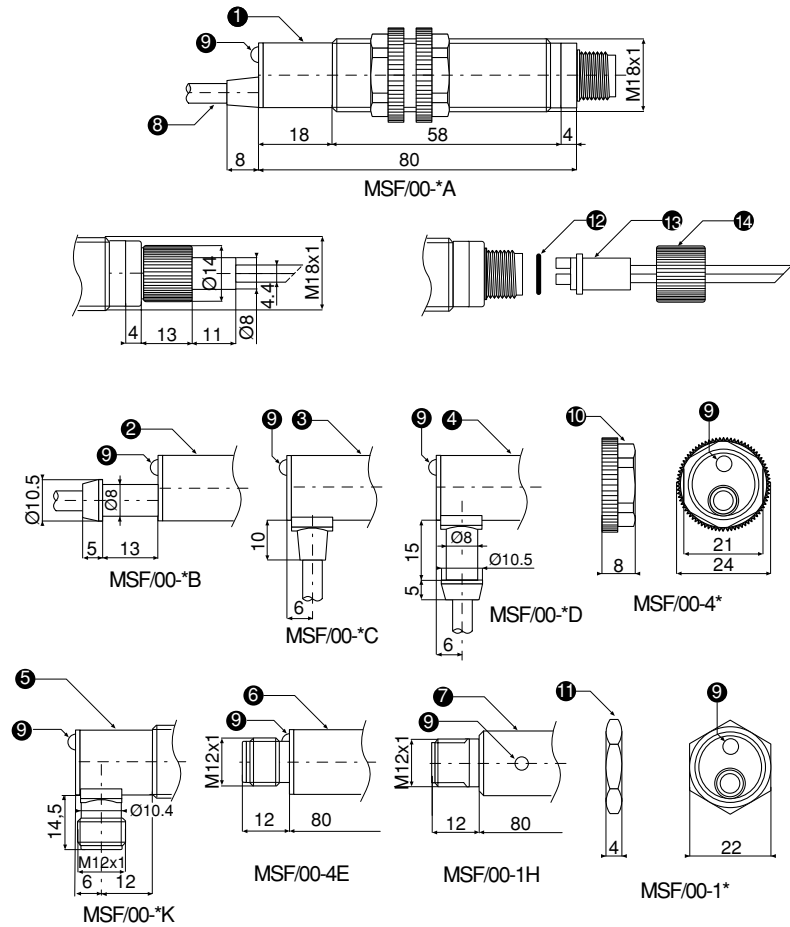



SERIE MSF

M18 optical fibre sensors DECOU[®] DC

- ◆ Multifunctional output NPN, PNP, NO and NC
- ◆ Logic connection possibilities
- ◆ Cable exit available in 7 versions for any installation requirement
- ◆ M12 standard plug-in exit axial and right angle (also available with housing and plug-in exit all in metal)
- ◆ LED status indicator
- ◆ Red light with visible spot
- ◆ Plastic or metal housing
- ◆ IP67 protection degree
- ◆ Complete protection against electrical damage
- ◆ OF series optical fibre connectable
- ◆ Wide range of cable-connectors and accessories


DIMENSIONAL DRAWING

Key

| | |
|---|---|
| 1 Axial cable exit | 8 M12 metal plug cable exit |
| 2 Axial cable exit with tang | 9 Red LED - output state indicator |
| 3 Cable 4x0,34mm ² , Ø4,7mm, PVC, 2m | 10 Tightening nut plastic housing |
| 4 Right angle cable exit (patented) | 11 Tightening nut metal housing |
| 5 Right angle cable exit with tang | 12 Sealing O-ring (supplied with OF optical fibres) |
| 6 M12 right angle plug cable exit | 13 Optical fibre OF series supplied separately |
| 7 M12 plastic plug cable exit | 14 Locking ring nut ST 08 (supplied) |
| | Connectors CD serie |
| | Accessories ST serie |

