#### 5M-A6+25CM-785-90-Q06-A8-S-6

Compact Laser Micro Focus Generator with elliptical Gaussian beam profile



# <section-header> 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+25CM-785-90-Q06-A8-S-6 produces an elliptical laser spot with elliptical Gaussian intensity distribution.

The laser has integrated electronics <u>type S</u> 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 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+25CM-785-90-Q06-A8-S-6

Series

5M



# **DATA SHEET**

Order Code	5M-A6+25CM-785-90-Q06-A8-S-6	
Line profile	Gaussian Intensity Distribution	
Wavelength	785 +10/-10 nm	
Laser output power	90 mW	
Laser safety class	3В	
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	12 mm	
Module length	64 mm	
Installation length	97 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

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 $\pm$ 0.5 mm.
9D-12	Screwdriver WS 1.2
PS051003E	Power Supply 5 V

# **RELATED PRODUCTS**





LASER MODULES SERIES 5MM	<ul> <li>Compact Laser Macro Focus Generator</li> <li>Circular beam profile and</li> <li>Extended depth of focus</li> </ul>
LASER MODULES SERIES 13MC	<ul> <li>Micro Focus Generator</li> <li>Rotationally symmetric, Gaussian beam profile</li> </ul>
LASER MODULES SERIES 5MC	<ul> <li>Compact Laser Micro Focus Generator</li> <li>Rotationally symmetric, Gaussian beam profile</li> </ul>
LASER MODULES SERIES 13M	<ul> <li>Micro Focus Generator</li> <li>Elliptical Gaussian beam profile</li> </ul>

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