

# POF Series

## ► Plastic Optical Fibers

The plastic optical fibers of POF Series are suitable for use in applications such as **contactless detecting, counting, controlling and positioning** as well as **scanning of micro objects at processing stations, feed and automatic systems.**

- Big variety of optical fibers (reflected light and through-beam)
- Small sensing heads with different lines of sight (axial, anuglar, flexible)
- Trouble-free shortening of the plastic optical fibers
- Small bending radius, low weight
- Possible application in explosion-hazardous areas
- No interference by magnet or high-frequency fields (welding plants, switchgear et al.)
- Sturdy, flexible, vibration-proof
- For temperatures from -55°C to +80°C (or +350°C with HT type)



### Characteristics

Our plastic optical fiber systems consist of an opto-electronic fiber optic sensor (e.g. SPECTRO-1-POF, SPECTRO-1-POF-IR, SPECTRO-3-POF-SL, SPECTRO-3-POF-SLA, SPECTRO-3-POF-SLE) as well as a plastic optical fiber with sensor head. The principle of operation is similiar to a through-beam sensor or a diffuse reflection sensor.

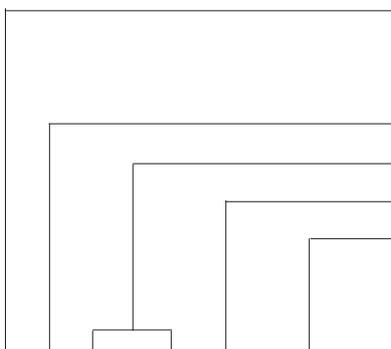
The opto-electronic fiber optic sensor includes transmitter, receiver, evaluation electronics and amplifier. It uses e.g. white light or IR light, which is transmitted through the fiber by the principle of total reflection (see figure „reflection inside a plastic optical fiber“).

We offer a wide choice of sensing heads that can be adapted to suit varying field conditions, e.g. as a diffuse reflection sensor or as a through-beam sensor with axial or radial light emission or with a 90mm flexible stainless steel sleeve which is even capable of „looking“ round corners, if needed.

The advantages of plastic optic fibers are the small bending radii. The fiber optics are bendable in any directions within the stated bending radii. It is also possible to cut the fibers in the field to any desired length using the fiber cutting tool (POF-CUTTER).



### Order Code



**POF-D-80-d2.5/d1-(0.5)-2000**

Product name of plastic optical fiber (Ex.)

#### Function of plastic optical fiber

(D = transmitted light operation, D/90 = transmitted light operation 90° angular  
R = reflected light operation, R/90 = reflected light operation 90° angular)

#### Operating distance (in mm)

**Sensor head type** (e.g. d2.5/d1 = sensor head with housing Ø 2.5mm and Ø 1mm)

#### Fiber cross section of plastic optical fiber (in mm)

#### Total length of optical fiber (in mm)

Special versions:

- HT: Sensor head with mit increased temperature stability up to 350°C
- VA: Stainless steel sheathing of the fibers
- CSC: Cross section converter
- SPX: Simplex (plastic optical fiber cable, without a sensor head)



Application

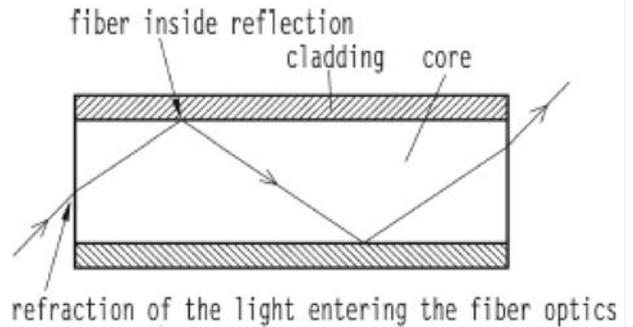
**Applications with plastic optical fibers of POF Series**

The excellent optical and mechanical characteristics of plastic optical fibers mean they are particularly well-suited to the sensing of small objects in production and automated systems, especially where difficult environmental and installation conditions exist (e.g. in environments with high levels of vibration).

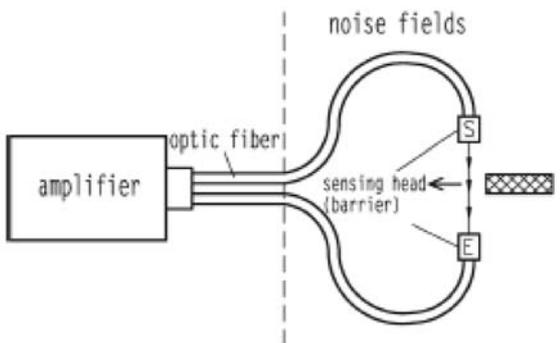
As no electrical energy is transmitted over the fibers it is possible to use them in applications with high magnetic fields and with high levels of electrical noise or in radioactive environments as well as in explosion-hazardous areas. In these cases it is necessary to mount the amplifier away from the hazardous area.

Plastic optical fibers can be found in a wide variety of industries including machine building, chemical, pharmaceutical, ceramics and plastics.

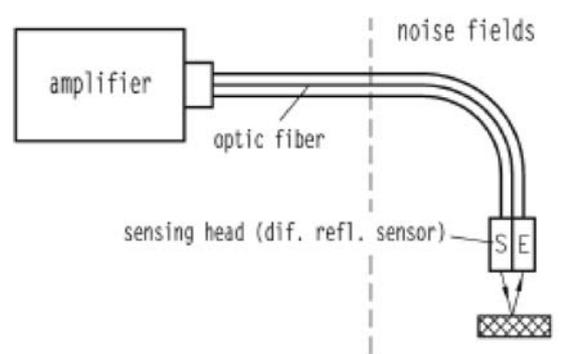
**Reflection inside a plastic optical fiber**



**Through-beam sensor**



**Diffuse reflection sensor**



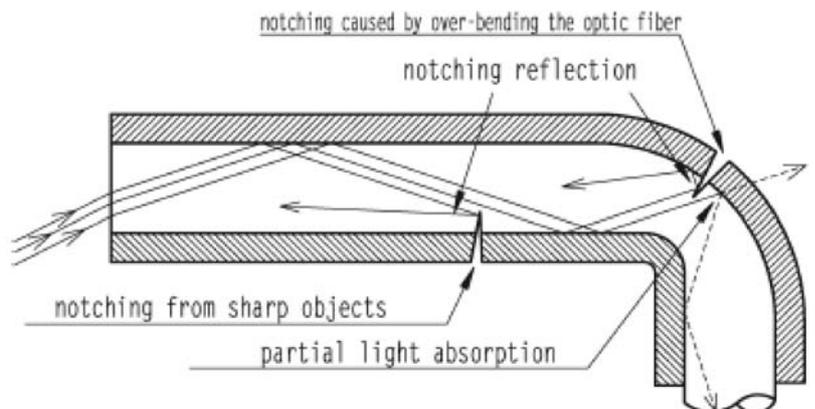
**Instructions for use**

If there is too much of a kink in the fiber optics, or if they get nicked by sharp objects, then this will cause a dimming of the light in the fiber optics.

In case of high mechanical stress (e.g. bending or squeezing for many times) the plastic optical fiber can be damaged at the highly stressed points.

For the installation it must be considered that plastic optical fibers can only be used for applications within the temperature range -55°C to +80°C. For higher temperatures use type POF-R-HT-M6x0.75/d4-(1.0)-2000-VA (up to +350°C) or glass fibers of FIO Series.

Chemicals such as organic solvents or gasoline may damage plastic optic fibers.





### Diffuse reflection sensors:

#### Reflected light optical fibers - optics axial

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#### Reflected light optical fibers - high temperature resistant

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#### Reflected light optical fibers - optics lateral 90°

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#### Reflected light optical fibers - simplex

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### Through-beam sensors:

#### Through-beam optical fibers - optics axial

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#### Through-beam optical fibers - optics lateral 90°

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#### Through-beam optical fibers - simplex

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### Accessories:

#### Fiber cutting tool

POF-CUTTER .....	Page 35
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#### Reduction sleeves (included with the optical fiber)

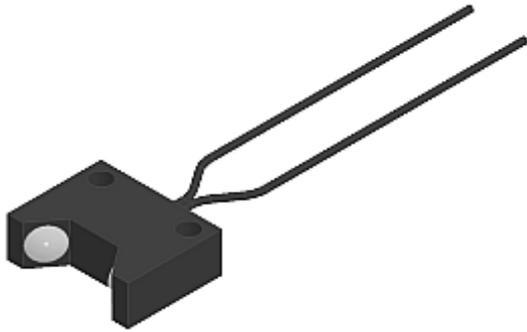
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Reflected Light POFs

**POF-R-12-18x14x6-(0.5)-2000**

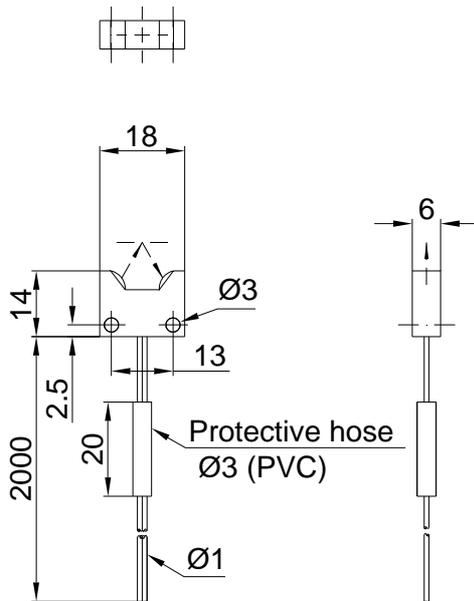
(Item no. 802182)



POF = Plastic optical fiber  
 R = Reflected light operation  
 12 = Sensing range 12mm  
 18x14x6 = Sensor head type 18mm x 14mm x 6mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Plastic (ABS)
Design sheath:	2x Ø 1.0mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	2mm/10mm
Light emission:	Axial
Temperature:	-40°C...+70°C
Enclosure rating:	IP40

(Delivery includes reduction sleeves)



