

## 5MM-A18-0.8+25CM-639-5-H18-A4.5-S-6

Compact Laser Macro Focus Generator with approx. circular beam profile

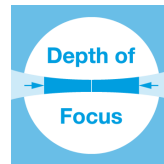


### FEATURES

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

- Spot diameter: 0.025 x 0.024 mm
- Wavelength: 639 nm
- Working distance: 16.5 mm
- Depth of focus: 1.44 mm

- Macro Focus Generator for extended depth of focus



## DESCRIPTION

The laser diode beam source type 5MM-A18-0.8+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 [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 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-A18-0.8+25CM-639-5-H18-A4.5-S-6

Series	5MM	
Order Code	5MM-A18-0.8+25CM-639-5-H18-A4.5-S-6	
Line profile	Gaussian Intensity Distribution	
Wavelength	639 +10/-10 nm	
Laser output power	5 mW	
Laser safety class	3R	
Focussing range	15-35 mm	
Working distance	16.5 mm	
Spot height	0.024 mm	
Spot width	0.025 mm	
Depth of focus	1.44 mm	
Diameter laser module	12 mm	
Module length	65.4 mm	
Installation length	111.9 mm	
Cable length	1.5 m	
Connector type	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

<b>60EX-4</b>	Eccentric key with a stroke of ± 0.5 mm.
<b>60EX-4-L</b>	Alternative eccentric key with long handle with a stroke of ± 0.5 mm.
<b>9D-12</b>	Screwdriver WS 1.2
<b>PS051003E</b>	Power Supply 5 V

## RELATED PRODUCTS

**LASER MODULES  
SERIES 5M**

- **Compact** Laser Micro Focus Generator
- 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

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