

# OF/OFA SERIES



## COMPLETE RANGE OF OPTIC FIBERS: UNIVERSAL OR ADVANCED MODELS

- Flexible models
- High temperature models (up to 125 °C)
- Fiber array with parallel beams for proximity or through beam detection
- Fixed focus proximity with axial, radial or lateral optics
- Proximity with 90° optics self-contained
- Focusing, collimating and deviating lenses

### APPLICATIONS

- Processing and Packaging machinery
- Electronics assembling
- Pharmaceutical industry
- Cosmetic and bottling industries

#### OF/OFA

|                                    |                                                                                                                                                                                                                                                               |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Through beam</b>                | Mechanical characteristics, length, diameter of the optic fiber, as well as the switching frequencies, light emitted and resolution of the optic fiber amplifier, affect the operating distances. Refer to the manuals to find the proper operating distance. |
| <b>Diffuse proximity</b>           |                                                                                                                                                                                                                                                               |
| <b>Fixed focus</b>                 |                                                                                                                                                                                                                                                               |
| <b>OF diameter</b>                 |                                                                                                                                                                                                                                                               |
| <b>OFA number of emitted beams</b> | M3, M4, M6                                                                                                                                                                                                                                                    |
| <b>Cable lengths</b>               | 1, 16, 32                                                                                                                                                                                                                                                     |
| <b>Operating temperature</b>       | 1, 2 m                                                                                                                                                                                                                                                        |
|                                    | -40...+60 °C (OF)                                                                                                                                                                                                                                             |
|                                    | -40...+125 °C (OF-...-HT)                                                                                                                                                                                                                                     |
| <b>Core material</b>               | -30...+70 °C (OFA)                                                                                                                                                                                                                                            |
| <b>Sheath material</b>             | PMMA plastic                                                                                                                                                                                                                                                  |
| <b>Terminal material</b>           | PE plastic                                                                                                                                                                                                                                                    |
| <b>Mechanical protection</b>       | Nickel-plated brass (OF),<br>Stainless steel, Aluminium, ABS (OFA)                                                                                                                                                                                            |
|                                    | IP67                                                                                                                                                                                                                                                          |

| OF SERIES         |                  |        |             |             |           |
|-------------------|------------------|--------|-------------|-------------|-----------|
| OPTIC FUNCTION    | FIBER TYPE       | LENGTH | TERMINAL    | MODEL       | ORDER No. |
| Through beam      | standard         | 1 m    | M4x0.7 mm   | OF-19-ST-10 | S76021901 |
|                   | standard         | 2 m    | M4x0.7 mm * | OF-23-ST-20 | S76022300 |
|                   | thin (Ø 1 mm)    | 1 m    | M2x0.4 mm   | OF-25-TN-10 | S76022500 |
|                   | standard         | 2 m    | M4x0.7 mm   | OF-43-ST-20 | 95A201350 |
|                   | high-temperature | 2 m    | M4x0.7 mm   | OF-43-HT-20 | 95A201280 |
|                   | ultra-flexible   | 2 m    | M4x0.7 mm   | OF-43-UF-20 | 95A201290 |
| Proximity         | high-efficiency  | 2 m    | M4x0.7 mm   | OF-43-HP-20 | 95A201300 |
|                   | standard         | 1 m    | M6x1 mm     | OF-18-ST-10 | S76021801 |
|                   | standard         | 2 m    | M6x1 mm *   | OF-22-ST-20 | S76022200 |
|                   | standard         | 2 m    | M4x0.7 mm   | OF-24-ST-20 | S76022400 |
|                   | thin (Ø 1 mm)    | 1 m    | M3x0.5 mm   | OF-26-TN-10 | S76022600 |
|                   | thin (Ø 1 mm)    | 1 m    | M3x0.5 mm * | OF-28-TN-10 | S76022800 |
|                   | standard         | 2 m    | ø 3x15 mm   | OF-38-ST-20 | 95A201070 |
|                   | standard         | 2 m    | M6x0.75 mm  | OF-42-ST-20 | 95A201340 |
|                   | high-temperature | 2 m    | M6x0.75 mm  | OF-42-HT-20 | 95A201250 |
|                   | ultra-flexible   | 2 m    | M6x0.75 mm  | OF-42-UF-20 | 95A201260 |
| Coaxial proximity | high-efficiency  | 2 m    | M6x0.75 mm  | OF-42-HP-20 | 95A201270 |
|                   | standard         | 2 m    | M6x1 mm     | OF-36-ST-20 | 95A201000 |
|                   | extra-flexible   | 2 m    | M6x1 mm     | OF-36-XF-20 | 95A201330 |
|                   | standard         | 2 m    | M4x0.7 mm   | OF-44-ST-20 | 95A201310 |
|                   | extra-flexible   | 2 m    | M4x0.7 mm   | OF-44-XF-20 | 95A201320 |

