Technical data sheet
Glass fiber optics type diffuse reflective
Part no.: 50153809
GF-LB-SS-405-SM

For Illustration purposes only

Contents

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	60 °
Light beam exit	Front
Fiber core	Mixed fiber configuration
	Multiple fiber core
Fiber core material	Glass
Active fiber diameter	1 mm
Operating range with LV461	0 ... 150 mm
Operating range with LV462	0 ... 250 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 LV463I.XR	0 ... 2,000 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	M4
Smallest bending radius (static)	R23
Smallest bending radius (moving)	R23
Sleeve length at optical outlet	25.7 mm
Metric thread on fiber optic sleeve	Yes
Laying	standard

Environmental data

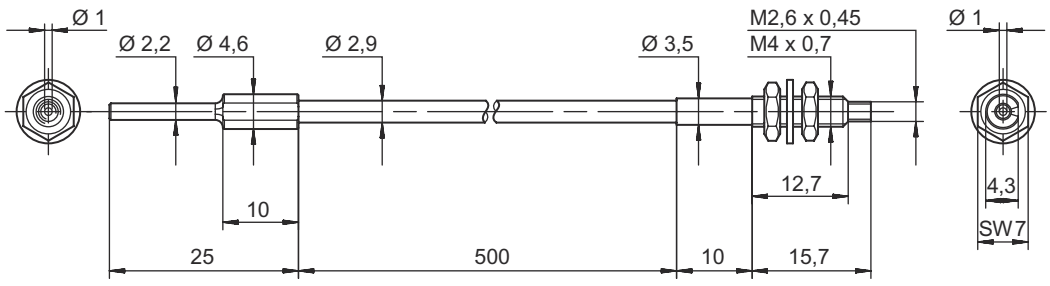
Ambient temperature, operation	-40 ... 250 °C

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

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.
- The maximum range is limited by the length of the light conductor.
- 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