

## Technical data sheet

### Glass fiber optics for throughbeam operation

Part no.: 50142351

GF-LB-SS-840-SF

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For illustration purposes only

## Technical data

### Basic data

|                     |                            |
|---------------------|----------------------------|
| Series              | GF                         |
| Operating principle | Throughbeam principle      |
| Device type         | Transmit and receive fiber |
| Area of application | General applications       |

### Special version

|                 |                |
|-----------------|----------------|
| Special version | Heat resistant |
|-----------------|----------------|

### Optical data

|                                |  |
|--------------------------------|--|
| Opening angle                  | 65 °   |
| Light beam exit                | Lateral with lens                                |
| Fiber core                     | Mixed fiber configuration<br>Multiple fiber core |
| Fiber core material            | Glass  |
| Active fiber diameter          | 7 mm   |
| Operating range with LV463     | 0 ... 400 mm                                     |
| Operating range with LV463.XV  | 0 ... 680 mm                                     |
| Operating range with LV463.XR  | 0 ... 1,000 mm                                   |
| Operating range with LV463L.XR | 0 ... 2,000 mm                                   |

### Mechanical data

|                                     |                         |
|-------------------------------------|-------------------------|
| Design                              | Cylindrical             |
| Outer diameter                      | 4.5 mm                  |
| Net weight                          | 255 g                   |
| Head material                       | Stainless steel         |
| Type                                | Glass fiber optics (GF) |
| Fiber length                        | 4,000 mm                |
| Fiber sheathing material            | Stainless steel         |
| Fastening of the probe              | Ø 10 mm                 |
| Smallest bending radius (static)    | R40                     |
| Smallest bending radius (moving)    | R40                     |
| Sleeve length at optical outlet     | 20 mm                   |
| Metric thread on fiber optic sleeve | No                      |
| Laying                              | standard                |

### Environmental data

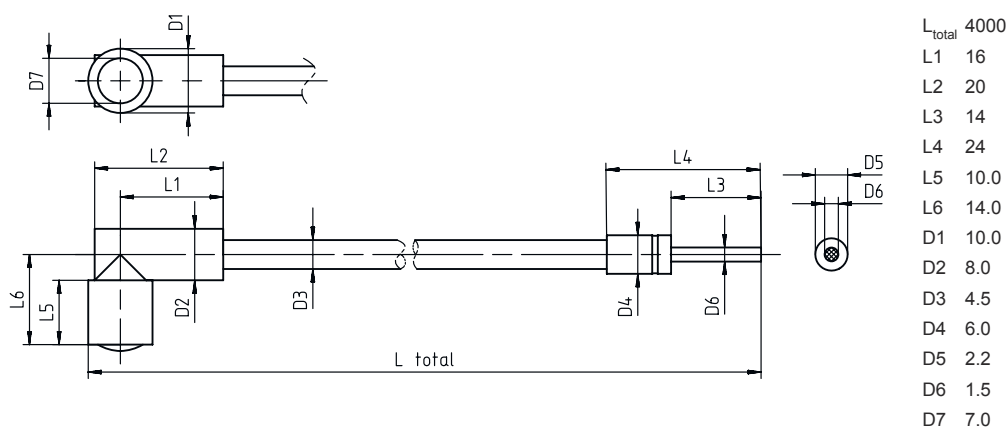
|                                |                |
|--------------------------------|----------------|
| Ambient temperature, operation | -30 ... 300 °C |
|--------------------------------|----------------|

### Classification

|                       |          |
|-----------------------|----------|
| Customs tariff number | 90011090 |
| ECLASS 5.1.4          | 27270905 |
| ECLASS 8.0            | 27270905 |
| ECLASS 9.0            | 27270905 |
| ECLASS 10.0           | 27270905 |
| ECLASS 11.0           | 27273606 |
| ECLASS 12.0           | 27273606 |
| ECLASS 13.0           | 27273606 |
| ECLASS 14.0           | 27273606 |
| ECLASS 15.0           | 27273606 |
| ECLASS 16.0           | 27273606 |
| ETIM 5.0              | EC002651 |
| ETIM 6.0              | EC002651 |
| ETIM 7.0              | EC002651 |
| ETIM 8.0              | EC002651 |
| ETIM 9.0              | EC002651 |
| ETIM 10.0             | EC002651 |
| UNSPSC 26.08          | 41112103 |

## Dimensioned drawings

All dimensions in millimeters



## Notes



### Observe intended use!



- ⌘ This product is not a safety sensor and is not intended as personnel protection.
- ⌘ The product may only be put into operation by competent persons.
- ⌘ Only use the product in accordance with its intended use.

## Further information

- Suitable products for operating these fiber optics are the fiber optic amplifiers LV461, LV462B as well as LV463, LV463.XV and LV463.XR.
- Operating range measured on a white object (90% diffuse reflection) with the following settings on the fiber optic amplifier:
  - max. response time
  - max. amplification
  - min. switching threshold
- The maximum range is limited by the length of the light conductor.