ORDERING SYSTEM

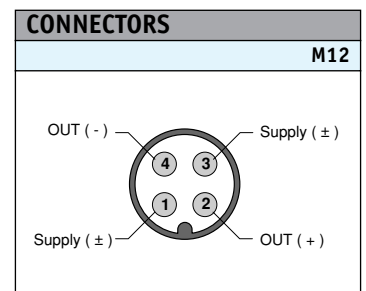
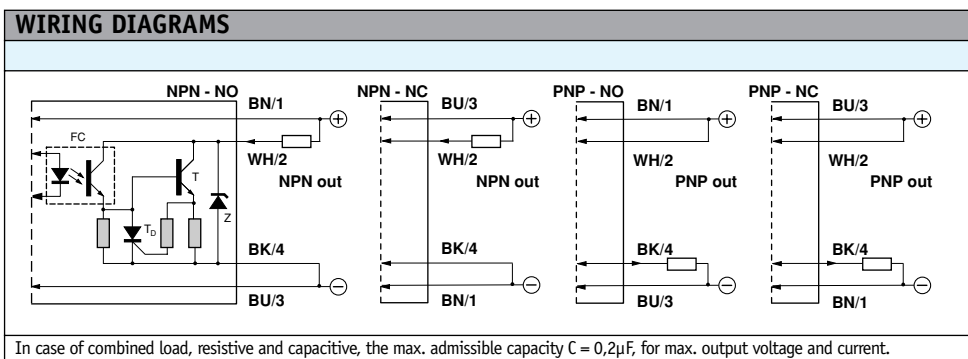
| | | MSF / 00 - 1 A | | | |
|---|------------|-----------------------|--|----------|---|
| serie | | | | | cable exit |
| M18 optical fibre sensor DECOU [®] | MSF | | | A | axial cable exit |
| output type | | | | B | ⁽¹⁾ axial cable exit with tang |
| multifunctional output NPN, PNP, NO, NC | 00 | | | C | right angle cable exit (patented) |
| housing | | | | D | ⁽¹⁾ right angle cable exit with tang |
| plastic housing | 0 | | | E | M12 plug cable exit (plastic housing) |
| metal housing | 1 | | | H | M12 plug cable exit (metal housing) |
| | | | | K | M12 right angle cable exit |


(1) Available only on request

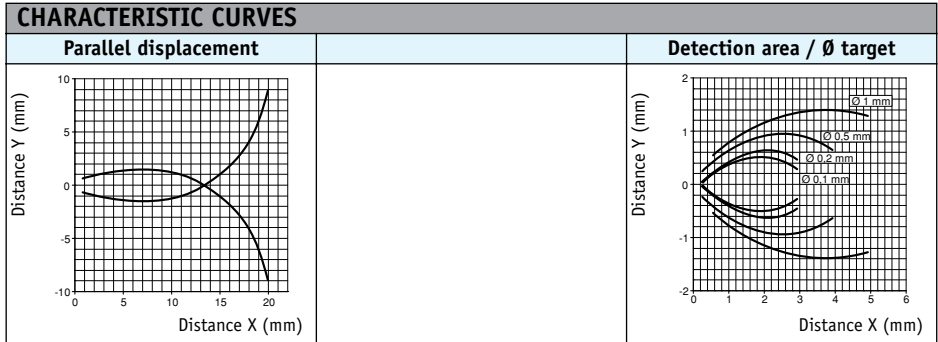
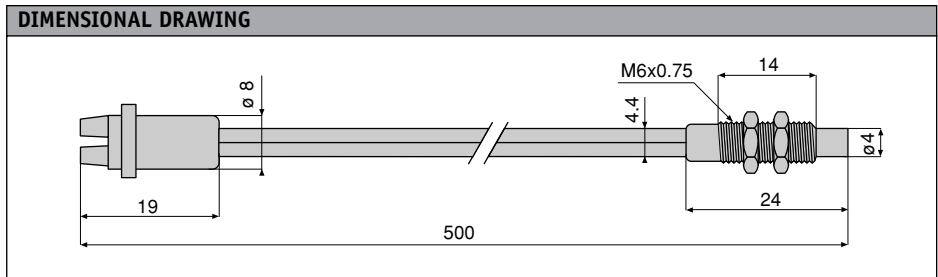
| SPECIFICATIONS | |
|--------------------------------|---|
| Model | MSF/00-1* |
| Nominal sensing distance (Sn) | see optical fibres table |
| Emission | red (660nm) |
| Tolerance | +15/-10% of the nominal sensing distance Sn |
| Differential travel | ≤10% |
| Repeat accuracy | 5% |
| Operating voltage | 10-30Vdc |
| Ripple | ≤10% |
| No-load supply current | 25mA |
| Load current | ≤100mA |
| Leakage current | ≤10μA |
| Voltage drop | 1,2Vmax. I _L =100mA |
| Output type | DECOUT® (NPN, PNP, NO, NC) |
| Switching frequency | 500Hz |
| Time delay before availability | 200ms |
| Supply electrical protections | transient |
| Output electrical protections | short circuit(with hold) |
| Temperature range | -25...+70°C (without freeze) |
| Temperature drift | 10% Sr |
| Interference to external light | 3000 lux (incandescent lamp), 10000 lux (sunlight) |
| Protection degree (DIN 40 050) | IEC IP67 |
| LED indicators | Red (output energized) |
| Housing material | polyamide (plastic), nickel-plated brass (metal) polycarbonate (cable exit) |
| Tightening torque | 40Nm (metal housing) |
| Weight (approx.) | 150g |