All dimensions in mm

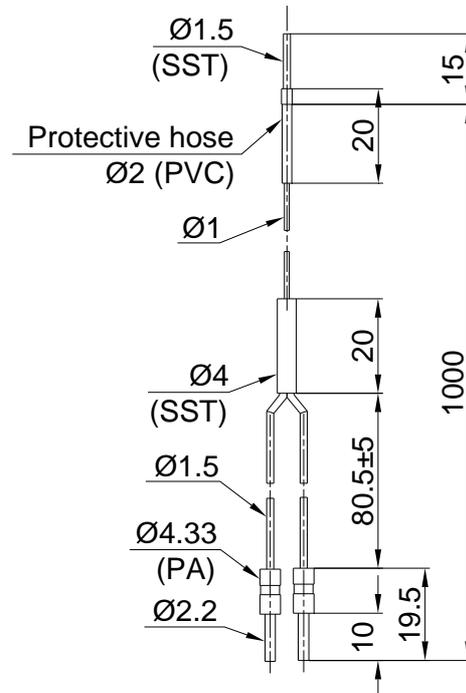
**POF-R-25-d4/d1.5-(1.1)-1000**

(Item no. 802136)



POF = Plastic optical fiber  
 R = Reflected light operation  
 25 = Sensing range 25mm  
 d4/d1.5 = Sensor head type Ø 4mm and Ø 1.5mm  
 (1.1) = Fiber cross section Ø 1.1mm (transmitter and receiver)  
 1000 = Total length 1000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 1.5mm
Design fiber:	2x Ø 1.1mm
Bending radius (rigid/flexible):	2mm/10mm
Light emission:	Axial
Temperature:	-55°C...+80°C
Enclosure rating:	IP40



All dimensions in mm





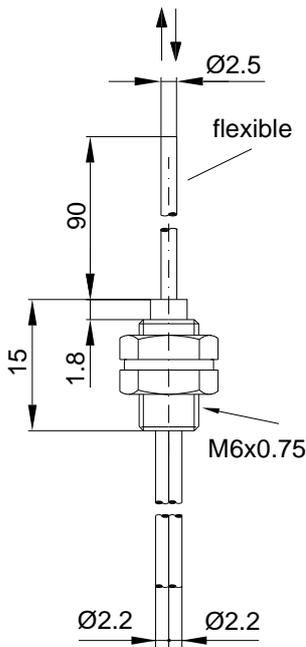
Reflected Light POFs

**POF-R-30-M6x0.75/d2.5-(1.0)-2000** (Item no. 802075)



POF = Plastic optical fiber  
 R = Reflected light operation  
 30 = Sensing range 30mm  
 M6x0.75/d2.5 = Sensor head type M6 (fine-pitch thread) and Ø 2.5mm  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Brass
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	25mm/--
Light emission:	Axial
Temperature:	-25°C...+70°C
Enclosure rating:	IP67
Special feature:	Flexible attachment



All dimensions in mm

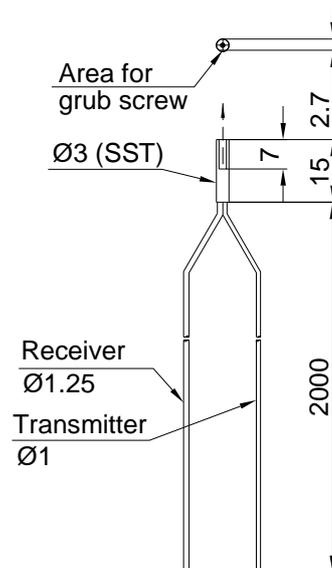
**POF-R-32-d3-(0.5)-2000** (Item no. 802183)



POF = Plastic optical fiber  
 R = Reflected light operation  
 32 = Sensing range 32mm  
 d3 = Sensor head type Ø 3mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	1x Ø 1.0mm und 1x Ø 1.25mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	1mm/--
Light emission:	Axial
Temperature:	-40°C...+60°C
Enclosure rating:	IP40

Transmitter 1 fiber Ø0.5  
 Receiver 9 fibers Ø 0.265



All dimensions in mm





Reflected Light POFs

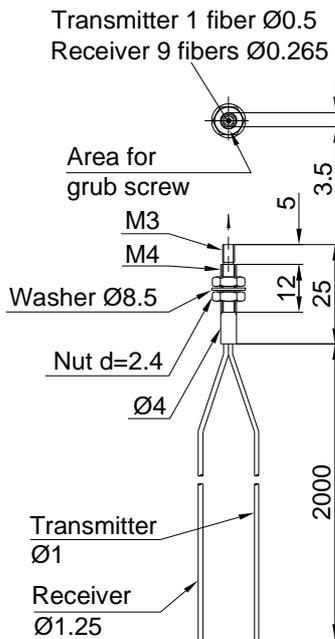
**POF-R-32-M4/M3-(0.5)-2000**

(Item no. 802077)



POF = Plastic optical fiber  
 R = Reflected light operation  
 32 = Sensing range 32mm  
 M4/M3 = Sensor head type M4 and M3  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head: Brass  
 Design sheath: 1x Ø 1.0mm und 1x Ø 1.25mm  
 Design fiber: 2x Ø 0.5mm  
 Bending radius (rigid/flexible): 1mm/--  
 Light emission: Axial  
 Temperature: -40°C...+60°C  
 Enclosure rating: IP40



All dimensions in mm

**POF-R-35-d4/d3-(0.5)-2000**

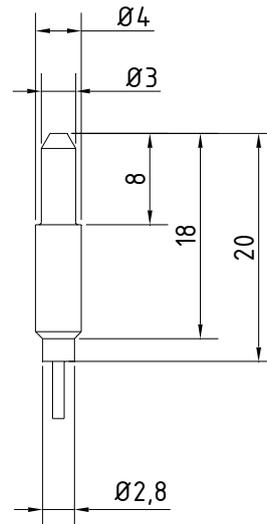
(Item no. 802070)



POF = Plastic optical fiber  
 R = Reflected light operation  
 35 = Sensing range 35mm  
 d4/d3 = Sensor head type Ø 4mm and Ø 3mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head: Aluminum  
 Design sheath: 2x Ø 1.1mm  
 Design fiber: 2x Ø 0.5mm  
 Bending radius (rigid/flexible): 25mm/--  
 Light emission: Axial  
 Temperature: -30°C...+70°C  
 Enclosure rating: IP40

(Delivery includes reduction sleeves)



All dimensions in mm



Reflected Light POFs

**POF-R-35-M4/d3-(0.5)-2000**

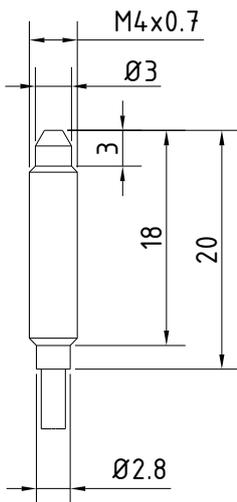
(Item no. 802069)



POF = Plastic optical fiber  
 R = Reflected light operation  
 35 = Sensing range 35mm  
 M4/d3 = Sensor head type M4 and Ø 3mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Brass
Design sheath:	2x Ø 1.1mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	25mm/--
Light emission:	Axial
Temperature:	-30°C...+70°C
Enclosure rating:	IP40

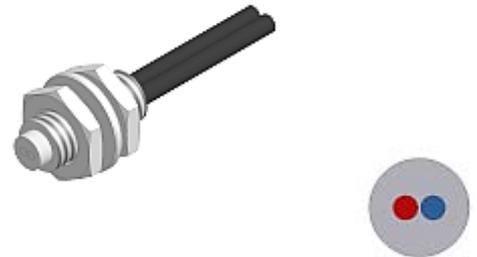
(Delivery includes reduction sleeves)



All dimensions in mm

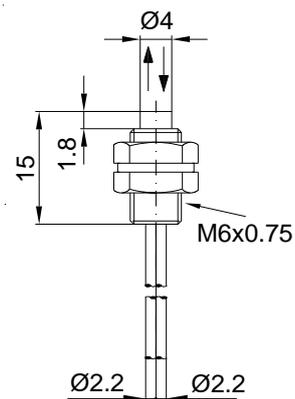
**POF-R-40-M6x0.75/d4-(1.0)-2000**

(Item no. 802074)



POF = Plastic optical fiber  
 R = Reflected light operation  
 40 = Sensing range 40mm  
 M6x0.75/d4 = Sensor head type M6 (fine-pitch thread) and Ø 4mm  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Brass
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	25mm/--
Light emission:	Axial
Temperature:	-25°C...+70°C
Enclosure rating:	IP67



All dimensions in mm





Reflected Light POFs

**POF-R-45-M4/d2.5-(0.5)-2000**

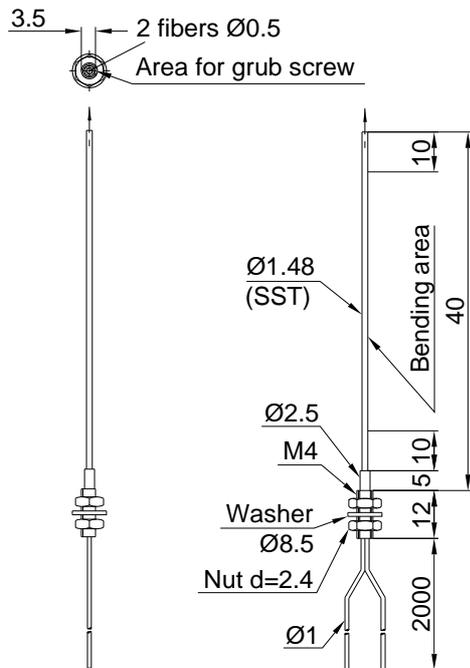
(Item no. 802184)



POF = Plastic optical fiber  
 R = Reflected light operation  
 45 = Sensing range 45mm  
 M4/d2.5 = Sensor head type M4 and Ø 2.5mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 1.0mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	2mm/10mm
Light emission:	Axial
Temperature:	-55°C...+80°C
Enclosure rating:	IP67

(Delivery includes reduction sleeves)



