

### 5LP40-S88+55CM-639-17-H18-A8-C-6

Micro Line Generator with a large fan angle



#### **FEATURES**

Laser line with a large fan angle and Gaussian intensity distribution.

Line length: 56 mm
Line width: 38 μm
Wavelength: 639 nm
Working distance: 82 mm

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



## **DESCRIPTION**

The laser diode beam source type 5LP40-S88+55CM-639-17-H18-A8-C-6 has a fan angle of 40°.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 38 %. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics  $\underline{type\ C}$  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 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**

5LP40-S88+55CM-639-17-H18-A8-C-6

| Series 5LP                |                                  |         |
|---------------------------|----------------------------------|---------|
| Order Code                | 5LP40-S88+55CM-639-17-H18-A8-C-6 |         |
| Line profile              | Gaussian Intensity Distribution  |         |
| Line type                 | Laser Micro Line                 |         |
| Wavelength                | 639 +10/-10 nm                   |         |
| Laser output power        | 17 mW                            |         |
| Laser safety class        | 3В                               |         |
| Fan angle $\alpha$        | 40 deg                           |         |
| Focussing range           | 70-125 mm                        |         |
| Working distance          | 82 mm                            |         |
| Line length               | 56 mm                            |         |
| Line width                | 0.038 mm                         |         |
| Rayleigh range            | 3.52 mm                          |         |
| Edge intensity            | 38 %                             |         |
| Diameter laser module     | 25/28 mm                         |         |
| Module length             | 90.1 mm                          |         |
| Installation length       | 202.1 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**

50HD-15

Hex key WS 1.5



**9D-12** Screwdriver WS 1.2

**13MK-25-36-10-F** Mounting Console with flat base plate

**13MK-25-36-10-M** Mounting Console with base plate with dovetail

profile

**PS051003E** Power Supply 5 V

### **RELATED PRODUCTS**

LASER MODULES

• Macro Line, large fan angle

• Gaussian intensity distribution

Gaussian intensity distributionExtended depth of focus

LASER MODULES
■ Micro Line, large fan angle
SERIES LNC-5LP
■ Gaussian intensity distribution

Low noise

LASER MODULES

• Micro Line Generator, fan angle

• Uniform intensity distribution

LASER MODULES

• Micro Line, small fan angle

SERIES 13LN

• Uniform intensity distribution

Thin lines

LASER MODULES • Compact Micro Line, small fan angle

SERIES 5LM+25CM • Gaussian intensity distribution

LASER MODULES • Compact Micro Line, large fan angle

SERIES 5LP+25CM • Gaussian intensity distribution

LASER MODULES • Micro Line, small fan angle

SERIES 5LM • Gaussian intensity distribution



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