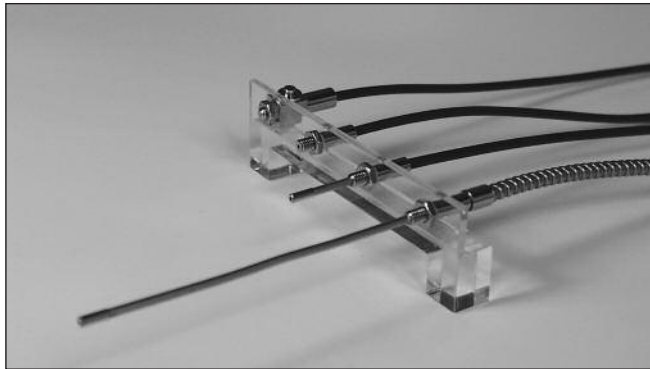


# Photoelectrics Fibre Optics, Glass Types FGT, FGD

CARLO GAVAZZI



- Fibre diameter  $\varnothing 1$  mm (400 x 50  $\mu\text{m}$ )
- Temperature range from -25°C up to 200°C
- Bending radius 10, 20 or 30 mm
- Sheath material PVC/thermo polyolefine, metallic spiral/polyolefine or flexible INOX

## Type Selection

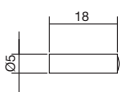
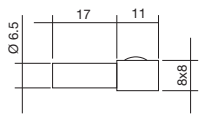
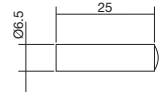
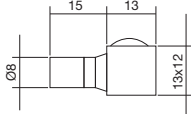
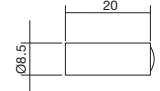
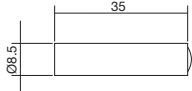
| Length [cm]             | Distance <sup>1)</sup> [mm] | Dimensions [mm] | Standard glass Ordering no.  | Reinforced metal Ordering no.  | High temperature Ordering no.  |
|-------------------------|-----------------------------|-----------------|--|--|--|
| 60<br>100<br>150<br>200 | 200<br>200<br>200<br>200    |                 | FGT 01 SCM 060<br>FGT 01 SCM 100<br>FGT 01 SCM 150<br>FGT 01 SCM 200 | FGT 01 MCM 060<br>FGT 01 MCM 100<br>FGT 01 MCM 150<br>FGT 01 MCM 200 | FGT 01 TCM 060<br>FGT 01 TCM 100<br>FGT 01 TCM 150<br>FGT 01 TCM 200 |
| 60<br>100<br>150<br>200 | 80<br>80<br>80<br>80        |                 | FGD 02 SCM 060<br>FGD 02 SCM 100<br>FGD 02 SCM 150<br>FGD 02 SCM 200 | FGD 02 MCM 060<br>FGD 02 MCM 100<br>FGD 02 MCM 150<br>FGD 02 MCM 200 | FGD 02 TCM 060<br>FGD 02 TCM 100<br>FGD 02 TCM 150<br>FGD 02 TCM 200 |
| 60<br>100               | 200<br>200                  |                 | FGT 03 SCM 060   |  | FGT 03 TCM 100   |
| 60<br>100<br>150<br>200 | 80<br>80<br>80<br>80        |                 | FGD 04 SCM 060<br>FGD 04 SCM 100<br>FGD 04 SCM 150                   | FGD 04 MCM 060<br>FGD 04 MCM 100<br>FGD 04 MCM 150                   | FGD 04 TCM 060<br>FGD 04 TCM 100<br>FGD 04 TCM 150<br>FGD 04 TCM 200 |
| 60                      | 200                         |                 | FGT 05 SCM 060   |  |  |
| 60<br>100<br>200        | 80<br>80<br>80              |                 | FGD 06 SCM 060<br>FGD 06 SCM 100<br>FGD 06 SCM 200                   | FGD 06 MCM 060<br>FGD 06 MCM 100                                     | FGD 06 TCM 100<br>FGD 06 TCM 200                                     |
| 60<br>100<br>150<br>200 | 80<br>80<br>80<br>80        |                 | FGD 07 SCM 060<br>FGD 07 SCM 100<br>FGD 07 SCM 150<br>FGD 07 SCM 200 | FGD 07 MCM 060<br>FGD 07 MCM 100<br>FGD 07 MCM 150                   | FGD 07 TCM 060<br>FGD 07 TCM 100<br>FGD 07 TCM 150<br>FGD 07 TCM 200 |
| 60<br>100<br>150<br>200 | 200<br>200<br>200<br>200    |                 | FGT 07 SCM 060<br>FGT 07 SCM 100<br>FGT 07 SCM 150                   | FGT 07 MCM 060<br>FGT 07 MCM 100<br>FGT 07 MCM 150                   | FGT 07 TCM 060<br>FGT 07 TCM 100<br>FGT 07 TCM 150<br>FGT 07 TCM 200 |

<sup>1)</sup> Sensing distance given for a fibre length up to 1 m.

## General Specifications

|   |  |
|---|--|
| <b>Bending radius</b><br>FG...SCM...: 10 mm<br>FG...MCM...: 20 mm<br>FG...TCM...: 30 mm   | <b>Sheath material</b><br>FG...SCM...: PVD and thermo polyolefine<br>FG...MCM...: Metallic spiral and polyolefine<br>FG...TCM...: Flexible INOX  |
| <b>Temperature range</b><br>FG...SCM...: -25 to +60°C (-13 to +140°F)<br>FG...MCM...: -25 to +120°C (-13 to +248°F)<br>FG...TCM...: -25 to +200°C (-13 to +392°F) | <b>Fibre</b><br>Diameter: Ø1 mm, 400 x 50 µm<br>Attenuation vs. length (@ 4 m):<br>Through beam: ≤ 20%<br>Diffuse: ≤ 35%<br>Attenuation vs. bending radius:<br>r = 15 mm: ≤ 3%<br>r = 10 mm: ≤ 15% |

## Accessories - Lenses for FGT 01.. & FGD 02.. Fibre Optic

|   |  |   |   |
|---|--|---|---|
| <b>AFGT 03</b><br>Sensing range: 800 mm<br>    | <b>AFGT 04</b><br>Sensing range: 800 mm<br> | <b>AFGD 05</b><br>Focus point: 10 mm<br> | <b>AFGT 06</b><br>Sensing range: 3000 mm<br> |
| <b>AFGT 07</b><br>Sensing range: 3000 mm<br> | <b>AFGD 08</b><br>Focus point: 30 mm<br>  |   |   |

## Ordering Key

|  |                       |
|--|-----------------------|
|  | <b>FGT 01 SCS 200</b> |
| <b>Optic Fibre</b> _____   |                       |
| <b>Fibre material</b> _____<br>G Glass   |                       |
| <b>Fibre type</b> _____<br>D Diffuse<br>T Through-beam   |                       |
| <b>Sensor head 01-99</b> _____<br>Forthrunning type number   |                       |
| <b>Sheath material</b> _____<br>S Standard glass, PVC and thermo polyolefine<br>M Metallic spiral and polyolefine<br>T Flexible INOX |                       |
| <b>Fibre diameter</b> _____<br>C 1.0 mm  |                       |
| <b>Core condition</b> _____<br>M Multicore   |                       |
| <b>Fibre length 001-999</b> _____<br>cm 1 cm to 9.9 m  |                       |