All dimensions in mm

**POF-R-55-M4/M3-(0.5)-2000**

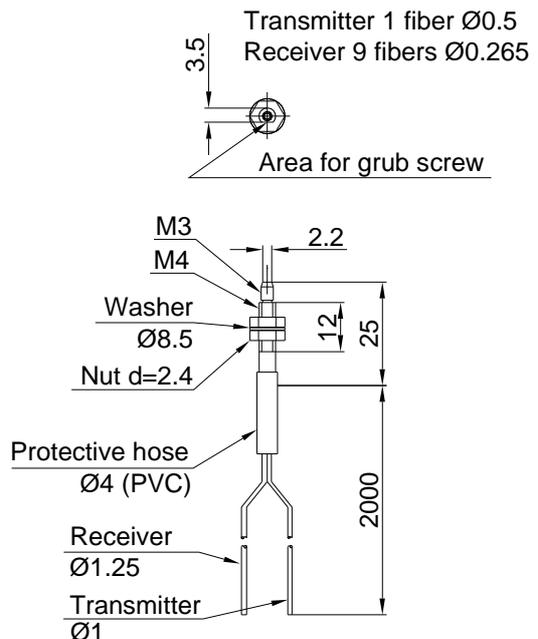
(Item no. 802076)



POF = Plastic optical fiber  
 R = Reflected light operation  
 55 = Sensing range 55mm  
 M4/M3 = Sensor head type M4 and M3  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	1x Ø 1.0mm und 1x Ø 1.25mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	2mm/10mm
Light emission:	Axial
Temperature:	-55°C...+80°C
Enclosure rating:	IP40

(Delivery includes reduction sleeves)



All dimensions in mm



Reflected Light POFs

**POF-R-60-M5x0.5-(0.5)-2000**

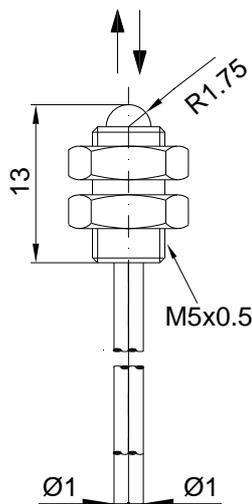
(Item no. 802071)



POF = Plastic optical fiber  
 R = Reflected light operation  
 60 = Sensing range 60mm  
 M5x0.5 = Sensor head type M5 (fine-pitch thread)  
 (0.5) = Fiber cross section  $\varnothing$  0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x $\varnothing$ 1.0mm
Design fiber:	2x $\varnothing$ 0.5mm
Bending radius (rigid/flexible):	25mm/--
Light emission:	Axial, cylindric light beam
Temperature:	-25°C...+70°C
Enclosure rating:	IP67

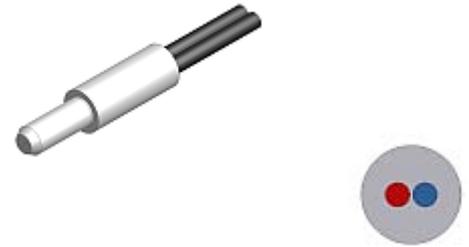
(Delivery includes reduction sleeves)



All dimensions in mm

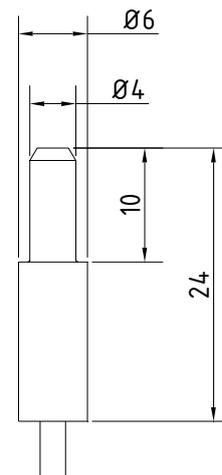
**POF-R-75-d6/d4-(1.0)-2000**

(Item no. 802073)



POF = Plastic optical fiber  
 R = Reflected light operation  
 75 = Sensing range 75mm  
 d6/d4 = Sensor head type  $\varnothing$  6mm and  $\varnothing$  4.5mm  
 (1.0) = Fiber cross section  $\varnothing$  1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Brass
Design sheath:	2x $\varnothing$ 2.2mm
Design fiber:	2x $\varnothing$ 1.0mm
Bending radius (rigid/flexible):	25mm/--
Light emission:	Axial
Temperature:	-30°C...+70°C
Enclosure rating:	IP67



All dimensions in mm



Reflected Light POFs

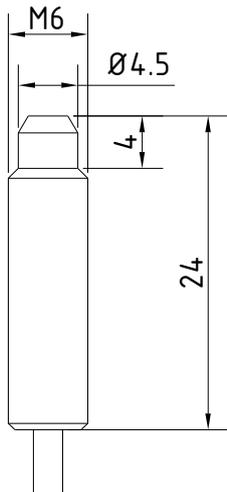
**POF-R-75-M6/d4.5-(1.0)-2000**

(Item no. 802072)



POF = Plastic optical fiber  
 R = Reflected light operation  
 75 = Sensing range 75mm  
 M6/d4.5 = Sensor head type M6 and Ø 4.5mm  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Brass
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	25mm/--
Light emission:	Axial
Temperature:	-30°C...+70°C
Enclosure rating:	IP67



All dimensions in mm

**POF-R-90-M4-(1.0)-2000**

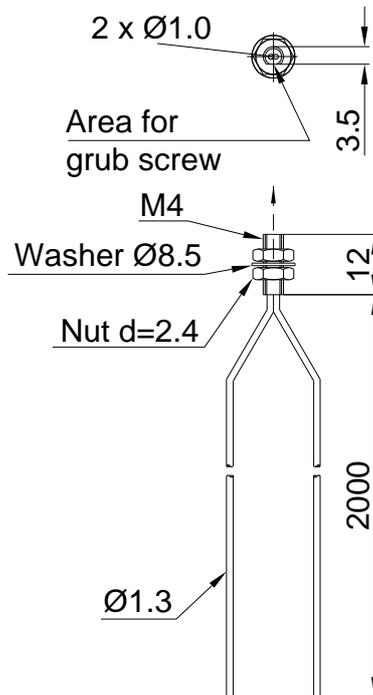
(Item no. 802186)



POF = Plastic optical fiber  
 R = Reflected light operation  
 90 = Sensing range 90mm  
 M4 = Sensor head type M4  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 1.3mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	1mm/--
Light emission:	Axial
Temperature:	-40°C...+60°C
Enclosure rating:	IP67

(Delivery includes reduction sleeves)



All dimensions in mm

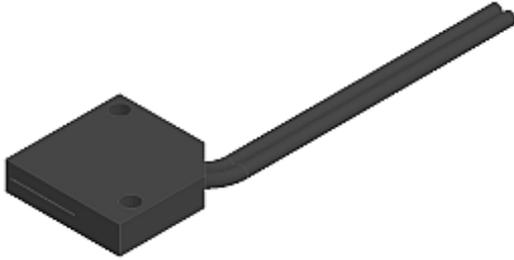




Reflected Light POFs

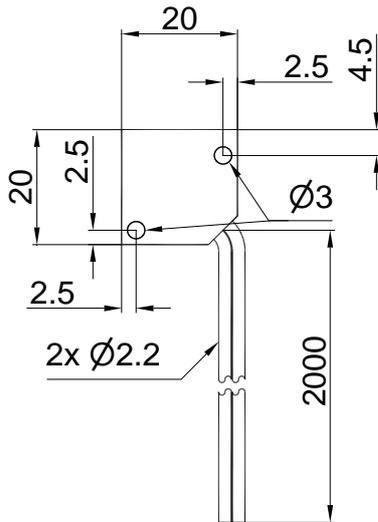
**POF-R-110-20x20x5-(1.1)-2000**

(Item no. 802187)



POF = Plastic optical fiber  
 R = Reflected light operation  
 110 = Sensing range 110mm  
 5x20x20 = Sensor head type 5mm x 20mm x 20mm  
 (1.1) = Fiber cross section Ø 1.1mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Plastic (PPS)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.1mm
Bending radius (rigid/flexible):	2mm/10mm
Light emission:	Axial, line 10.85mm
Temperature:	-55°C...+80°C
Enclosure rating:	IP40



All dimensions in mm

**POF-R-110-d3-(1.0)-2000**

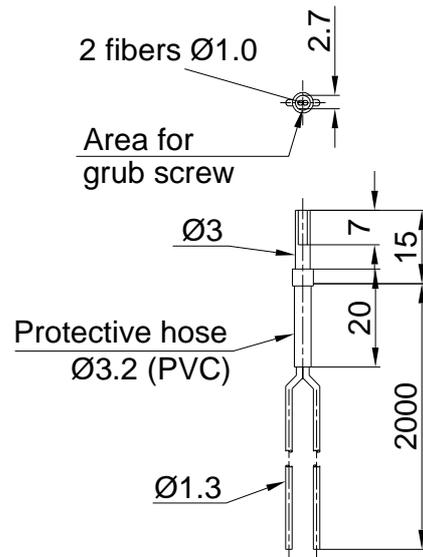
(Item no. 802188)



POF = Plastic optical fiber  
 R = Reflected light operation  
 110 = Sensing range 110mm  
 d3 = Sensor head type Ø 3mm  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 1.3mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	4mm/10mm
Light emission:	Axial
Temperature:	-55°C...+80°C
Enclosure rating:	IP67

(Delivery includes reduction sleeves)



All dimensions in mm





Reflected Light POFs

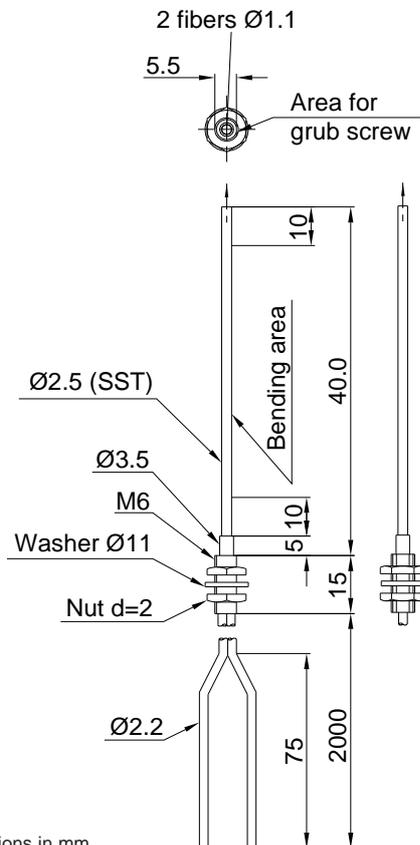
**POF-R-110-M6/d2.5-(1.1)-2000**

(Item no. 802189)



