

## 5M-A6+55CM-785-90-Q06-A8-C-6

Compact Laser Micro Focus Generator with elliptical Gaussian beam profile



### FEATURES

Compact Laser spot with elliptical Gaussian beam profile.

- Spot diameter: 0.002 x 0.003 mm
- Wavelength: 785 nm
- Working distance: 3 mm

- Micro Focus Generator for small spot widths and high power density in the focal plane



## DESCRIPTION

The laser diode beam source type 5M-A6+55CM-785-90-Q06-A8-C-6 produces an elliptical laser spot with elliptical Gaussian intensity distribution.

The laser has integrated electronics [type C](#) 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

5M-A6+55CM-785-90-Q06-A8-C-6

Series

5M

Order Code	5M-A6+55CM-785-90-Q06-A8-C-6	
Line profile	Gaussian Intensity Distribution	
Wavelength	785 +10/-10 nm	
Laser output power	90 mW	
Laser safety class	3B	
Focussing range	2-6 mm	
Working distance	3 mm	
Spot height	0.003 mm	
Spot width	0.002 mm	
Rayleigh range	0.005 mm	
Diameter laser module	25/28 mm	
Module length	76.4 mm	
Installation length	109.4 mm	
Cable length	1.5 m	
Connector type	Lumberg SV50 IEC 61076-2-106	
Supply voltage	5 ± 0.2 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	100 kHz	100 kHz
Modulation delay ON/OFF	1/0.5 µs	2/1 µs
Rise / Fall time	3/2 µs	3/2 µs

## ACCESSORIES

60EX-4	Eccentric key with a stroke of ± 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

## RELATED PRODUCTS

**LASER MODULES  
SERIES 5MM**

- **Compact** Laser Macro Focus Generator
- **Circular** beam profile and
- Extended depth of focus

**LASER MODULES  
SERIES 13MC**

- Micro Focus Generator
- **Rotationally symmetric**, Gaussian beam profile

**LASER MODULES  
SERIES 5MC**

- **Compact** Laser Micro Focus Generator
- **Rotationally symmetric**, Gaussian beam profile

**LASER MODULES  
SERIES 13M**

- Micro Focus Generator
- Elliptical Gaussian beam profile

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## CONTACT

For more information please contact:

Schäfter + Kirchhoff GmbH

Kieler Str. 212

22525 Hamburg

Germany

Tel: +49 40 85 39 97-0

Fax: +49 40 85 39 97-79

[info@sukhamburg.de](mailto:info@sukhamburg.de)

[www.sukhamburg.com](http://www.sukhamburg.com)

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