

Technical data sheet

Glass fiber optics for throughbeam operation

Part no.: 50126466

GF-LB-SS-450-IQ

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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 | On face |
| Fiber core | Mixed fiber configuration Multiple fiber core |
| Fiber core material | Glass |
| Active fiber diameter | 1.5 mm |
| Operating range with LV463 | 0 ... 400 mm |
| Operating range with LV463 + GF-L1 | 0 ... 1,200 mm |
| Operating range with LV463 + GF-U1 | 0 ... 800 mm |
| Operating range with LV463.XV | 0 ... 680 mm |
| Operating range with LV463.XV + GF-L1 | 0 ... 2,040 mm |
| Operating range with LV463.XV + GF-U1 | 0 ... 1,360 mm |
| Operating range with LV463.XR | 0 ... 1,000 mm |
| Operating range with LV463.XR + GF-L1 | 0 ... 3,000 mm |
| Operating range with LV463.XR + GF-U1 | 0 ... 2,000 mm |
| Operating range with LV463L.XR | 0 ... 2,000 mm |
| Operating range with LV463L.XR + GF-L1 | 0 ... 6,000 mm |
| Operating range with LV463L.XR + GF-U1 | 0 ... 4,000 mm |

Mechanical data

| | |
|-------------------------------------|-------------------------|
| Design | Cylindrical |
| Outer diameter | 5.5 mm |
| Net weight | 309 g |
| Head material | Stainless steel |
| Type | Glass fiber optics (GF) |
| Fiber length | 5,000 mm |
| Fiber sheathing material | Stainless steel |
| Fastening of the probe | Ø 4 mm |
| Smallest bending radius (static) | R40 |
| Smallest bending radius (moving) | R40 |
| Sleeve length at optical outlet | 10 mm |
| Metric thread on fiber optic sleeve | No |
| Laying | standard |

Environmental data

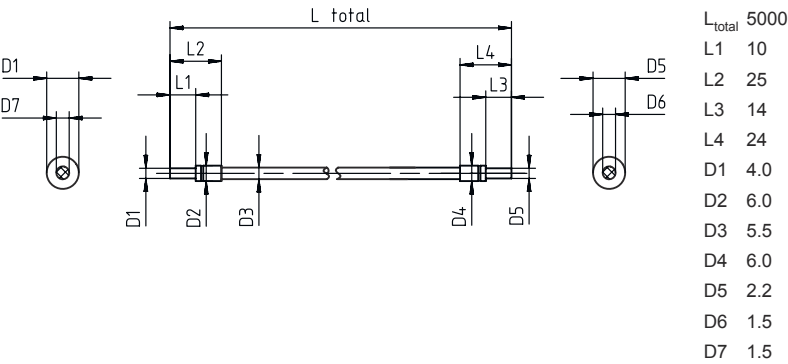
| | |
|--------------------------------|----------------|
| Ambient temperature, operation | -30 ... 300 °C |
|--------------------------------|----------------|

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 |
| ETIM 5.0 | EC002651 |
| ETIM 6.0 | EC002651 |
| ETIM 7.0 | EC002651 |
| ETIM 8.0 | EC002651 |
| ETIM 9.0 | EC002651 |
| ETIM 10.0 | EC002651 |


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

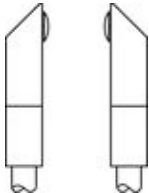
- Suitable products for operating these fiber optics are the fiber optic amplifiers LV461, LV462B as well as LV463, LV463.XV and LV463.XR.
- Operating range measured on a white object (90% diffuse reflection) with the following settings on the fiber optic amplifier:
 - max. response time
 - max. amplification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


Accessories

General

| | Part no. | Designation | Article | Description |
|---|----------|-------------|-----------------|--|
|  | 50014649 | GF-L1 | Lens attachment | Functions: Collimated Type of fastening: Adhesive |

Accessories

| | Part no. | Designation | Article | Description |
|--|----------|-------------|-------------------|--|
|  | 50009382 | GF-U1 | Deflector element | Functions: 90° - deflection Type of fastening: Adhesive |

| Note | |
|--|--|
|  | <p>A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.</p> |