POF = Plastic optical fiber  
 R = Reflected light operation  
 110 = Sensing range 110mm  
 M6/d2.5 = Sensor head type M6 and Ø 2.5mm  
 (1.1) = Fiber cross section Ø 1.1mm (transmitter and receiver)  
 2000 = Total length 2000mm

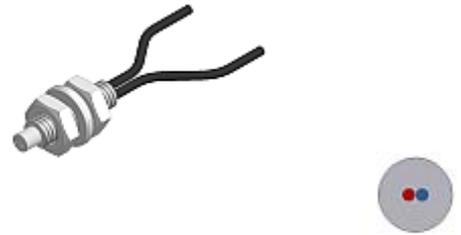
Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.1mm
Bending radius (rigid/flexible):	4mm/10mm
Light emission:	Axial
Temperature:	-55°C...+80°C
Enclosure rating:	IP67



All dimensions in mm

**POF-R-125-M3/d2-(0.5)-2000**

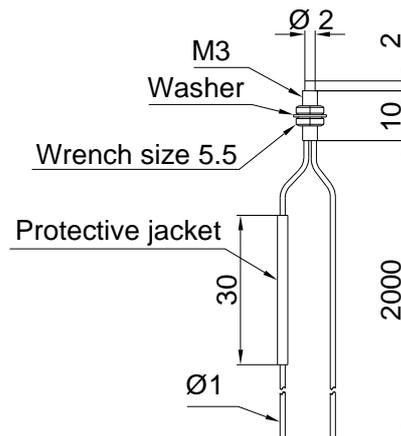
(Item no. 802190)



POF = Plastic optical fiber  
 R = Reflected light operation  
 125 = Sensing range 125mm  
 M3/d2 = Sensor head type M3 and Ø 2mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 1.0mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	2mm/10mm
Light emission:	Axial
Temperature:	-55°C...+80°C
Enclosure rating:	IP67

(Delivery includes reduction sleeves)



All dimensions in mm



Reflected Light POFs

**POF-R-125-M4/d2.5-(0.5)-2000**

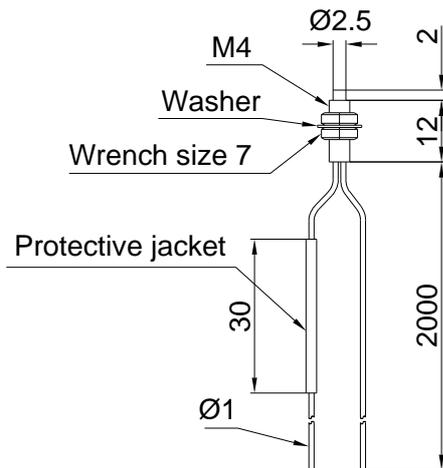
(Item no. 802191)



POF = Plastic optical fiber  
 R = Reflected light operation  
 125 = Sensing range 125mm  
 M4/d2.5 = Sensor head type M4 and Ø 2.5mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 1.0mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	2mm/10mm
Light emission:	Axial
Temperature:	-55°C...+80°C
Enclosure rating:	IP67

(Delivery includes reduction sleeves)



All dimensions in mm

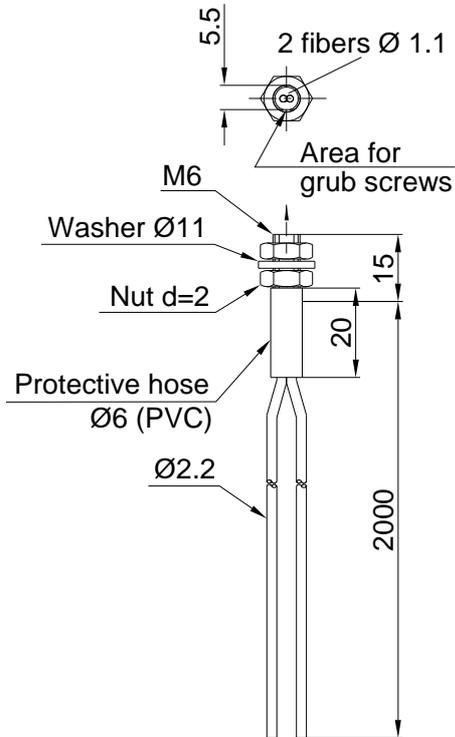
**POF-R-220-M6-(1.1)-2000**

(Item no. 802192)



POF = Plastic optical fiber  
 R = Reflected light operation  
 220 = Sensing range 220mm  
 M6 = Sensor head type M6  
 (1.1) = Fiber cross section Ø 1.1mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.1mm
Bending radius (rigid/flexible):	4mm/10mm
Light emission:	Axial
Temperature:	-55°C...+80°C
Enclosure rating:	IP67



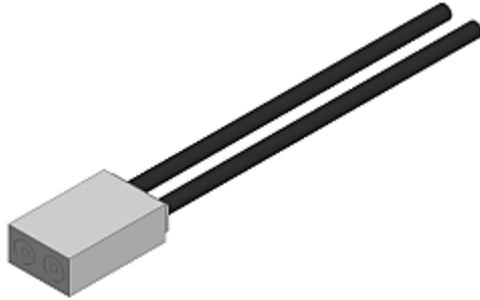
All dimensions in mm





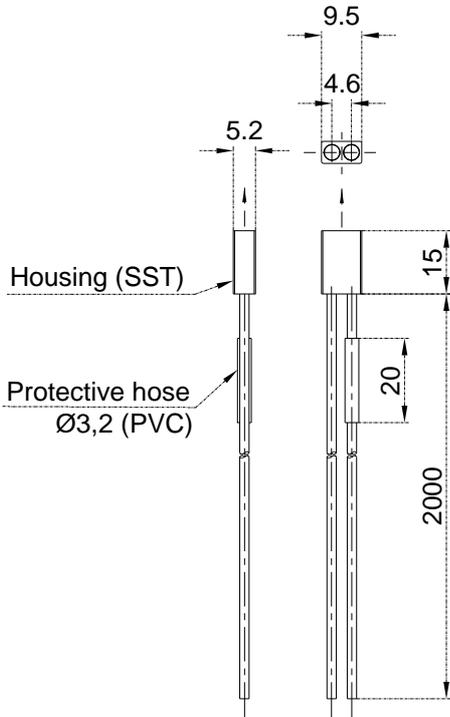
Reflected Light POFs

**POF-R-230-15x9.5x5.2-(1.1)-2000** (Item no. 802193)



POF = Plastic optical fiber  
 R = Reflected light operation  
 230 = Sensing range 230mm  
 15x9.5x5.2 = Sensor head type 15mm x 9.5mm x 5.2mm  
 (1.1) = Fiber cross section Ø 1.1mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.1mm
Bending radius (rigid/flexible):	1mm/--
Light emission:	Axial, lens made of glass
Temperature:	-25°C...+55°C
Enclosure rating:	IP40



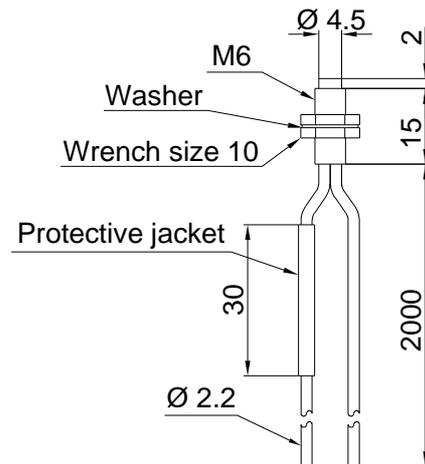
All dimensions in mm

**POF-R-400-M6/d4.5-(1.0)-2000** (Item no. 802194)



POF = Plastic optical fiber  
 R = Reflected light operation  
 400 = Sensing range 400mm  
 M6/d4.5 = Sensor head type M6 and Ø 4.5mm  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	2mm/10mm
Light emission:	Axial
Temperature:	-55°C...+80°C
Enclosure rating:	IP40



All dimensions in mm





Reflected Light POFs

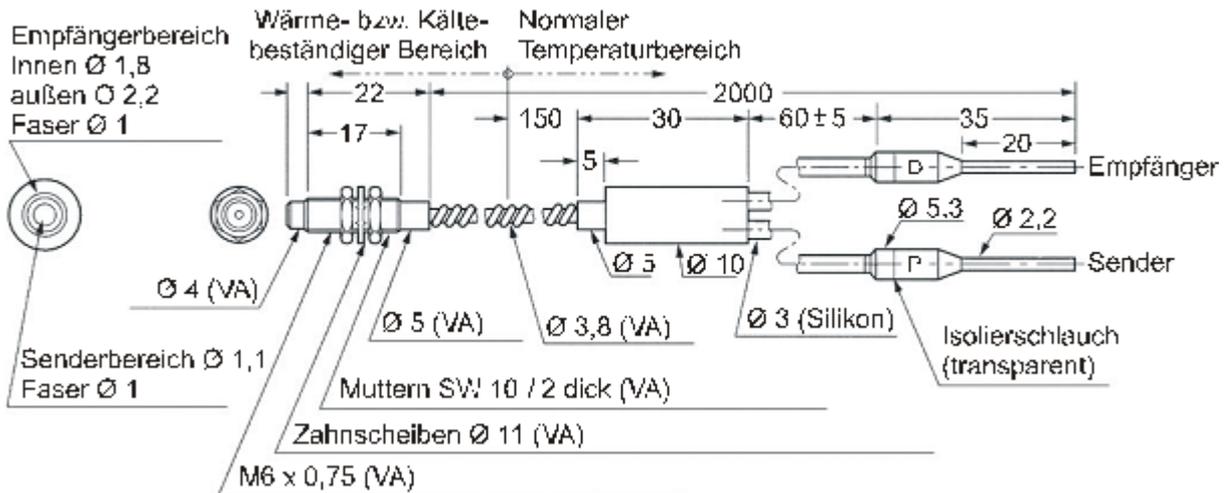
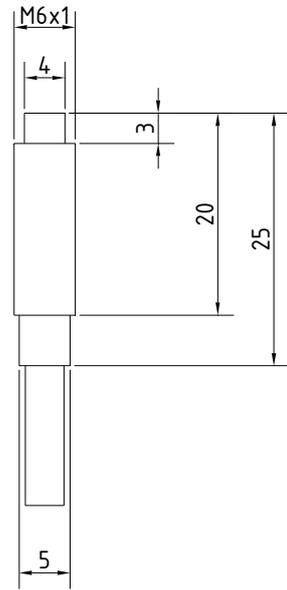
**POF-R-HT-M6x0.75/d4-(1.0)-2000-VA**

(Item no. 802078)



POF = Plastic optical fiber  
 R = Reflected light operation  
 HT = High Temperature (the sensor head along with a cable length of approx. 1720mm is temperature resistant up to 350°C)  
 M6x0.75/d4 = Sensor head type M6 (fine-pitch thread) and Ø 4mm  
 (1.0) = Fiber cross section Ø 1.0mm  
 2000 = Total length 2000mm  
 VA= Stainless steel sheathing  
Please note: Connection area of control electronics suitable (over a length of approx. 280 mm) only for normal temperature range!