| OPTICAL FIBRES TABLE | | | | | | |
|----------------------|-----------------------------------|------------------|----------------|----------|-----------------------------|---------------------|
| model | type | sensing distance | ∅ fibre (core) | free-cut | fibre length ⁽²⁾ | head shape (mm) |
| OF/SC1 | diffuse reflection ⁽¹⁾ | 20 mm | 1mm | no | 0,5m | M6x0,75 |
| OF/SR1 | through-beam | 40 mm | 1mm | no | 0,5m | M4x0,5 |
| OF/SR2 | through-beam | 400 mm | 1mm | no | 0,5m | M7x0,75 (with lens) |
| OF/SR3 | through-beam | 400 mm | 1mm | no | 0,5m | ∅6 (with lens) |

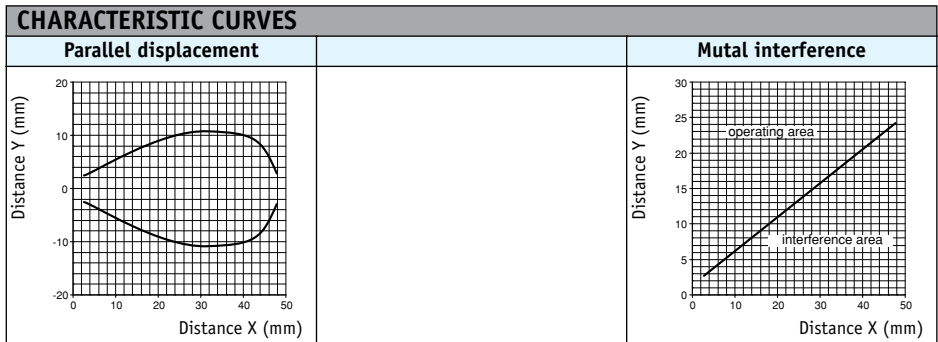
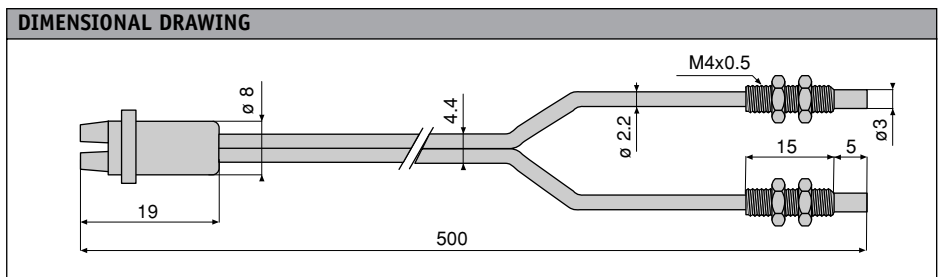
(1) Retro-reflective operating mode also possible; - (2) Fibre length different from the standard one is available on request (see OF serie pages)




