



Glass fibre optic cables



1000mm



80mm

GLL

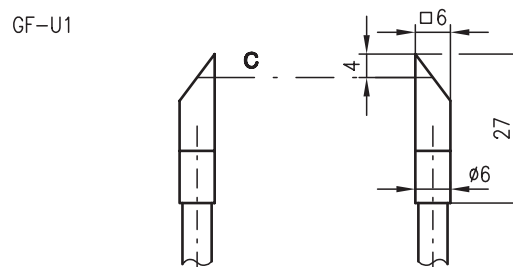
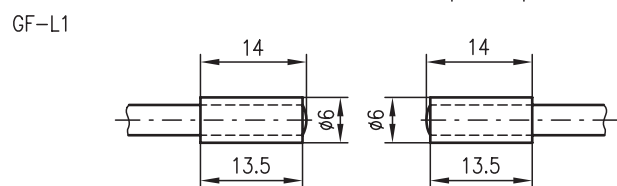
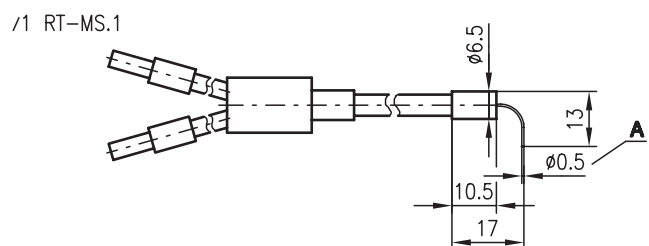
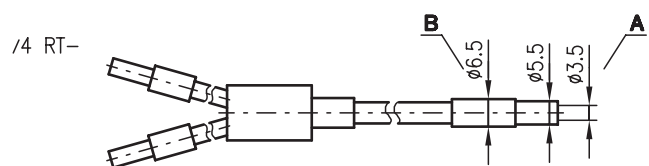
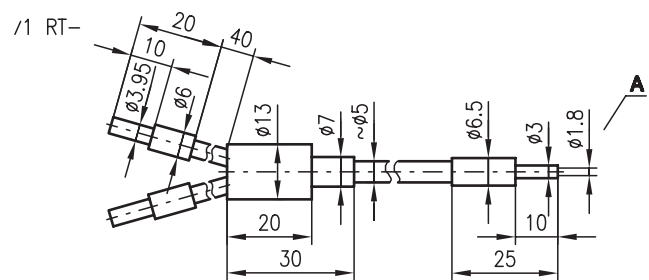
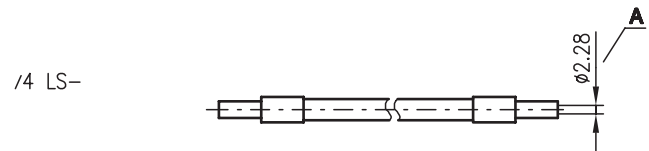
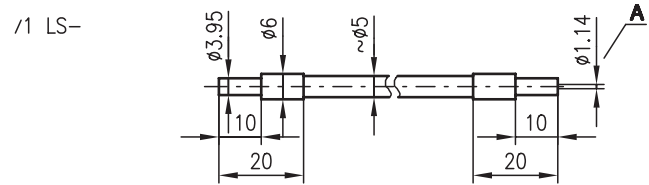
- Glass fibre optic cables in throughbeam or scanner operation
- Fibre optic cables with various cross sections and end pieces
- Connection pieces suitable for all control devices of the series (I)LVS 19, (I)LVS 9, LVSR 8 and LVSR 325
- Metal sheathing allows use at high temperatures and offers the maximum mechanical fibre protection
- Silicone coated metal sheathing results in a high protection class (IP 65) and allows use in the food industry

Accessories:

(available separately)

- Angles and optics attachments
- GF-L1 (Part No. 500 14649)
- GF-U1 (Part No. 500 09382)

Dimensioned drawing



- A** Active diameter
- B** At VA sheathing \varnothing 8mm
- C** Waveguide

Glass fibre optic cables

Specifications

Optical data

Standard length	approx. 500mm and approx. 1000mm (special lengths on request)
Fibre optic cable outer diameter	approx. 5mm
Minimum bending radius	40mm

Materials of sheathing and end piece

...-MS	brass/aluminium anodised or V2A
...-SI	silicone/V2A
...-VA	V2A/V2A

Operation and storage temperature

...-MS	-30°C ... +140°C
...-SI	-30°C ... +160°C
...-VA	-30°C ... +300°C (transient)