Sensing range: 260mm  
 Material sensor head: Stainless steel 1.4301 (V2A)  
 Design sheath: 1x Ø 3.8mm (VA) or 2x Ø 3.0mm (silicone) or 2x Ø 2.2mm  
 Design fiber: Ø 1.0mm  
 Bending radius (rigid/flexible): 25mm/---  
 Light emission: Coaxial  
 Temperature: -60°C...+350°C (see above)  
 Enclosure rating: (to be supplemented)

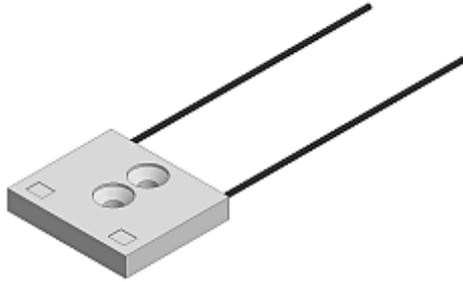


All dimensions in mm



Reflected Light POFs

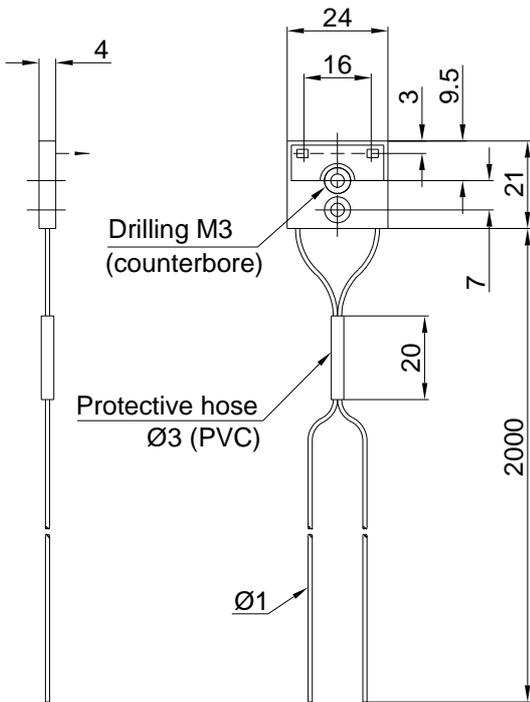
**POF-R/90-12-24x21x4-(0.5)-2000** (Item no. 802195)



POF = Plastic optical fiber  
 R/90 = Reflected light operation, optics lateral 90°  
 12 = Sensing range 12mm  
 24x21x4 = Sensor head type 24mm x 21mm x 4mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Brass
Design sheath:	2x Ø 1.0mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	1mm/-
Light emission:	Lateral
Temperature:	-40°C...+60°C
Enclosure rating:	IP40

(Delivery includes reduction sleeves)



All dimensions in mm

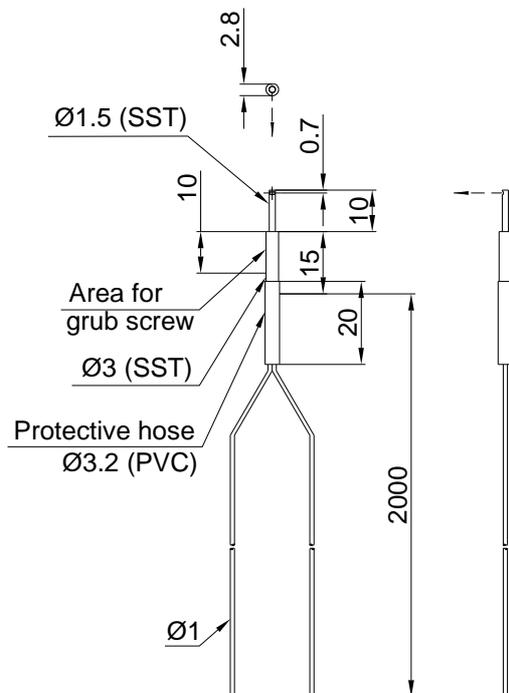
**POF-R/90-25-d3/d1.5-(0.5)-2000** (Item no. 802126)



POF = Plastic optical fiber  
 R/90 = Reflected light operation, optics lateral 90°  
 25 = Sensing range 25mm  
 d3/d1.5 = Sensor head type Ø 3mm and Ø 1.5mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 1.0mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	2mm/10mm
Light emission:	Lateral
Temperature:	-55°C...+80°C
Enclosure rating:	IP30

(Delivery includes reduction sleeves)



All dimensions in mm





Reflected Light POFs

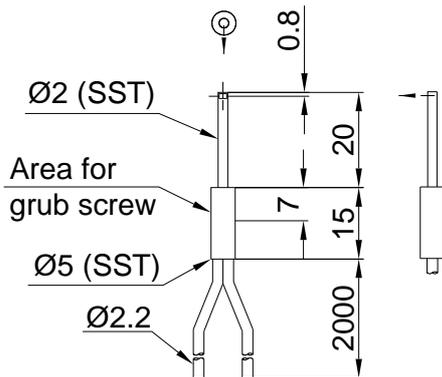
**POF-R/90-45-d5/d2-(1.1)-2000**

(Item no. 802125)



POF = Plastic optical fiber  
 R/90 = Reflected light operation, optics lateral 90°  
 45 = Sensing range 45mm  
 d5/d2 = Sensor head type Ø 5mm and Ø 2mm  
 (1.1) = Fiber cross section 1.1mm (transmitter and receiver)  
 2000 = Total length 2000mm

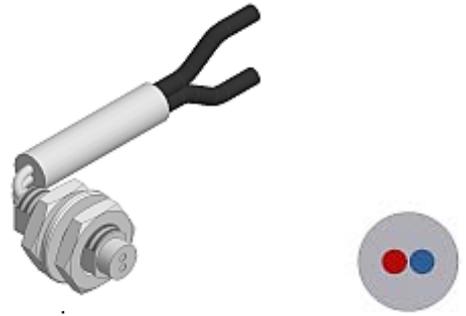
Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.1mm
Bending radius (rigid/flexible):	4mm/10mm
Light emission:	Lateral
Temperature:	-55°C...+80°C
Enclosure rating:	IP30



All dimensions in mm

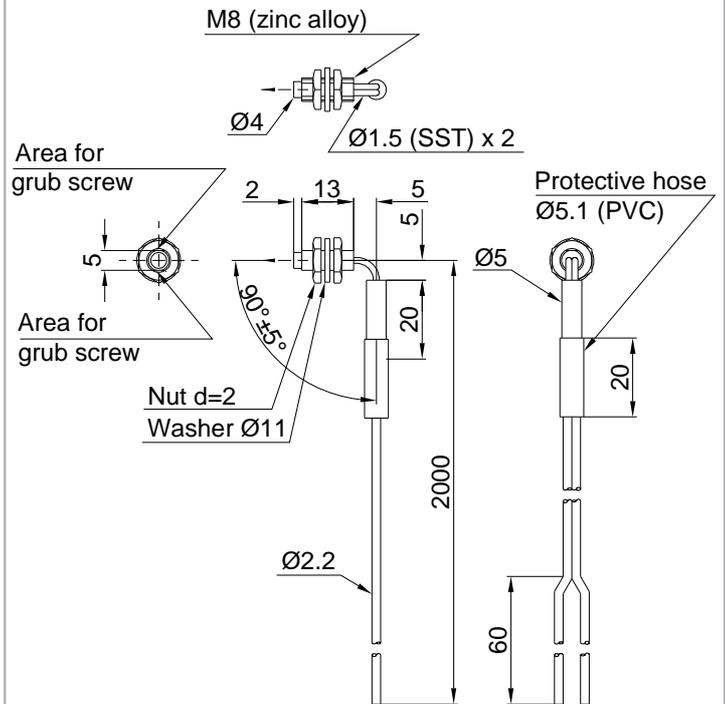
**POF-R/90-85-M8/d4-(1.0)-2000**

(Item no. 802185)



POF = Plastic optical fiber  
 R/90 = Reflected light operation, optics lateral 90°  
 85 = Sensing range 85mm  
 M8/d4 = Sensor head type M8 and Ø 4mm  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	4mm/10mm
Light emission:	Lateral
Temperature:	-55°C...+80°C
Enclosure rating:	IP67



All dimensions in mm





Reflected Light POFs

**POF-SPX1-d2.2-(1.0)-(length)** (Item no. see below)



POF = Plastic optical fiber  
 SPX1 = Simplex, fiber 1-fold  
 d2.2 = Sheath Ø 2.2mm  
 (1.0) = Fiber cross section 1.0mm  
 (length) = Length as per request

Design sheath: 1x Ø 2.2mm  
 Design fiber: 1x Ø 1.0mm  
 Bending radius (rigid/flexible): 10mm/--  
 Temperature: -20°C...+50°C  
 Enclosure rating: IP67

**POF-SPX1-d2.2-(1.0)-1000** Length 1000 mm (Item no. 802140)  
**POF-SPX1-d2.2-(1.0)-2000** Length 2000 mm (Item no. n.n.)



