

## 5MM-S88-0.8+25CM-640-9-H22-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: 0.12 x 0.115 mm

Wavelength: 640 nmWorking distance: 82 mmDepth of focus: 34.5 mm

Macro Focus Generator for extended depth of focus



### DESCRIPTION

The laser diode beam source type 5MM-S88-0.8+25CM-640-9-H22-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-S88-0.8+25CM-640-9-H22-A4.5-S-6



Line profile       Gaussian Intensity Dist         Wavelength       640 ± 1         Laser output power       1         Laser safety class       70-1         Working distance       2         Spot height       0.3         Spot width       0         Depth of focus       3         Diameter laser module       4         Module length       6         Installation length       17         Cable length       2         Connector type       Lumberg SV50 IEC 61076         Supply voltage       5 ±         Max. current consumption       4         Working temperature       0         Modulation inputs       Analog	Series		5MM	
Wavelength 640 + 1  Laser output power  Laser safety class  Focussing range 70-1  Working distance  Spot height 0.1  Spot width 0  Depth of focus 3  Diameter laser module  Module length 6  Installation length 17  Cable length  Connector type Lumberg SV50 IEC 61076  Supply voltage 5 ±  Max. current consumption  Working temperature 0  Modulation inputs Analog	Order Code	5MM-S88-0.8+25CM-640-9-H22-A4.5-S-6		
Laser safety class  Focussing range 70-1  Working distance  Spot height 0.1  Spot width 0  Depth of focus 3  Diameter laser module  Module length 6  Installation length 17  Cable length  Connector type Lumberg SV50 IEC 61076  Supply voltage 5 ±  Max. current consumption  Working temperature 0  Modulation inputs Analog	ine profile	Gaussian Intensity Distribution		
Laser safety class  Focussing range 70-1  Working distance  Spot height 0.1  Spot width 0  Depth of focus 3  Diameter laser module  Module length 6  Installation length 17  Cable length  Connector type Lumberg SV50 IEC 61076  Supply voltage 5 ±  Max. current consumption  Working temperature 0  Modulation inputs Analog		640 +5/-5 nm		
Focussing range 70-1 Working distance  Spot height 0.1 Spot width 0 Depth of focus 3 Diameter laser module  Module length 6 Installation length 17 Cable length  Connector type Lumberg SV50 IEC 61076 Supply voltage 5 ± Max. current consumption  Working temperature 0 Modulation inputs Analog	aser output power	9 mW		
Working distance  Spot height 0.1  Spot width 0  Depth of focus 3  Diameter laser module  Module length 6  Installation length 17  Cable length  Connector type Lumberg SV50 IEC 61076  Supply voltage 5 ±  Max. current consumption  Working temperature 0  Modulation inputs Analog	aser safety class	3В		
Spot height 0.1 Spot width 0  Depth of focus 3  Diameter laser module  Module length 6 Installation length 17  Cable length  Connector type Lumberg SV50 IEC 61076  Supply voltage 5 ±  Max. current consumption  Working temperature 0  Modulation inputs Analog	ocussing range	70-125 mm		
Spot width 0 Depth of focus 3 Diameter laser module  Module length 6 Installation length 17 Cable length  Connector type Lumberg SV50 IEC 61076 Supply voltage 5 ± Max. current consumption  Working temperature 0 Modulation inputs Analog	Vorking distance	82 mm		
Depth of focus  Diameter laser module  Module length  6 Installation length  Cable length  Connector type  Lumberg SV50 IEC 61076  Supply voltage  5 ±  Max. current consumption  Working temperature  0 Modulation inputs  Analog	Spot height	0.115 mm		
Diameter laser module  Module length 6 Installation length 17 Cable length  Connector type Lumberg SV50 IEC 61076 Supply voltage 5 ±  Max. current consumption  Working temperature 0  Modulation inputs Analog	Spot width	0.12 mm		
Module length 6 Installation length 17 Cable length  Connector type Lumberg SV50 IEC 61076 Supply voltage 5 ± Max. current consumption  Working temperature 0  Modulation inputs Analog	Depth of focus	34.5 mm		
Installation length  Cable length  Connector type  Lumberg SV50 IEC 61076  Supply voltage  5 ±  Max. current consumption  Working temperature  0  Modulation inputs	Diameter laser module	12 mm		
Cable length  Connector type  Lumberg SV50 IEC 61076  Supply voltage  5 ±  Max. current consumption  Working temperature  0  Modulation inputs  Analog	Module length	65.4 mm		
Connector type  Lumberg SV50 IEC 61076  Supply voltage  5 ±  Max. current consumption  Working temperature  0  Modulation inputs  Analog	nstallation length	177.4 mm		
Supply voltage 5 ±  Max. current consumption  Working temperature 0  Modulation inputs Analog	Cable length	1.5 m		
Max. current consumption  Working temperature 0  Modulation inputs Analog	Connector type	Lumberg SV50 IEC 61076-2-106		
Working temperature 0  Modulation inputs Analog	Supply voltage	5 ± 0.25 V		
Modulation inputs Analog	Max. current consumption	0.25 A		
· · · · · · · · · · · · · · · · · · ·	Norking temperature	0 - 40 °C		
Input resistance 22 kOhm 22	Modulation inputs	Analog	TTL	
·	nput resistance	22 kOhm	22 kOhm	
Max. modulation frequency50 kHz10	Max. modulation frequency	50 kHz	1000 kHz	
Modulation delay ON/OFF 4/0.5 μs 0.05/	Modulation delay ON/OFF	4/0.5 μs	0.05/0.05 μs	
Rise / Fall time $5/4 \mu s$ 0.1/	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** 

**SERIES 5M** 

Compact Laser Micro Focus Generator

Elliptical Gaussian beam profile

LASER MODULES

Laser Macro Focus Generator

SERIES 13MMC • Rotationally symmetric beam profile

Extended depth of focus

LASER MODULES
SERIES 13MM

Macro Focus Generator

Circular beam profile

Extended depth of focus

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