\* a bendable stainless steel extension 90mm long protrudes from the threaded optic head



| OFA SERIES            |                       |        |          |             |           |
|-----------------------|-----------------------|--------|----------|-------------|-----------|
| OPTIC FUNCTION        | FIBER TYPE            | LENGTH | TERMINAL | MODEL       | ORDER No. |
| Through beam          | axial, 16 beam array  | 2 m    | 15x15 mm | OFA-1-AE-20 | 95A201170 |
|                       | radial, 16 beam array | 2 m    | 15x15 mm | OFA-1-AS-20 | 95A201180 |
| Proximity             | axial, 32 beam array  | 2 m    | 20x20 mm | OFA-2-AE-20 | 95A201150 |
|                       | radial, 32 beam array | 2 m    | 20x20 mm | OFA-2-AS-20 | 95A201160 |
|                       | radial                | 2 m    | 5x65 mm  | OFA-6-RA-20 | 95A201140 |
| Fixed focus proximity | axial                 | 2 m    | 15x20 mm | OFA-4-FE-20 | 95A201200 |
|                       | lateral               | 2 m    | 15x20 mm | OFA-4-FF-20 | 95A201210 |
|                       | radial                | 2 m    | 15x20 mm | OFA-4-FS-20 | 95A201190 |



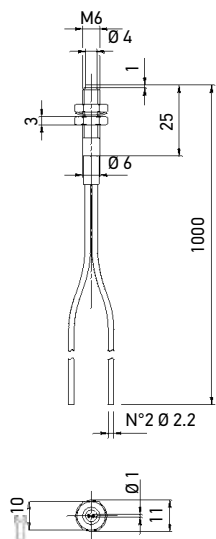
| OF ACCESSORIES                                      |                 |       |           |
|-----------------------------------------------------|-----------------|-------|-----------|
| DESCRIPTION                                         | SUITABLE FiberS | MODEL | CODE N°   |
| 2 pcs 90° deviating lenses                          | OF-43-XX        | AF-1  | 95ACC2690 |
| 2 pcs long distance collimating lenses (x 4)        | OF-43-XX        | AF-2  | 95ACC2700 |
| 1 pc focusing lens with 4 mm resolution             | OF-44-XX        | AF-3  | 95ACC2710 |
| 1 pc focusing lens with 0.4 mm resolution           | OF-44-XX        | AF-4  | 95ACC2720 |
| 2 pcs adapters Ø 2.2 mm for thin Fibers             | OF-XX-TN        | AF-5  | 95ACC2730 |
| 1 pc metal sheath for m6 x 0.75 Fibers              | OF-42-XX        | AF-7  | 95ACC2750 |
| 1 pc metal sheath for m4 x 07 Fibers                | OF-43-XX (*)    | AF-9  | 95ACC2770 |
| Fiber-cutting tool with Ø 2.2 mm and Ø 1.1 mm holes | ALL             | AF-11 | 95ACC2780 |

