

## 5LP40-S150+25CM-785-85-Q06-A8-S-6

Compact Micro Line Generator with a large fan angle



### FEATURES

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

- Line length: 101 mm
- Line width: 70  $\mu\text{m}$
- Wavelength: 785 nm
- Working distance: 147 mm

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



## DESCRIPTION

The laser diode beam source type 5LP40-S150+25CM-785-85-Q06-A8-S-6 has a fan angle of 40°.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 3 %. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

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.

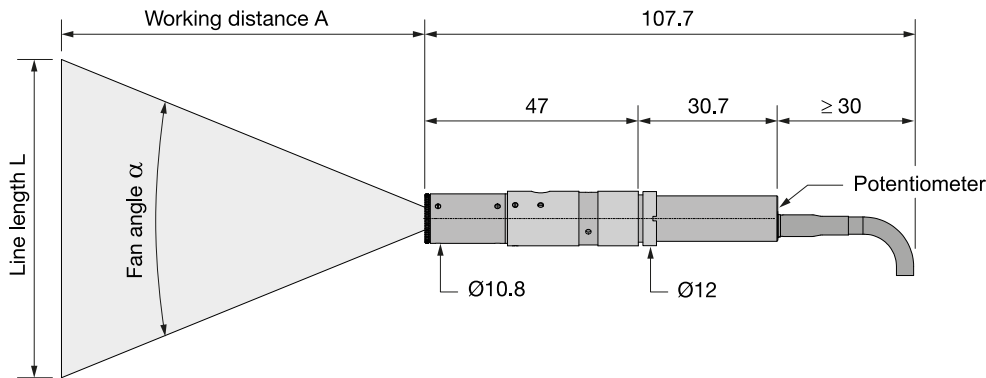
The working distance can be adjusted by adjusting the focus setting. Please note that beam parameters like line length and line width increase proportionally to the working distance. A fine-adjustment of the distance between laser and target is recommended for fine-focusing.

## TECHNICAL DATA

5LP40-S150+25CM-785-85-Q06-A8-S-6

|                           |                                   |                   |
|---------------------------|-----------------------------------|-------------------|
| Series                    | 5LP                               |                   |
| Order Code                | 5LP40-S150+25CM-785-85-Q06-A8-S-6 |                   |
| Line profile              | Gaussian Intensity Distribution   |                   |
| Line type                 | Laser Micro Line                  |                   |
| Wavelength                | 785 +10/-10 nm                    |                   |
| Laser output power        | 85 mW                             |                   |
| Laser safety class        | 3B                                |                   |
| Fan angle $\alpha$        | 40 deg                            |                   |
| Focussing range           | 125-260 mm                        |                   |
| Working distance          | 147 mm                            |                   |
| Line length               | 101 mm                            |                   |
| Line width                | 0.07 mm                           |                   |
| Rayleigh range            | 9.93 mm                           |                   |
| Edge intensity            | 3 %                               |                   |
| Diameter laser module     | 12 mm                             |                   |
| Module length             | 77.7 mm                           |                   |
| Installation length       | 254.7 mm                          |                   |
| Cable length              | 1.5 m                             |                   |
| Connector type            | Lumberg SV50 IEC 61076-2-106      |                   |
| Supply voltage            | 5 $\pm$ 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 $\mu$ s                     | 0.05/0.05 $\mu$ s |
| Rise / Fall time          | 5/4 $\mu$ s                       | 0.1/0.02 $\mu$ s  |

Dimensions (for a complete dimensional drawing please refer to the downloads section)



## DOWNLOADS



[921120000622.pdf](#)

## 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  |
| 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 SERIES 5LPM+25CM

- **Compact** Macro Line, **large** fan angle
- Gaussian intensity distribution
- Extended depth of focus

### LASER MODULES SERIES LNC-5LP

- Micro Line, **large** fan angle
- Gaussian intensity distribution
- Low noise

**LASER MODULES  
SERIES 13LR**

- Micro Line Generator, fan angle
- Uniform intensity distribution

**LASER MODULES  
SERIES 13LN**

- Micro Line, **small** fan angle
- Uniform intensity distribution
- Thin lines

**LASER MODULES  
SERIES 5LM+25CM**

- **Compact** Micro Line, **small** fan angle
- Gaussian intensity distribution

**LASER MODULES  
SERIES 5LP**

- Micro Line, **large** fan angle
- Gaussian intensity distribution

**LASER MODULES  
SERIES 5LM**

- Micro Line, **small** fan angle
- Gaussian intensity distribution

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