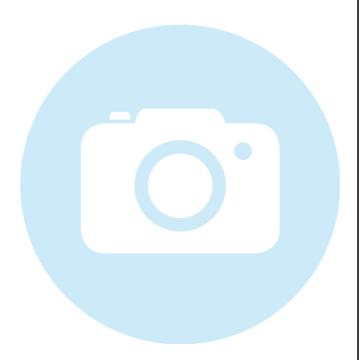


# 5LPM80-S150-1+55CM-450-44-O06-A7.5-P-6

Macro Line Generator with a large fan angle



#### **FEATURES**

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

Line length: 250 mm
Line width: 99 μm
Wavelength: 450 nm
Working distance: 142 mm
Depth of focus: 45.1 mm

Macro Line Generator for extended depth of focus



### **DESCRIPTION**

The laser diode beam source type 5LPM80-S150-1+55CM-450-44-O06-A7.5-P-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 15 %. 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 P</u> with micro-controller 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**

5LPM80-S150-1+55CM-450-44-O06-A7.5-P-6

Series	ries 5LPM	
Order Code	5LPM80-S150-1+55CM-450-44-O06-A7.5-P-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	450 +10/-10 nm	
Laser output power	44 mW	
Laser safety class	3В	
Fan angle α	84 deg	
Focussing range	120-255 mm	
Working distance	142 mm	
Line length	250 mm	
Line width	0.099 mm	
Depth of focus	45.1 mm	
Edge intensity	15 %	
Diameter laser module	25/28 mm	
Module length	91.5 mm	
Installation length	263.5 mm	
Cable length	1.5 m	
Connector type	Lumberg SV50 IEC 61076-2-106	
Supply voltage	5 ± 0.2 V	
Max. current consumption	0.5 A	
Working temperature	15 - 40 °C	
Modulation inputs	Analog	TTL
Input resistance	9 kOhm	9 kOhm
Max. modulation frequency	0.01 kHz	250 kHz
Modulation delay ON/OFF	3000/3000 μs	0.5/0.2 μs
Rise / Fall time	40000/40000 μs	0.5/0.5 μs

# **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

PS051003E Power Supply 5 V

# **RELATED PRODUCTS**

LASER MODULES SERIES 5LPM Macro Line, large fan angle
 Coussian intensity distribution

Gaussian intensity distributionExtended depth of focus

LASER MODULES SERIES LNC-5LPM

Macro Line, large fan angleGaussian intensity distribution

Extended depth of focus

Low noise

LASER MODULES
SERIES 13LRM

Macro Line Generator, fan angleUniform 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



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