

### 5LM15-S325+25CM-639-18-H18-A8-S-6

Compact Micro Line Generator with a fan angle



#### **FEATURES**

Compact laser line with a fan angle and Gaussian intensity distribution.

Line length: 86.9 mm
Line width: 140 μm
Wavelength: 639 nm
Working distance: 313 mm

 Micro Line Generator for small laser line widths and high power density in the focal plane



#### DESCRIPTION

The laser diode beam source type 5LM15-S325+25CM-639-18-H18-A8-S-6 has a fan angle of  $15^{\circ}$ .

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 40 %. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

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 beam parameters like line length and line width increase proportionally to the working distance.



A fine-adjustment of the distance between laser and target is recommended for fine-focusing.

# **TECHNICAL DATA**

5LM15-S325+25CM-639-18-H18-A8-S-6

Series		5LM	
Order Code	5LM15-S325+25CM-639-18-H18-A8-S-6		
Line profile	Gaussian Intensity Distribution		
Line type	Laser Micro Line		
Wavelength	639 +10/-10 nm		
Laser output power	18 mW		
Laser safety class	3B		
Fan angle $\alpha$	15 deg		
Focussing range	255-425 mm		
Working distance	313 mm		
Line length	86.9 mm		
Line width	0.14 mm		
Rayleigh range	48 mm		
Edge intensity	40 %		
Diameter laser module	12 mm		
Module length	64.9 mm		
Installation length	407.9 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	



### **DOWNLOADS**



## **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.

Screwdriver WS 1.2 9D-12

PS051003E Power Supply 5 V

### RELATED PRODUCTS

LASER MODULES ■ Compact Micro Line, small fan angle

**SERIES 5LMM+25CM** Gaussian intensity distribution

Extended depth of focus

LASER MODULES Micro Line, small fan angle **SERIES LNC-5LM** Gaussian intensity distribution

Low noise

LASER MODULES Micro Line Generator, fan angle

**SERIES 13LR** Uniform intensity distribution

LASER MODULES Micro Line, small fan angle **SERIES 13LN** Uniform intensity distribution

Thin lines

LASER MODULES ■ Compact Micro Line, large fan angle

**SERIES 5LP+25CM** Gaussian intensity distribution

• Micro Line, small fan angle LASER MODULES

**SERIES 5LM** Gaussian intensity distribution

LASER MODULES • Micro Line, large fan angle

**SERIES 5LP** Gaussian intensity distribution



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