All dimensions in mm





Through-beam POFs

**POF-D-40-d1-(0.5)-500**

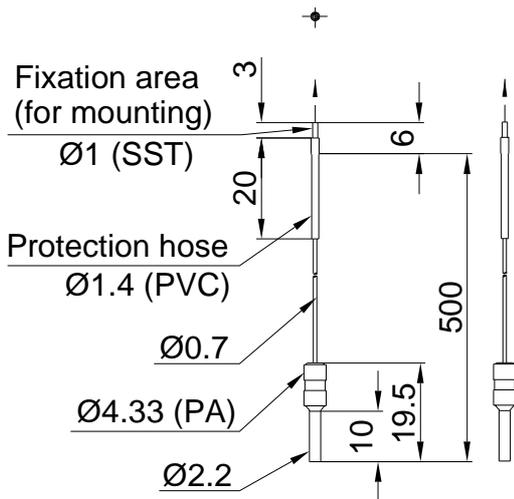
(Item no. 802196)



POF = Plastic optical fiber  
 D = Through-beam operation  
 40 = Sensing range 40mm  
 d1 = Sensor head type Ø 1mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 500 = Total length 500mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 1.0mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	2mm/10mm
Light emission:	Axial
Temperature:	-55°C...+80°C
Enclosure rating:	IP67

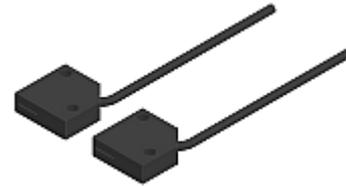
(Delivery includes reduction sleeves)



All dimensions in mm

**POF-D-80-15x15x5-(0.5)-2000**

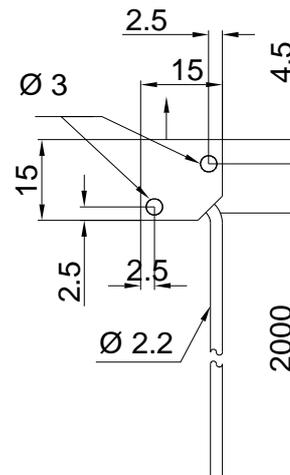
(Item no. 802146)



POF = Plastic optical fiber  
 D = Through-beam operation  
 80 = Sensing range 80mm  
 15x15x5 = Sensor head type 15mm x 15mm x 5mm  
 (0.5) = Faserquerschnitt Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Plastic (PPS)
Design sheath:	2x Ø 1.0mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	2mm/10mm
Light emission:	Axial
Temperature:	-55°C...+80°C
Enclosure rating:	IP40

(Delivery includes reduction sleeves)



All dimensions in mm





Through-beam POFs

**POF-D-100-d3/d1.5-(0.5)-2000**

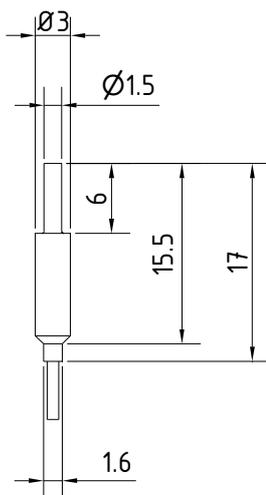
(Item no. 802141)



POF = Plastic optical fiber  
 D = Through-beam operation  
 100 = Sensing range 100mm  
 d3/d1.5 = Sensor head type Ø 3mm and Ø 1.5mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Aluminum
Design sheath:	2x Ø 1.1mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	25mm/--
Light emission:	Axial
Temperature:	-30°C...+70°C
Enclosure rating:	IP67

(Delivery includes reduction sleeves)



All dimensions in mm

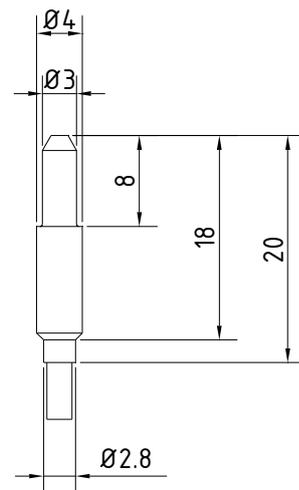
**POF-D-100-d4/d3-(0.5)-2000**

(Item no. 802174)



POF = Plastic optical fiber  
 D = Through-beam operation  
 100 = Sensing range 100mm  
 d4/d3 = Sensor head type Ø 4mm and Ø 3mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Brass
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	25mm/--
Light emission:	Axial
Temperature:	-30°C...+70°C
Enclosure rating:	(to be supplemented)



All dimensions in mm



Through-beam POFs

**POF-D-100-M3/d2-(0.5)-2000**

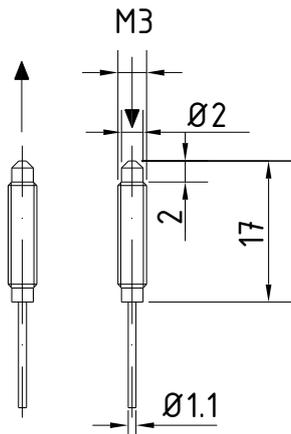
(Item no. 802142)



POF = Plastic optical fiber  
 D = Through-beam operation  
 100 = Sensing range 100mm  
 M3/d2 = Sensor head type M3 and Ø 2mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Brass
Design sheath:	2x Ø 1.1mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	25mm/--
Light emission:	Axial
Temperatur:	-30°C...+70°C
Schutzart:	IP67

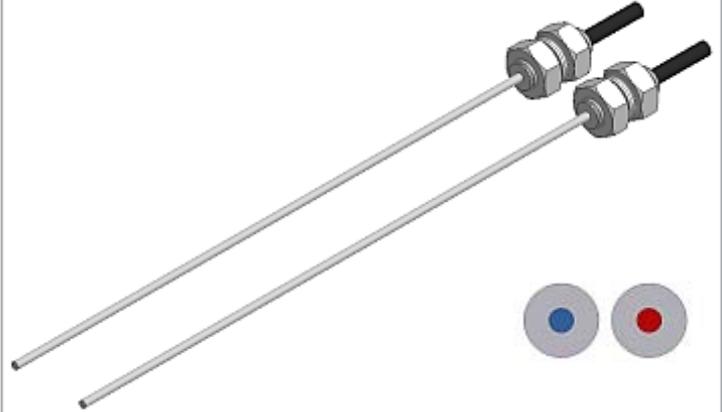
(Delivery includes reduction sleeves)



All dimensions in mm

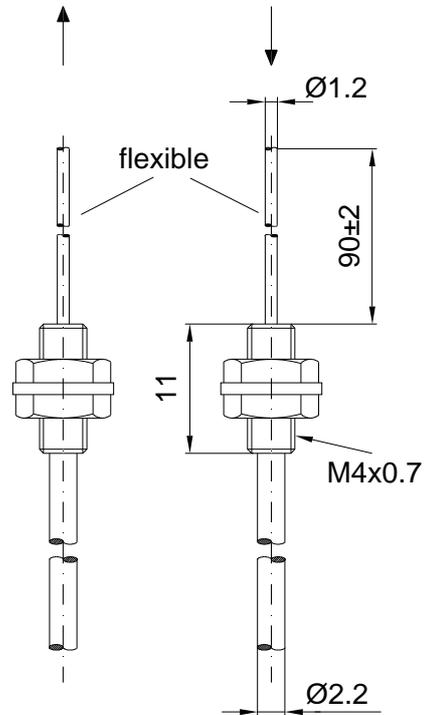
**POF-D-100-M4/d1.2-(1.0)-2000**

(Item no. 802145)



POF = Plastic optical fiber  
 D = Through-beam operation  
 120 = Sensing range 120mm  
 M4/d1.2 = Sensor head type M4 and Ø 1.2mm  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Brass
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	25mm/--
Light emission:	Axial
Temperatur:	-25°C...+70°C
Schutzart:	IP67



All dimensions in mm





Through-beam POFs

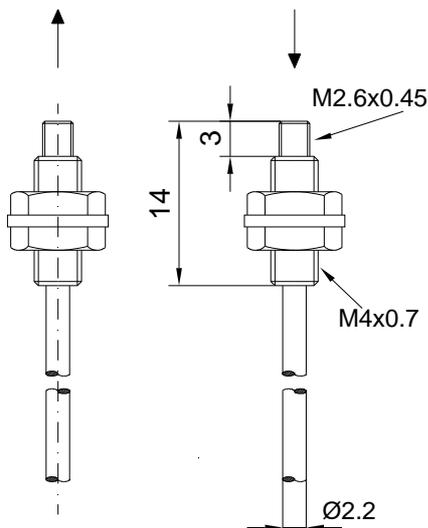
**POF-D-120-M4/M2.6-(1.0)-2000**

(Item no. 802147)



POF = Plastic optical fiber  
 D = Through-beam operation  
 120 = Sensing range 120mm  
 M4/M2.6 = Sensor head type M4 and M2.6  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Brass
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	25mm/--
Light emission:	Axial
Temperature:	-25°C...+70°C
Enclosure rating:	IP67



All dimensions in mm

**POF-D-140-d1.5-(0.5)-2000**

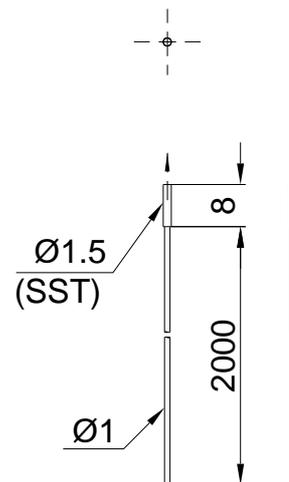
(Item no. 802197)



POF = Plastic optical fiber  
 D = Through-beam operation  
 140 = Sensing range 140mm  
 d1.5 = Sensor head type Ø 1.5mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 1.0mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	2mm/10mm
Light emission:	Axial
Temperature:	-55°C...+80°C
Enclosure rating:	IP67

(Delivery includes reduction sleeves)



