

### 5LTM-250-22+55CM-639-10-H18-A8-C-6

Semi-telecentric Macro Line Generator



#### **FEATURES**

Semi-telecentric laser line with constant line length of 2.4 mm and extended depth of focus.

Line length: 2.4 mm
Line width: 134 μm
Wavelength: 639 nm
Working distance: 245 mm
Depth of focus: 44.5 mm

Macro Line Generator for extended depth of focus



## **DESCRIPTION**

The laser diode beam source type 5LTM-250-22+55CM-639-10-H18-A8-C-6 produces a semi-telecentric laser line with 2.4 mm line length. In this case the line length is given on the 13.5%-level. The intensity profile is Gaussian in line direction and the line is truncated at 4.8 mm. The line width is constant along the laser line. Across the laser line the intensity distribution is approx. 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.

For this laser type the working distance is fixed. A fine-adjustment of the distance between laser and target is recommended for fine-focusing in order to achieve minimal line width.



# **TECHNICAL DATA**

5LTM-250-22+55CM-639-10-H18-A8-C-6

| Series                    | 5LTM                               |         |
|---------------------------|------------------------------------|---------|
| Order Code                | 5LTM-250-22+55CM-639-10-H18-A8-C-6 |         |
| Line profile              | Gaussian Intensity Distribution    |         |
| Line type                 | Laser Macro Line                   |         |
| Wavelength                | 639 +10/-10 nm                     |         |
| Laser output power        | 10 mW                              |         |
| Laser safety class        | 3B                                 |         |
| Focussing range           | 245-245 mm                         |         |
| Working distance          | 245 mm                             |         |
| Line length               | 2.4 mm                             |         |
| Line width                | 0.134 mm                           |         |
| Depth of focus            | 44.5 mm                            |         |
| Edge intensity            | 40 %                               |         |
| Diameter laser module     | 25/28 mm                           |         |
| Module length             | 78.5 mm                            |         |
| Installation length       | 353.5 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**

**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 5LT-2

Semi-telecentric Micro Line

Gaussian intensity distributionConstant line length ca. 2 mm

LASER MODULES SERIES LNC-5LTM-2 Semi-telecentric Macro Line

Gaussian intensity distribution

Constant line length ca. 2 mm

Extended depth of focus

Low noise

LASER MODULES SERIES 13LTM Semi-telecentric Macro Line

Uniform intensity distribution

Constant line length 15 mm

Extended depth of focus

LASER MODULES SERIES 5LTM-1+25CM ■ Compact semi-telecentric Macro Line

Gaussian intensity distribution

Constant line length ca. 4.8 mm

Extended depth of focus

LASER MODULES SERIES 5LTM-1 Semi-telecentric Macro Line

Gaussian intensity distribution

Constant line length ca. 4.8 mm

Extended depth of focus

LASER MODULES SERIES 5LTM-2+25CM Compact semi-telecentric Macro Line

Gaussian intensity distribution

Constant line length ca. 2 mm

Extended depth of focus



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