

## TAKEX - DIFFUSE FIBRE OPTIC CABLES

FRS8BC01

Fiber diffuse M3 with 70mm tip 2m



### PRODUCT DESCRIPTION

| Order no. | Appearance of fibre ends                                                                                               | Length of fibre conductors                                                           | Material in fibres | Material in fibre sheath              | Temperature range                                 |                                  |
|-----------|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------|---------------------------------------|---------------------------------------------------|----------------------------------|
| FR8EBC    | <br>Tip:<br>M3x0.5                    |     | 2 m                | Plastic:<br>polymethacrylate,<br>PMMA | Plastic:<br>polyethylene                          | -30 °C to +70 °C                 |
| FR19YBC   | Fibre,<br>direct<br>det.<br>M3, 2m,<br>high flex                                                                       |     | 2 m                | Plastic:<br>polymethacrylate,<br>PMMA | Plastic:<br>polyethylene                          | -30 °C to +70 °C                 |
| FRS8BC01  | Fibre,<br>direct<br>det.<br>M3, tip<br>diam<br>1.3mm,<br>2m                                                            |     | 2 m                | Plastic:<br>polymethacrylate,<br>PMMA | Plastic:<br>polyethylene<br>(tip metal<br>SUS304) | -30 °C to +70 °C                 |
| FR108BC   | <br>Tip:<br>M4x0.7                    |    | 2 m                | Plastic:<br>polymethacrylate,<br>PMMA | Plastic:<br>polyethylene                          | -30 °C to +70 °C                 |
| FX210J    | <br>Tip:<br>M4x0.7                  |  | 1 m                | Plastic:<br>polymethacrylate,<br>PMMA | Plastic:<br>polyurethane                          | -30 °C to +70 °C                 |
| FRS84BC   | <br>Tip:<br>M4x0.7,<br>Ø1.4<br>mm   |   | 2 m                | Plastic:<br>polymethacrylate,<br>PMMA | Plastic:<br>polyurethane<br>(tip metal<br>SUS304) | -30 °C to +70 °C                 |
| FR5BC     | <br>Tip:<br>M6x1                    |   | 2 m                | Plastic:<br>polymethacrylate,<br>PMMA | Plastic:<br>polyethylene                          | -30 °C to +70 °C                 |
| FR7BC     | <br>Tip:<br>M6x0.75,<br>Ø2.5        |   | 2 m                | Plastic:<br>polymethacrylate,<br>PMMA | Plastic:<br>polyethylene                          | -30 °C to +70 °C                 |
| FR7YBC    | Fibre,<br>direct<br>det.<br>M6, tip<br>diam<br>2.5mm,<br>2m, high<br>flex                                              |   | 2 m                | Plastic:<br>polymethacrylate,<br>PMMA | Plastic:<br>polyethylene<br>(tip metal<br>SUS304) | -30 °C to +70 °C                 |
| FRSV83BC  | Fibre,<br>side<br>view,<br>direct<br>det.<br>diam.<br>3mm, tip<br>diam<br>1.5mm,<br>2m                                 |   | 2 m                | Plastic:<br>polymethacrylate,<br>PMMA | Plastic:<br>polyethylene<br>(tip metal<br>SUS304) | -30 °C to +70 °C                 |
| FRL732BC  | Fibre,<br>curtain,<br>direct<br>det.<br>width<br>11mm,<br>2m fibre                                                     |   | 2 m                | Plastic:<br>polymethacrylate,<br>PMMA | Plastic:<br>polyethylene<br>(tip brass)           | -30 °C to +70 °C                 |
| GLX510J   | <br>Tip:<br>M4x0.7<br>High<br>temp. |   | 1 m                | Glass                                 | PTFE                                              | -60 °C to +220 °C<br>(tip 230 °) |

|         |                                                          |                                                                                  |     |       |            |                   |
|---------|----------------------------------------------------------|----------------------------------------------------------------------------------|-----|-------|------------|-------------------|
| GXH510J | Fibre, direct det., M4, 1m, high temp 350C, metal casing |  | 1 m | Glass | Metal: SUS | -60 °C to +350 °C |
|---------|----------------------------------------------------------|----------------------------------------------------------------------------------|-----|-------|------------|-------------------|

Other fibre conductor lengths and versions available on request.

