

## Technical data sheet

### Glass fiber optics type diffuse reflective

Part no.: 50126488

GF-ETG-BR-650-IQ

#### Contents

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For illustration purposes only

Technical data

Basic data

|                     |                              |
|---------------------|------------------------------|
| Series              | GF                           |
| Operating principle | Diffuse reflection principle |
| Area of application | General applications         |

Special version

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

Optical data

|                                |                             |
|--------------------------------|-----------------------------|
| Opening angle                  | 65 °                        |
| Light beam exit                | On face                     |
| Fiber core                     | 50%/50% fiber configuration |
|                                | Multiple fiber core         |
| Fiber core material            | Glass                       |
| Active fiber diameter          | 2.5 mm                      |
| Operating range with LV463     | 2 ... 180 mm                |
| Operating range with LV463.XV  | 3 ... 305 mm                |
| Operating range with LV463.XR  | 5 ... 450 mm                |
| Operating range with LV463L.XR | 10 ... 900 mm               |

Mechanical data

|                                     |                         |
|-------------------------------------|-------------------------|
| Design                              | Cylindrical             |
| Outer diameter                      | 6 mm                    |
| Net weight                          | 269 g                   |
| Head material                       | Aluminum                |
| Type                                | Glass fiber optics (GF) |
| Fiber length                        | 5,000 mm                |
| Fiber sheathing material            | Nickel-plated brass     |
| Fastening of the probe              | Ø 6 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

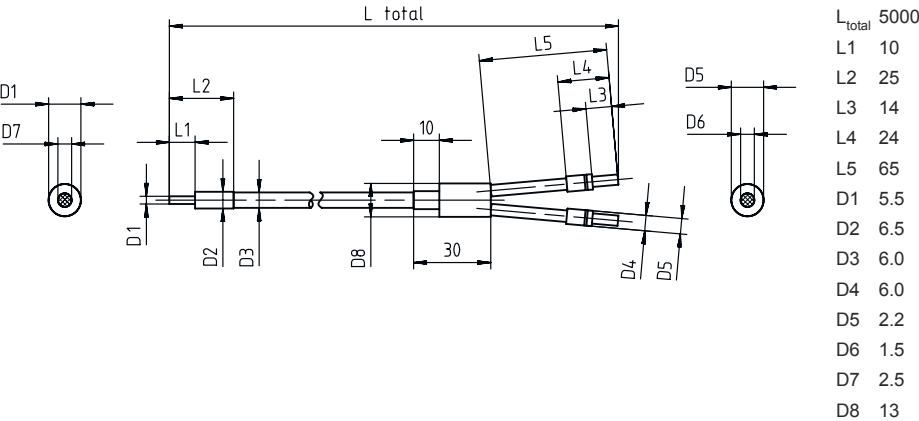
|                                |                |
|--------------------------------|----------------|
| Ambient temperature, operation | -30 ... 160 °C |
|--------------------------------|----------------|

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 |

Dimensioned drawings

All dimensions in millimeters



Notes

|                                                                                                                |                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <b>Observe intended use!</b> |                                                                                                                                                                                                                                                                                   |
|                                | <ul style="list-style-type: none"><li>⌚ This product is not a safety sensor and is not intended as personnel protection.</li><li>⌚ The product may only be put into operation by competent persons.</li><li>⌚ Only use the product in accordance with its intended use.</li></ul> |

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.