Order guide

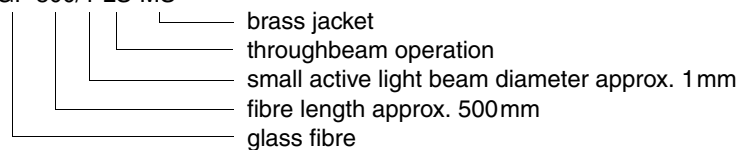
Glass fibre optic cables in throughbeam operation

Designation	GF 500/1 LS-... GF 1000/1 LS-...	GF 500/4 LS-...	GF 1000/4 LS-...
Operating range ¹⁾	200mm	600mm	1000mm
Operating range ²⁾	250mm	300mm	300mm
Operating range ³⁾	250mm	600mm	600mm
With GF-L1 ¹⁾	400mm	300mm	300mm
With GF-U1 ¹⁾	700mm	500mm	700mm
Active light beam diameter [mm]	1.1mm	2.3mm	2.3mm

- 1) Operating range in connection with (I)LVS 9/... and (I)LVS 19/...
 2) Operating range in connection with LVSR 325
 3) Operating range in connection with LVSR 8

Example code:

GF 500/1 LS-MS



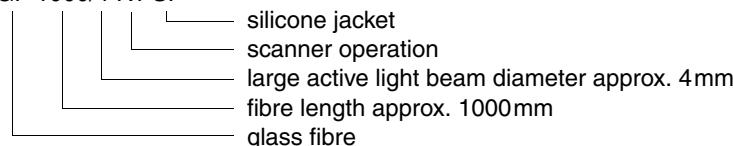
Glass fibre optic cables in scanner operation

Designation	GF 500/1 RT-... GF 1000/1 RT-...	GF 500/4 RT-... GF 1000/4 RT-...	GF 1000/1 RT-MS.1
Scanning range ¹⁾	50mm	80mm	10mm
Scanning range ²⁾	50mm	80mm	-
Scanning range ³⁾	50mm	80mm	10mm
Active light beam diameter [mm]	1.8mm	3.5mm	0.5mm

- 1) Scanning range in connection with (I)LVS 9/... and (I)LVS 19/... relative to white 90%
 2) Scanning range in connection with LVSR 325 relative to white 90%
 3) Scanning range in connection with LVSR 8 relative to white 90%

Example code:

GF 1000/4 RT-SI



Remarks

- **Mounting**
When mounting the fibre optic cable, a minimum bending radius of 40mm must be guaranteed for reliable function.
- **Connection**
The fibre optic cables must be inserted securely into the corresponding openings in the control device. The fibre optic cable is fixed in place using the set screw.
- **Optical attachments**
For larger operating ranges using .../1 type cable (beam exit approx. 1mm), or changes in cable direction, optical attachments are available.
Attention:
When mounting attachments, ensure that the optics are not contaminated by adhesive substances. The adhesive must fulfil the temperature requirements.
- Shipment is done in pairs for throughbeam (LS) applications.
- Fibre optic cables with other lengths, head pieces and cross sections on request.



Special types

Glass fibre optic cables



1000mm



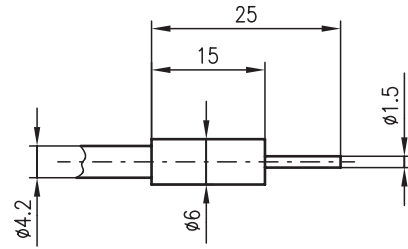
80mm



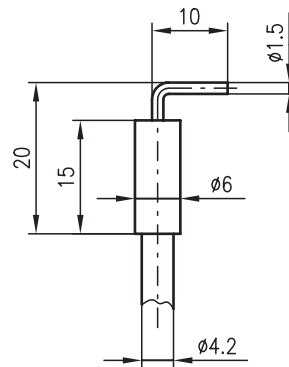
- Glass fibre optic cables in throughbeam or scanner operation
- Fibre optic cables with various cross sections and end pieces
- Connection pieces suitable for all control devices of the series (I)LVS 19, (I)LVS 9, LVSR 8, LKRTG 8 and LVSR 325
- Silicone coated metal sheathing results in a high protection class (IP 65) and allows use in the food industry

