

## Technical data sheet

### Glass fiber optics type diffuse reflective

Part no.: 50153813

GF-ETB-SS-605-SM

#### 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                 | 60 °                                             |
| Light beam exit               | Front                                            |
| Fiber core                    | Mixed fiber configuration<br>Multiple fiber core |
| Fiber core material           | Glass                                            |
| Active fiber diameter         | 1 mm                                             |
| Operating range with LV461    | 2 ... 60 mm                                      |
| Operating range with LV462    | 2 ... 100 mm                                     |
| Operating range with LV463    | 2 ... 180 mm                                     |
| Operating range with LV463.XV | 3 ... 305 mm                                     |
| Operating range with LV463.XR | 5 ... 450 mm                                     |

### Connection

|                            |          |
|----------------------------|----------|
| Connection, amplifier side | Ø 2.2 mm |
|----------------------------|----------|

### Mechanical data

|                                     |                         |
|-------------------------------------|-------------------------|
| Design                              | Cylindrical             |
| Outer diameter                      | 2.9 mm                  |
| Head material                       | Stainless steel         |
| Type                                | Glass fiber optics (GF) |
| Fiber length                        | 500 mm                  |
| Fiber sheathing material            | Stainless steel         |
| Fastening of the probe              | M6                      |
| Smallest bending radius (static)    | R23                     |
| Smallest bending radius (moving)    | R23                     |
| Sleeve length at optical outlet     | 33 mm                   |
| Metric thread on fiber optic sleeve | Yes                     |
| Laying                              | standard                |

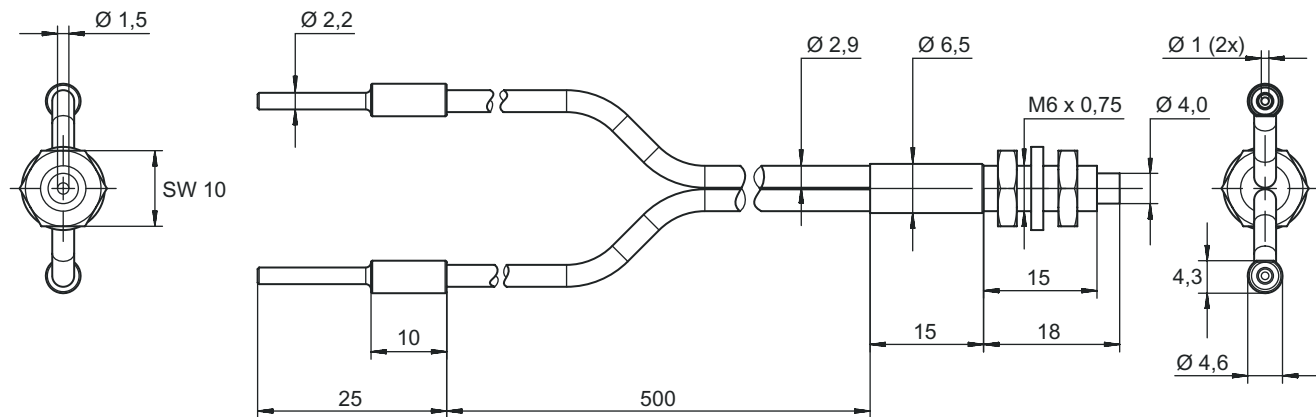
### Environmental data

|                                |                |
|--------------------------------|----------------|
| Ambient temperature, operation | -40 ... 250 °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 |

All dimensions in millimeters



## 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.

- 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