\* 2 sheaths have to be ordered for both the emitter-receiver sections

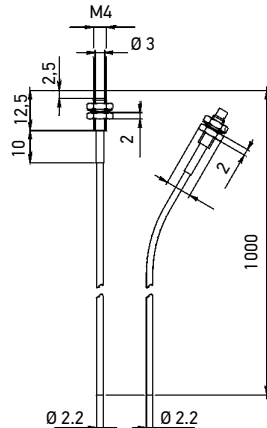
# DIMENSIONS

# OF SERIES

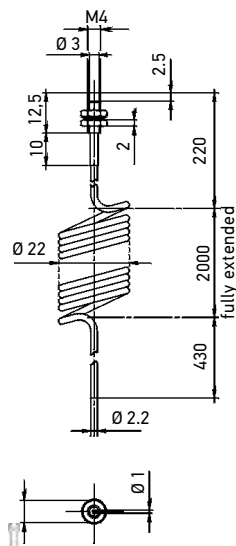
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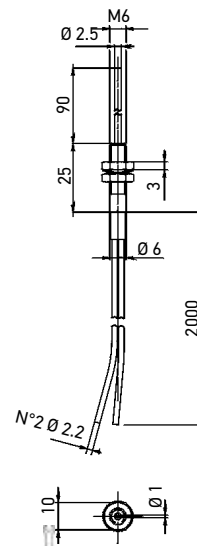
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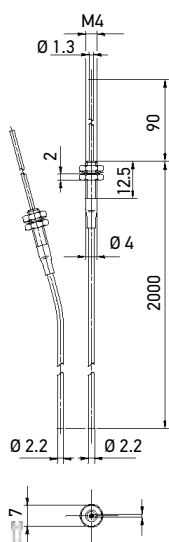
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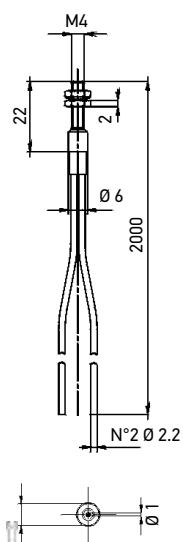
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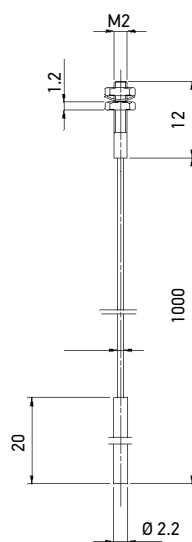
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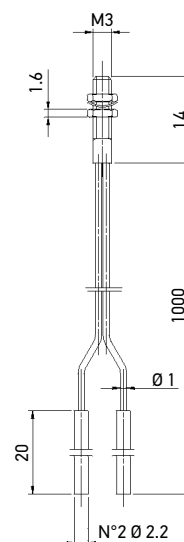
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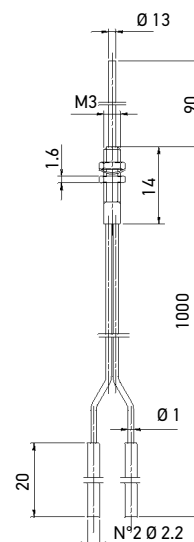
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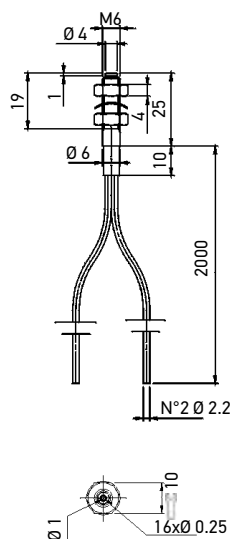
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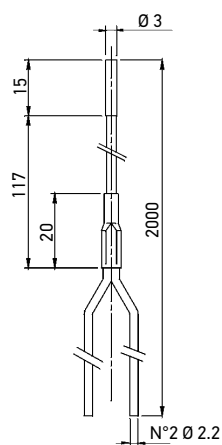
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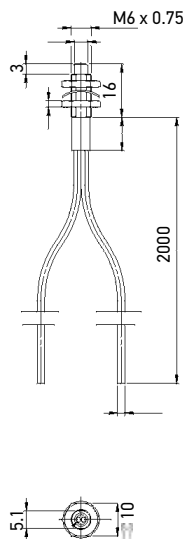
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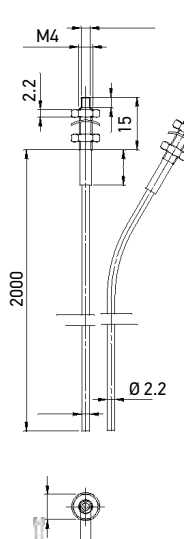
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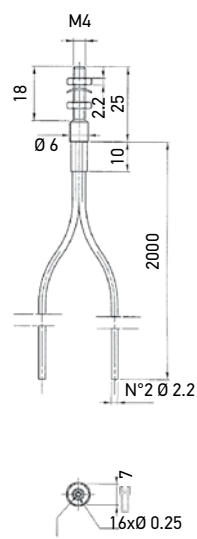
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**OF-43**