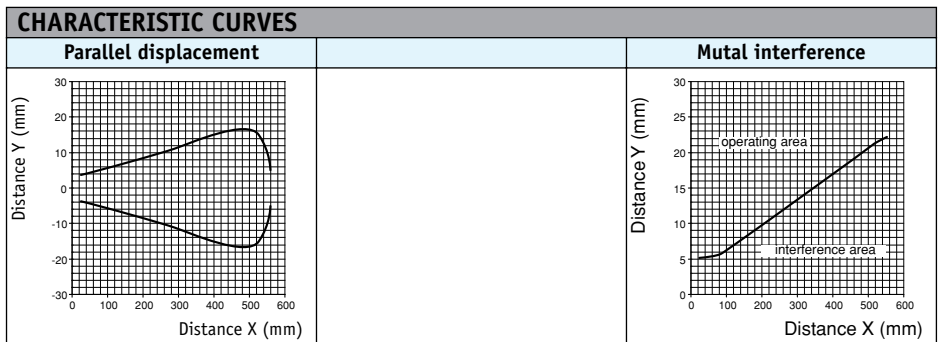
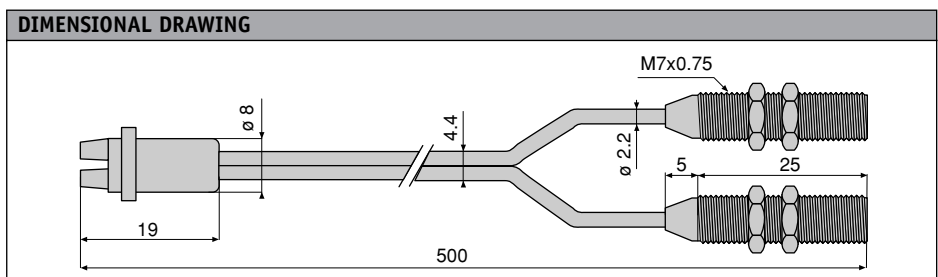
| | |
|---|---------------------|
| MODEL | OF/SC1 |
| diffuse reflection | |
|  | |
| Optical fibre core Ø | 1 mm |
| Distance (with MSF) | 20 mm |
| Fibre length (L) | 0,5 m |
| Free-cut | no |
| Head shape | M6 |
| Protection degree | IEC IP67 |
| Temperature range | -10°....+70°C |
| Optical fibre materials | PE, PMMA |
| Head materials | nickel-plated brass |
| Accessories available | none |




| | |
|--|---------------------|
| MODEL | OF/SR1 |
| through-beam | |
|  | |
| Optical fibre core Ø | 1 mm |
| Distance (with MSF) | 20 mm |
| Fibre length (L) | 0,5 m |
| Free-cut | no |
| Head shape | M6 |
| Protection degree | IEC IP67 |
| Temperature range | -10°....+70°C |
| Optical fibre materials | PE, PMMA |
| Head materials | nickel-plated brass |
| Accessories available | none |



| | |
|---|---------------------|
| MODEL | OF/SR2 |
| through-beamwith lenses | |
|  | |
| Optical fibre core Ø | 1 mm |
| Distance (with MSF) | 40 mm |
| Fibre length (L) | 0,5 m |
| Free-cut | no |
| Head shape | M4 |
| Protection degree | IEC IP67 |
| Temperature range | -10°....+70°C |
| Optical fibre materials | PE, PMMA |
| Head materials | nickel-plated brass |
| Accessories available | ST 28 |



| MODEL | OF/SR3 |
|---|---------------------|
| through-beam with lenses | |
|  | |
| Optical fibre core \emptyset | 1 mm |
| Distance (with MSF) | 400 mm |
| Fibre length (L) | 0,5 m |
| Free-cut | no |
| Head shape | $\emptyset 6$ mm |
| Protection degree | IEC IP67 |
| Temperature range | -10°....+70°C |
| Optical fibre materials | PE, PMMA |
| Head materials | nickel-plated brass |
| Accessories available | none |