All dimensions in mm





Through-beam POFs

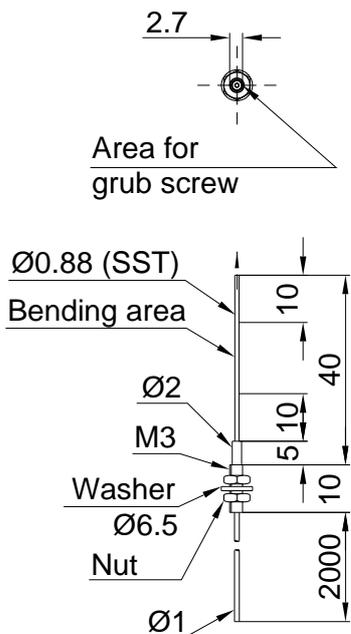
**POF-D-140-M3/d0.88-(0.5)-2000** (Item no. 802198)



POF = Plastic optical fiber  
 D = Through-beam operation  
 140 = Sensing range 140mm  
 M3/d0.88 = Sensor head type M3 and Ø 0.88mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head: Stainless steel 1.4301 (V2A)  
 Design sheath: 2x Ø 1.0mm  
 Design fiber: 2x Ø 0.5mm  
 Bending radius (rigid/flexible): 2mm/10mm  
 Light emission: axial  
 Temperature: -55°C...+80°C  
 Enclosure rating: IP67

(Delivery includes reduction sleeves)



All dimensions in mm

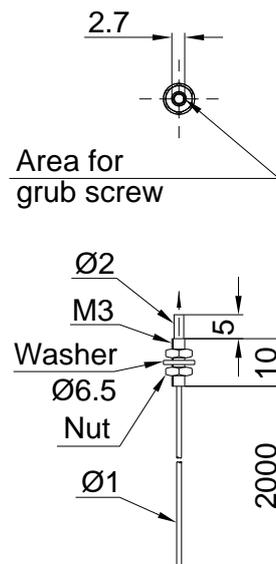
**POF-D-140-M3/d2-(0.5)-2000** (Item no. 802199)



POF = Plastic optical fiber  
 D = Through-beam operation  
 140 = Sensing range 140mm  
 M3/d2 = Sensor head type M3 and Ø 2mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head: Stainless steel 1.4301 (V2A)  
 Design sheath: 2x Ø 1.0mm  
 Design fiber: 2x Ø 0.5mm  
 Bending radius (rigid/flexible): 2mm/10mm  
 Light emission: axial  
 Temperature: -55°C...+80°C  
 Enclosure rating: IP67

(Delivery includes reduction sleeves)



All dimensions in mm

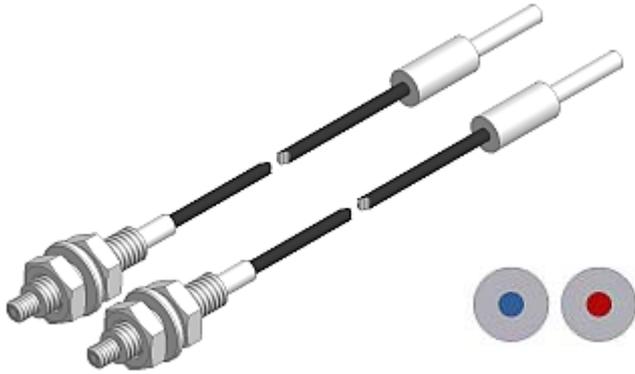




Through-beam POFs

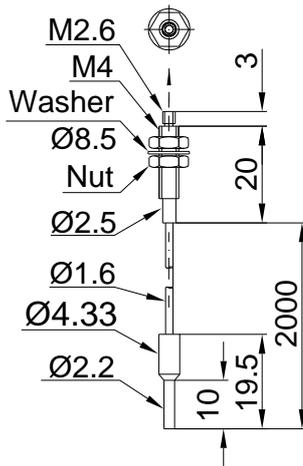
**POF-D-140-M4/M2.6-(1.0)-2000**

(Item no. 802200)



POF = Plastic optical fiber  
 D = Through-beam operation  
 140 = Sensing range 140mm  
 M4/M2.6 = Sensor head type M4 and M2.6  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	(to be supplemented)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	10mm/10mm
Light emission:	Axial
Temperature:	-60°C...+200°C
Enclosure rating:	IP40



All dimensions in mm

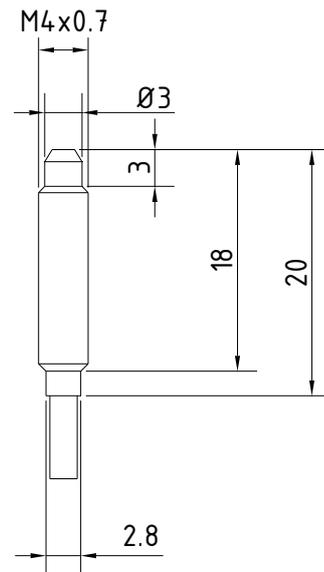
**POF-D-200-M4/d3-(1.0)-2000**

(Item no. 802201)



POF = Plastic optical fiber  
 D = Through-beam operation  
 200 = Sensing range 200mm  
 M4/d3 = Sensor head type M4 and Ø 3mm  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Brass
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	25mm/--
Light emission:	Axial
Temperature:	-30°C...+70°C
Enclosure rating:	(to be supplemented)



All dimensions in mm

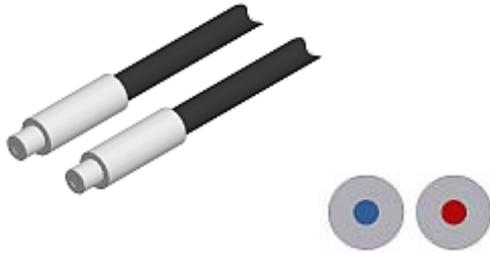




Through-beam POFs

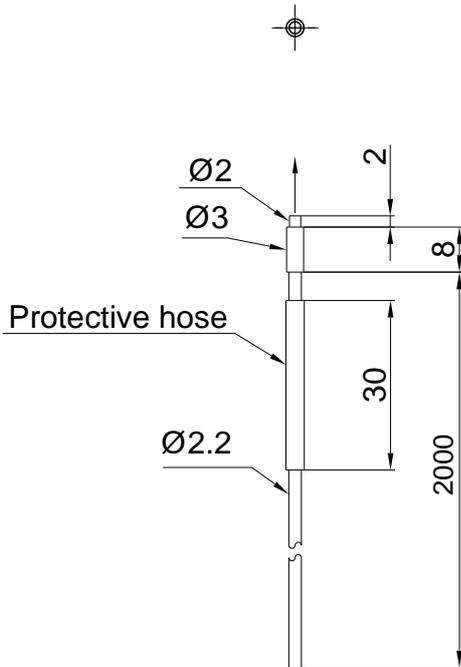
**POF-D-290-d3/d2-(1.1)-2000**

(Item no. 802207)



POF = Plastic optical fiber  
 D = Through-beam operation  
 290 = Sensing range 290mm  
 d3/d2 = Sensor head type Ø 3mm and Ø 2mm  
 (1.1) = Fiber cross section Ø 1.1mm (transmitter and receiver)  
 2000 = Total length 2000mm

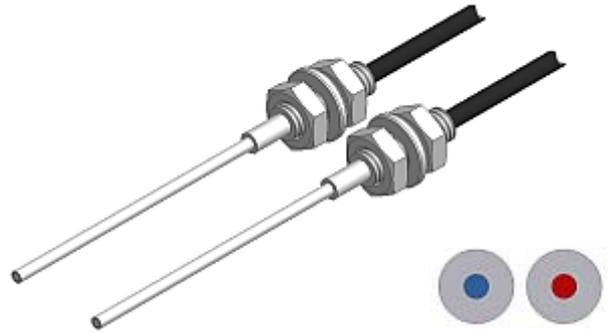
Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.1mm
Bending radius (rigid/flexible):	1mm/--
Light emission:	Axial
Temperature:	-40°C...+60°C
Enclosure rating:	IP67



All dimensions in mm

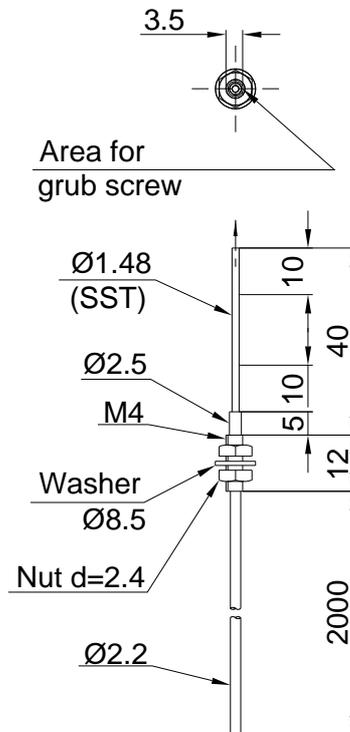
**POF-D-400-M4/d1.48-(1.0)-2000**

(Item no. 802203)



POF = Plastic optical fiber  
 D = Through-beam operation  
 400 = Sensing range 400mm  
 M4/d1.48 = Sensor head type M4 and Ø 1.48mm  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	4mm/10mm
Light emission:	Axial
Temperature:	-55°C...+80°C
Enclosure rating:	IP67



All dimensions in mm





Through-beam POFs

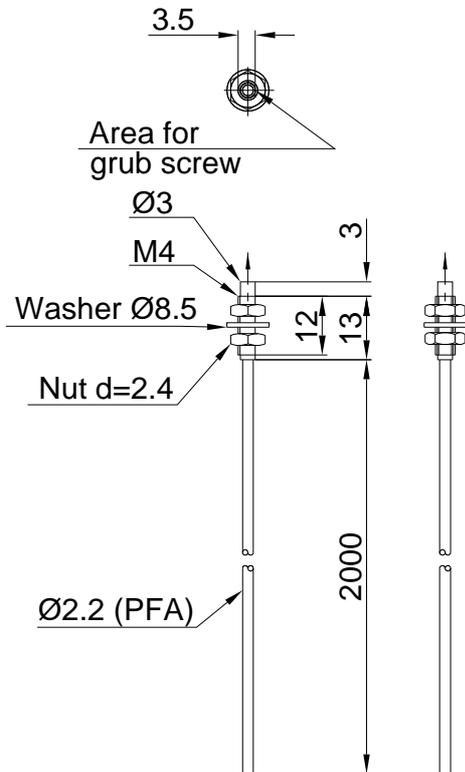
**POF-D-440-M4/d3-(1.0)-2000**

(Item no. 802204)



