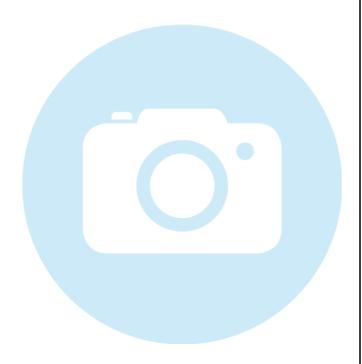


# 5LPM80-S150-1+25CM-785-59-Q06-A8-S-6

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

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  $\underline{type\ S}$  for control of the laser output power. The output power can be controlled using the  $\underline{modulation\ input\ ports\ (TTL\ and\ analog)}$  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

eries 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 II	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  $\pm$  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 Macro Line, large fan angle

Gaussian intensity distribution

Extended depth of focus

LASER MODULES SERIES LNC-5LPM Macro Line, large fan angle

Gaussian intensity distribution

Extended depth of focus

Low noise

LASER MODULES SERIES 13LRM Macro Line Generator, fan angle

Uniform intensity distribution

Extended depth of focus

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

This is a printout of the page  $\underline{\text{https://sukhamburg.com/products/details/5LPM80-S150-1}}$  25CM-785-59-Q06-A8-S-6 from 4/26/2024

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