Dimensioned drawing

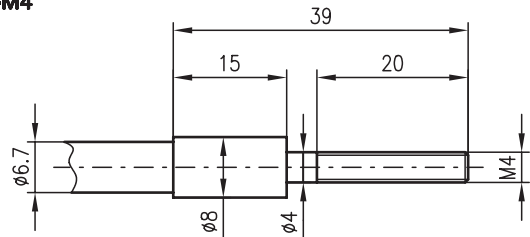
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GF 600/1-LS-SI-1,5



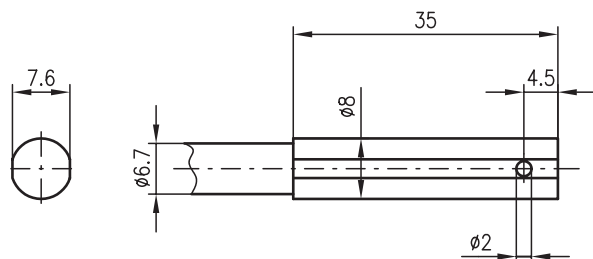
GF 600/1-RT-SI-W-1,5
GF 600/1-LS-SI-W-1,5



GF 600/4-RT-SI-M4
GF 600/4-LS-SI-M4



GF 600/4-RT-SI-W
GF 600/4-LS-SI-W



We reserve the right to make changes • LSG_e08e.fm

Accessories:

(available separately)



Glass fibre optic cables

Order guide

Glass fibre optic cables in throughbeam operation

Selection table		Order code →	GF 500/1 LS-MS Part No. 500 01030	GF 500/1 LS-SI Part No. 500 06779	GF 1000/1 LS-MS Part No. 500 01032	GF 1000/1 LS-SI Part No. 500 00036	GF 500/4 LS-MS Part No. 500 01031	GF 500/4 LS-VA Part No. 500 00043	GF 1000/4 LS-MS Part No. 500 01033	GF 1000/4 LS-SI Part No. 500 00037	GF 1000/4 LS-VA Part No. 500 00045
Equipment ↓	Sheathing/end piece	brass/aluminium	●		●		●		●		
		silicone/V2A		●		●				●	
		V2A/V2A						●			●
Length	500mm		●	●			●	●			
	1000mm				●	●			●	●	●
Light beam diameter	approx. 1 mm		●	●	●	●					
	approx. 4 mm						●	●	●	●	●

Glass fibre optic cables in scanner operation

Selection table		Order code →	GF 500/1 RT-MS Part No. 500 01034	GF 500/1 RT-SI Part No. 500 00038	GF 500/1 RT-VA Part No. 500 00046	GF 1000/1 RT-MS Part No. 500 01036	GF 500/4 RT-MS Part No. 500 01035	GF 500/4 RT-VA Part No. 500 00047	GF 1000/4 RT-MS Part No. 500 01037	GF 1000/4 RT-SI Part No. 500 00041	GF 1000/4 RT-MS.1 Part No. 500 11508
Equipment ↓	Sheathing/end piece	brass/aluminium	●			●	●		●		●
		silicone/V2A		●						●	
		V2A/V2A			●			●			
Length	500mm		●	●	●		●	●			
	1000mm					●			●	●	●
Light beam diameter	approx. 1 mm		●	●	●	●			●	●	●
	approx. 4 mm						●	●	●	●	●

Special types - Glass fibre optic cables in throughbeam or scanner operation

Selection table		Order code →	GF 600/1-LS-SI-1,5 Part No. 500 34365	GF 600/1-RT-SI-1,5 Part No. 500 34352	GF 600/1-LS-SI-W-1,5 Part No. 500 34363	GF 600/1-RT-SI-W-1,5 Part No. 500 34368	GF 600/4-LS-SI-M4 Part No. 500 34361	GF 600/4-RT-SI-M4 Part No. 500 34356	GF 600/4-LS-SI-W Part No. 500 34359	GF 600/4-RT-SI-W Part No. 500 34367	GFA 500/1 RT-MS Part No. 500 39123
Operating mode	throughbeam operation		●		●		●		●		
	scanner operation			●		●		●		●	●
Sheathing/end piece	brass/aluminium										●
	silicone/V2A		●	●	●	●	●	●	●	●	
	V2A/V2A										
Length	500mm										●
	600mm		●	●	●	●	●	●	●	●	
Light beam diameter	approx. 1 mm		●	●	●	●		●	●	●	
	approx. 4 mm						●	●	●	●	●

Remarks

- Fibre optic cables with other lengths, head pieces and cross sections on request.