

5MM-S50-0.8+25CM-639-5-H18-A4.5-S-6

Compact Laser Macro Focus Generator with approx. circular beam profile



FEATURES

Compact Laser spot with approx. circular beam profile and extended depth of focus.

Spot diameter: 0.069 x 0.065 mm

Wavelength: 639 nmWorking distance: 46 mmDepth of focus: 11.1 mm

Macro Focus Generator for extended depth of focus



DESCRIPTION

The laser diode beam source type 5MM-S50-0.8+25CM-639-5-H18-A4.5-S-6 produces a circular laser spot with extended depth of focus. The beam profile is approx. Gaussian. More precisely it has an elliptical intensity distribution clipped by a circular aperture.

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 the spot diameter increases proportionally to the working distance. A fine-adjustment of the distance between laser and target is recommended for fine-focusing.

TECHNICAL DATA

5MM-S50-0.8+25CM-639-5-H18-A4.5-S-6



Line profile Gaussian Intensity Distribution Wavelength 639 +10/-10 Laser output power 5 Laser safety class	Series		5MM
Wavelength 639 +10/-10 Laser output power 5 Laser safety class 35-70 Working distance 46 Spot height 0.065 Spot width 0.069 Depth of focus 11.1 Diameter laser module 12 Module length 65.4 Installation length 141.4 Cable length 1 Connector type Lumberg SV50 IEC 61076-2 Supply voltage 5 ± 0. Max. current consumption 0. Working temperature 0 - 4 Modulation inputs Analog Input resistance 22 kOhm 22 kOhm	Order Code	5MM-S50-0.8+25CM-639-5-H18-A4.5-S-6	
Laser output power 5 Laser safety class 5 Focussing range 35-70 Working distance 46 Spot height 0.065 Spot width 0.069 Depth of focus 11.1 Diameter laser module 12 Module length 65.4 Installation length 141.4 Cable length 1 Connector type Lumberg SV50 IEC 61076-2 Supply voltage 5 ± 0. Max. current consumption 0. Working temperature 0 - 4 Modulation inputs Analog Input resistance 22 kOhm 22 kOhm	Line profile	Gaussian Intensity Distribution	
Laser safety class 35-70 Working distance 46 Spot height 0.065 Spot width 0.069 Depth of focus 11.1 Diameter laser module 12 Module length 65.4 Installation length 141.4 Cable length 1 Connector type Lumberg SV50 IEC 61076-2 Supply voltage 5 ± 0. Max. current consumption 0.4 Modulation inputs Analog Input resistance 22 kOhm 22 kOhm	Wavelength	639 +10/-10 nm	
Focussing range 35-70 Working distance 46 Spot height 0.065 Spot width 0.069 Depth of focus 11.1 Diameter laser module 12 Module length 65.4 Installation length 141.4 Cable length 1 Connector type Lumberg SV50 IEC 61076-2 Supply voltage 5 ± 0. Max. current consumption 0.4 Modulation inputs Analog Input resistance 22 kOhm 22 kOhm	Laser output power	5 mW	
Working distance 46 Spot height 0.065 Spot width 0.069 Depth of focus 11.1 Diameter laser module 12 Module length 65.4 Installation length 141.4 Cable length 1 Connector type Lumberg SV50 IEC 61076-2 Supply voltage 5 ± 0. Max. current consumption 0. Working temperature 0 - 4 Modulation inputs Analog Input resistance 22 kOhm 22 kOhm	Laser safety class	3R	
Spot height 0.065 Spot width 0.069 Depth of focus 11.1 Diameter laser module 12 Module length 65.4 Installation length 141.4 Cable length 1 Connector type Lumberg SV50 IEC 61076-2 Supply voltage 5 ± 0. Max. current consumption 0. Working temperature 0 - 4 Modulation inputs Analog Input resistance 22 kOhm 22 kOhm	Focussing range	35-70 mm	
Spot width 0.069 Depth of focus 11.1 Diameter laser module 12 Module length 65.4 Installation length 141.4 Cable length 1 Connector type Lumberg SV50 IEC 61076-2 Supply voltage 5 ± 0. Max. current consumption 0. Working temperature 0 - 4 Modulation inputs Analog Input resistance 22 kOhm 22 kOhm	Working distance	46 mm	
Depth of focus Diameter laser module Module length 65.4 Installation length 141.4 Cable length Connector type Lumberg SV50 IEC 61076-2 Supply voltage 5 ± 0. Max. current consumption Working temperature 0 - 4 Modulation inputs Analog Input resistance 22 kOhm 22 kC	Spot height	0.065 mm	
Diameter laser module12Module length65.4Installation length141.4Cable length1Connector typeLumberg SV50 IEC 61076-2Supply voltage5 ± 0.Max. current consumption0.Working temperature0 - 4Modulation inputsAnalogInput resistance22 kOhm	Spot width	0.069 mm	
Module length65.4Installation length141.4Cable length1Connector typeLumberg SV50 IEC 61076-2Supply voltage5 ± 0.Max. current consumption0.Working temperature0 - 4Modulation inputsAnalogInput resistance22 kOhm	Depth of focus	11.1 mm	
Installation length 141.4 Cable length 1 Connector type Lumberg SV50 IEC 61076-2 Supply voltage 5 ± 0. Max. current consumption 0. Working temperature 0 - 4 Modulation inputs Analog Input resistance 22 kOhm 22 kO	Diameter laser module	12 mm	
Cable length Connector type Lumberg SV50 IEC 61076-2 Supply voltage 5 ± 0. Max. current consumption 0. Working temperature 0 - 4 Modulation inputs Analog Input resistance 22 kOhm 22 kO	Module length	65.4 mm	
Connector type Lumberg SV50 IEC 61076-2 Supply voltage 5 ± 0. Max. current consumption 0. Working temperature 0 - 4 Modulation inputs Analog Input resistance 22 kOhm 22 kO	Installation length	141.4 mm	
Supply voltage 5 ± 0. Max. current consumption 0. Working temperature 0 - 4 Modulation inputs Analog Input resistance 22 kOhm 22 kO	Cable length	1.5 m	
Max. current consumption0.Working temperature0 - 4Modulation inputsAnalogInput resistance22 kOhm22 kO	Connector type	Lumberg SV50 IEC 61076-2-106	
Working temperature 0 - 4 Modulation inputs Analog Input resistance 22 kOhm 22 kO	Supply voltage	5 ± 0.25 V	
Modulation inputs Analog Input resistance 22 kOhm 22 kO	Max. current consumption	0.25 A	
Input resistance 22 kOhm 22 kO	Working temperature	0 - 40 °C	
	Modulation inputs	Analog	TTL
Max. modulation frequency50 kHz1000	Input resistance	22 kOhm	22 kOhm
<u></u>	Max. modulation frequency	50 kHz	1000 kHz
Modulation delay ON/OFF4/0.5 μs0.05/0.0	Modulation delay ON/OFF	4/0.5 μs	0.05/0.05 μs
Rise / Fall time 5/4 μs 0.1/0.0	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

PS051003E Power Supply 5 V

RELATED PRODUCTS



LASER MODULES

Compact Laser Micro Focus Generator

SERIES 5M

Elliptical Gaussian beam profile

LASER MODULES SERIES 13MMC Laser Macro Focus Generator

Rotationally symmetric beam profile

Extended depth of focus

LASER MODULES SERIES 13MM Macro Focus Generator

• Circular beam profile

Extended depth of focus

This is a printout of the page https://sukhamburg.com/products/details/5MM-S50-0 8 25CM-639-5-H18-A4 5-S-6 from 4/24/2024

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