0.05 μ s
Rise / Fall time	5/4 μ s	0.1/0.02 μ s

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
13MK-25-36-10-M	Mounting Console with base plate with dovetail profile
PS051003E	Power Supply 5 V

RELATED PRODUCTS

LASER MODULES SERIES 5LPM	<ul style="list-style-type: none">▪ Macro Line, large fan angle▪ Gaussian intensity distribution▪ Extended depth of focus
LASER MODULES SERIES LNC-5LPM	<ul style="list-style-type: none">▪ Macro Line, large fan angle▪ Gaussian intensity distribution▪ Extended depth of focus▪ Low noise
LASER MODULES SERIES 13LRM	<ul style="list-style-type: none">▪ Macro Line Generator, fan angle▪ Uniform intensity distribution▪ Extended depth of focus
LASER MODULES SERIES 13LNM	<ul style="list-style-type: none">▪ Micro Line Generator, small fan angle▪ Uniform intensity distribution▪ Extended depth of focus
LASER MODULES SERIES 5LMM+25CM	<ul style="list-style-type: none">▪ Compact Micro Line, small fan angle▪ Gaussian intensity distribution▪ Extended depth of focus
LASER MODULES SERIES 5LPM+25CM	<ul style="list-style-type: none">▪ 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

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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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