| Order no. | Appearance of fibre ends                                                                                    |                                                                                      | Smallest detectable object<br>Sn<1 mm | Bend radius<br>mm      | Other                                                                     | Sn= Detection distance (mm) |                    |      |
|-----------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------|------------------------|---------------------------------------------------------------------------|-----------------------------|--------------------|------|
|           |                                                                                                             |                                                                                      |                                       |                        |                                                                           | F71R                        | F70R, F70AR, F70TR | F80R |
| FR8EBC    | <br>Tip: M3x0.5            |     | Ø0.03 mm                              | 20R                    | Rear edge cuttable                                                        | 65                          | 110                | 190  |
| FR19YBC   | Fibre, direct det. M3, 2m, high flex                                                                        |     | Ø0.03 mm                              | 1R                     | Flexible fibre, rear edge cuttable, suitable for fibre protection FA4SP10 | 8                           | 14                 | 40   |
| FRS8BC01  | Fibre, direct det. M3, tip diam 1.3mm, 2m                                                                   |     | Ø0.03 mm                              | 15R (Tip not bendable) | Rear edge cuttable Steel tip L=15 mm                                      | 30                          | 50                 | 90   |
| FR108BC   | <br>Tip: M4x0.7            |   | Ø0.03 mm                              | 30R                    | Rear edge cuttable, suitable for fibre protection FA4SP10                 | 120                         | 200                | 360  |
| FX210J    | <br>Tip: M4x0.7          |  | Ø0.03 mm                              | 30R                    | Coaxial                                                                   | 45                          | 80                 | 135  |
| FRS84BC   | <br>Tip: M4x0.7, Ø1.4 mm |   | Ø0.03 mm                              | 15R                    | Steel tip L=70 mm (tip: 10R)                                              | 30                          | 50                 | 90   |
| .FR5BC    | <br>Tip: M6x1            |   | Ø0.03 mm                              | 30R                    | Rear edge cuttable                                                        | 100                         | 180                | 320  |
| FR7BC     | <br>Tip: M6x0.75, Ø2.5   |   | Ø0.03 mm                              | 30R                    | Rear edge cuttable, suitable for fibre protection FA6SP10                 | 100                         | 180                | 320  |
| FR7YBC    | Fibre, direct det. M6, tip diam 2.5mm, 2m, high flex                                                        |   | Ø0.03 mm                              | 1R                     | Rear edge cuttable, suitable for fibre protection FA6SP10                 | 70                          | 130                | 220  |
| FRSV83BC  | Fibre, side view, direct det. diam. 3mm, tip diam 1.5mm, 2m                                                 |   | Ø0.03 mm                              | 15R                    | Rear edge cuttable, steel tip L=20 mm (Ø1.5 mm) "Side view"               | 10                          | 20                 | 40   |
| FRL732BC  | Fibre, curtain, direct det. width 11mm, 2m fibre                                                            |   | Ø0.1 mm                               | 30R                    | Rear edge cuttable, curtain fibre (Ø0.265x16x2 mm)                        | 55                          | 100                | 170  |

|         |                                                                                                                      |                                                                                   |             |     |                                      |    |    |     |
|---------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------|-----|--------------------------------------|----|----|-----|
| GLX510J | <br>Tip:<br>M4x0.7<br>High<br>temp. |                                                                                   | Ø0.05<br>mm | 50R | High<br>temperature                  | 45 | 80 | 135 |
| GXH510J | Fibre,<br>direct<br>det.,<br>M4, 1m,<br>high<br>temp<br>350C,<br>metal<br>casing                                     |  | Ø0.05<br>mm | 50R | Metal casing,<br>high<br>temperature | 45 | 80 | 135 |

## DIMENSIONS

Fibre parts marked \* must not be bent.

## SPECIFICATIONS

|                    |       |
|--------------------|-------|
| Bending Radius Min | 20    |
| Distance Max       | 90 mm |
| Distance Min       | 0 mm  |
| Fiber Length       | 2000  |

|                        |                   |
|------------------------|-------------------|
| Fiber Material         | Plastic           |
| Material Fiber Casing  | Polyethylene      |
| Photocell technology   | Directional fiber |
| Temperature range from | -30 °C            |
| Temperature range to   | 70 °C             |