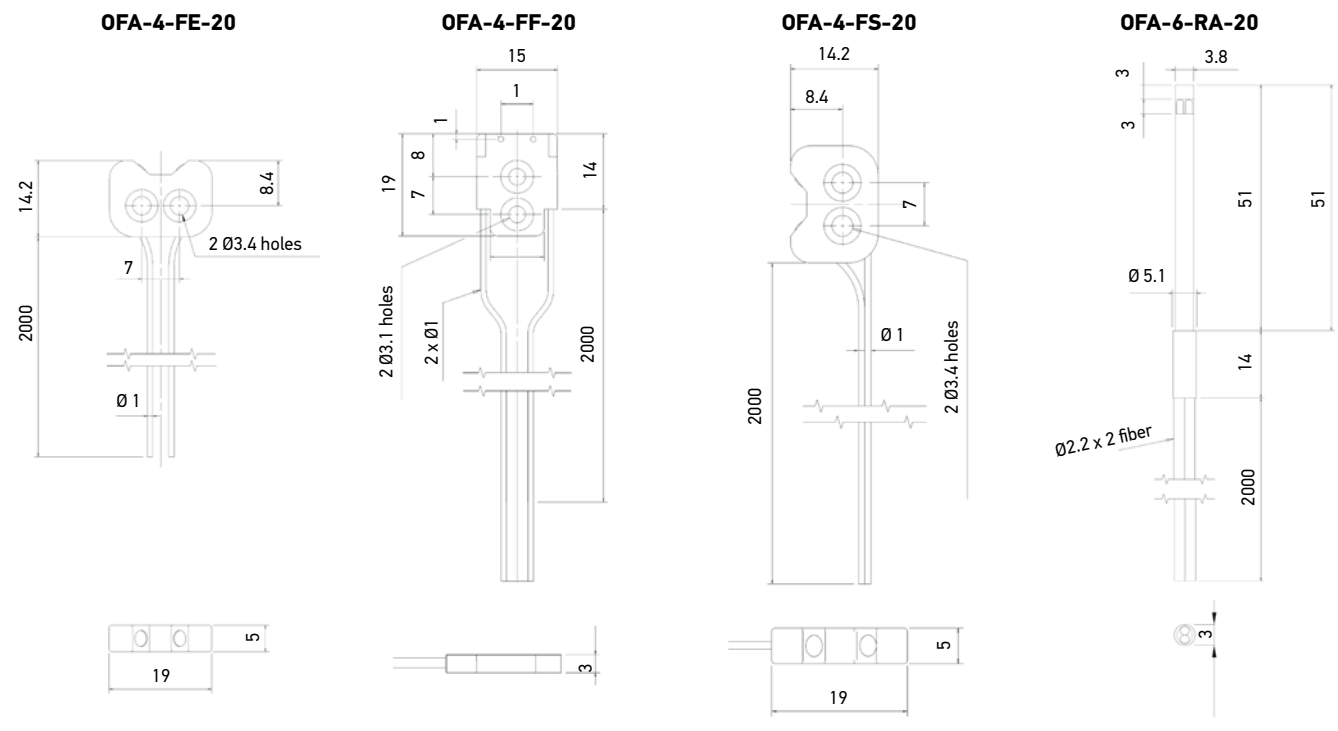
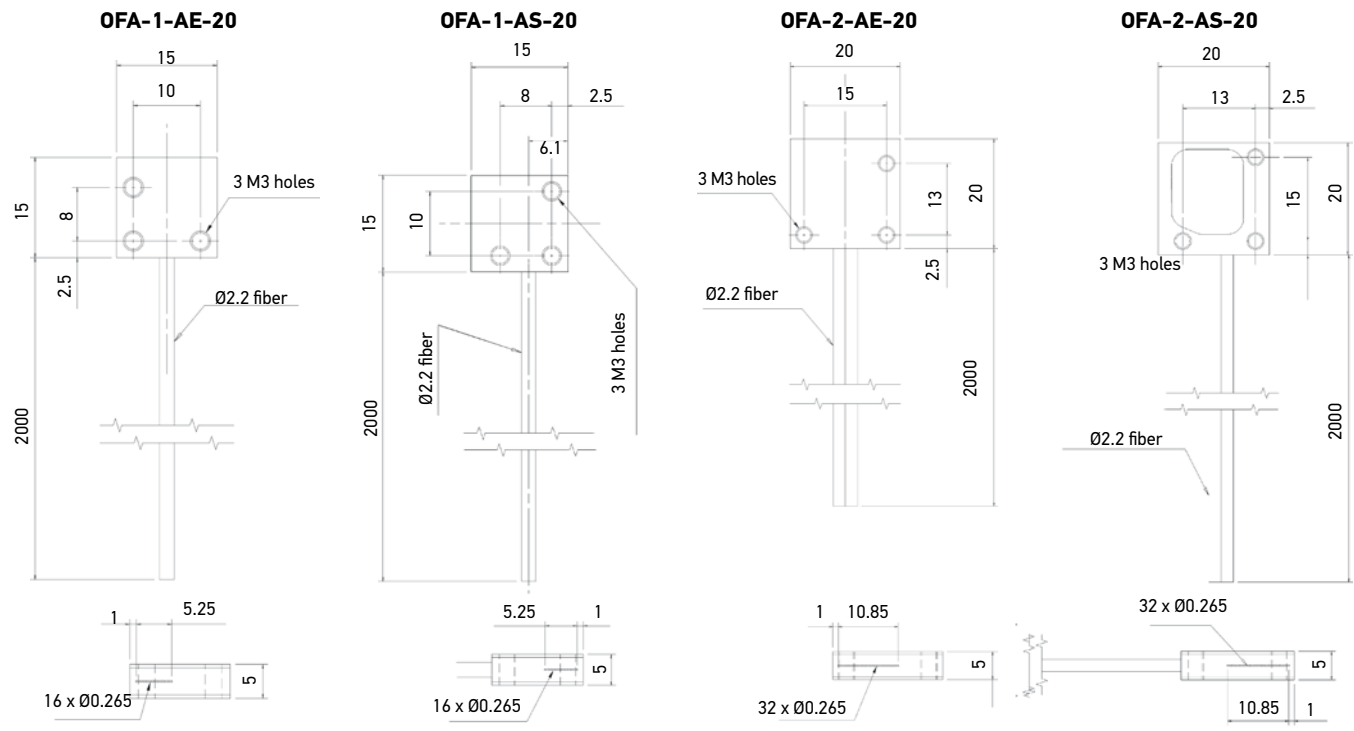
**OF-44**



mm

DIMENSIONS

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mm

# DETECTION DIAGRAMS