POF = Plastic optical fiber  
 D = Through-beam operation  
 440 = Sensing range 440mm  
 M4/d3 = Sensor head type M4 and Ø 3mm  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head: (to be supplemented)  
 Design sheath: 2x Ø 2.2mm  
 Design fiber: 2x Ø 1.0mm  
 Bending radius (rigid/flexible): 25mm/25mm  
 Light emission: Axial  
 Temperature: -60°C...+130°C  
 Enclosure rating: IP40



All dimensions in mm

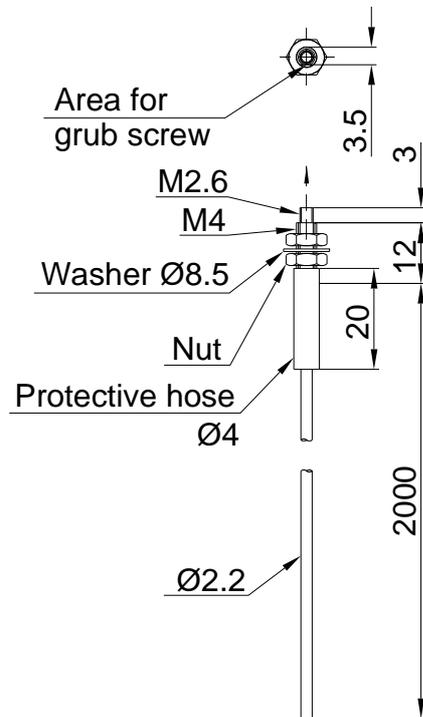
**POF-D-530-M4/M2.6-(1.0)-2000**

(Item no. 802205)



POF = Plastic optical fiber  
 D = Through-beam operation  
 530 = Sensing range 530mm  
 M4/M2.6 = Sensor head type M4 and M2.6  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head: Stainless steel 1.4301 (V2A)  
 Design sheath: 2x Ø 2.2mm  
 Design fiber: 2x Ø 1.0mm  
 Bending radius (rigid/flexible): 4mm/10mm  
 Light emission: Axial  
 Temperature: -55°C...+80°C  
 Enclosure rating: IP67



All dimensions in mm

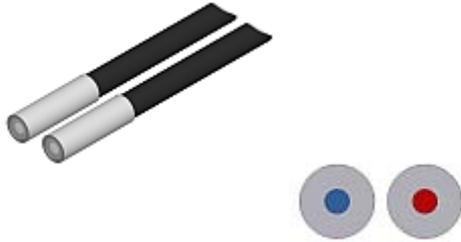




Through-beam POFs

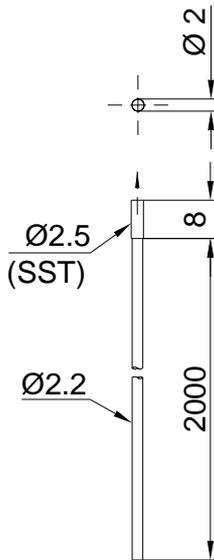
**POF-D-800-d2.5-(1.0)-2000**

(Item no. 802208)



POF = Plastic optical fiber  
 D = Through-beam operation  
 800 = Sensing range 800mm  
 d2.5 = Sensor head type Ø 2.5mm  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

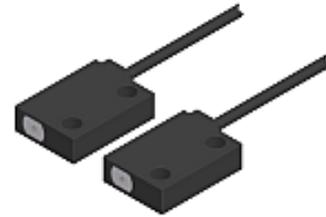
Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	10mm/--
Light emission:	Axial
Temperature:	-40°C...+70°C
Enclosure rating:	IP40



All dimensions in mm

**POF-D-1400-12x8x3-(0.5)-2000**

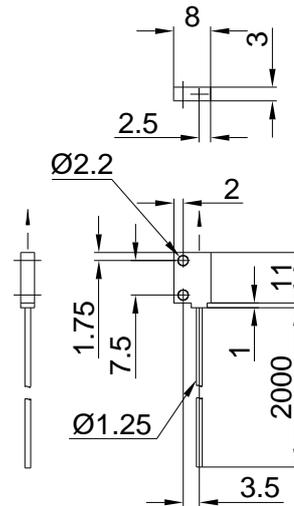
(Item no. 802148)



POF = Plastic optical fiber  
 D = Through-beam operation  
 1400 = Sensing range 1400mm  
 12x8x3 = Sensor head type 12mm x 8mm x 3mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Polycarbonat (PC)
Design sheath:	2x Ø 1.25mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	2mm/10mm
Light emission:	Axial
Temperature:	-40°C...+60°C
Enclosure rating:	IP40

(Delivery includes reduction sleeves)



All dimensions in mm





Through-beam POFs

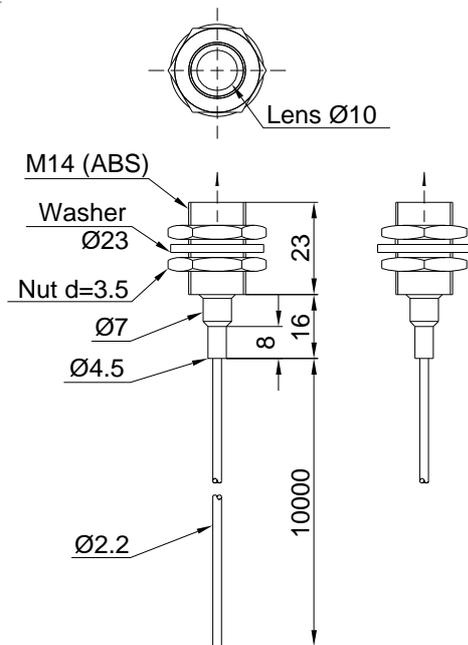
**POF-D-14000-M14-(1.0)-10000**

(Item no. 802209)



POF = Plastic optical fiber  
 D = Through-beam operation  
 14000 = Sensing range 14000mm  
 M14 = Sensor head type M14  
 (1.0) = Fiber cross section  $\varnothing$  1.0mm (transmitter and receiver)  
 10000 = Total length 10000mm

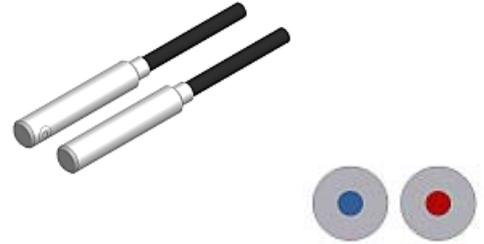
Material sensor head: Plastic (ABS)  
 Design sheath: 2x  $\varnothing$  2.2mm  
 Design fiber: 2x  $\varnothing$  1.0mm  
 Bending radius (rigid/flexible): 4mm/10mm  
 Light emission: Axial  
 Temperature: -40°C...+70°C  
 Enclosure rating: IP67



All dimensions in mm

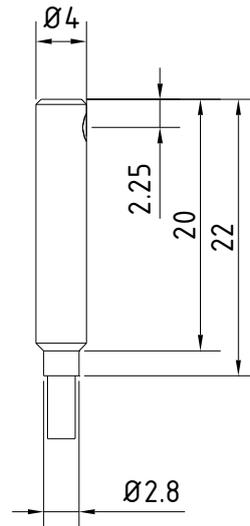
**POF-D/90-100-d4-(1.0)-2000**

(Item no. 802210)



POF = Plastic optical fiber  
 D/90 = Through-beam operation, optics lateral 90°  
 100 = Sensing range 100mm  
 d4 = Sensor head type  $\varnothing$  4mm  
 (1.0) = Fiber cross section  $\varnothing$  1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head: Aluminum  
 Design sheath: 2x  $\varnothing$  2.2mm  
 Design fiber: 2x  $\varnothing$  1.0mm  
 Bending radius (rigid/flexible): 25mm/--  
 Light emission: Lateral  
 Temperature: -30°C...+70°C  
 Enclosure rating: (to be supplemented)



All dimensions in mm

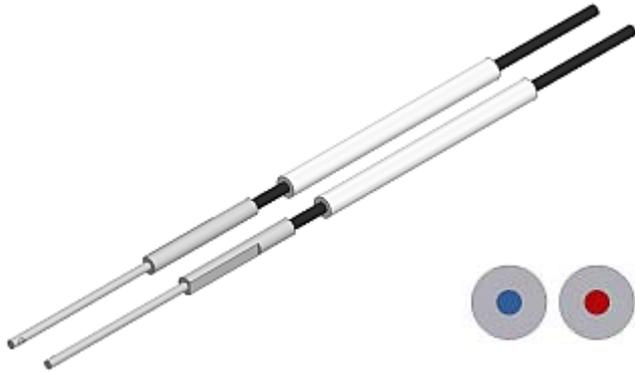




Through-beam POFs

**POF-D/90-180-d2/d1-(1.0)-2000**

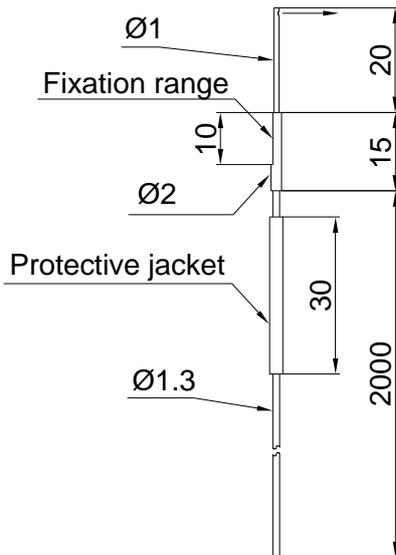
(Item no. 802211)



POF = Plastic optical fiber  
 D/90 = Through-beam operation, optics lateral 90°  
 180 = Sensing range 180mm  
 d2/d1 = Sensor head type Ø 2mm and Ø 1mm  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 1.5mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	4mm/10mm
Light emission:	Lateral
Temperature:	-55°C...+80°C
Enclosure rating:	IP30

(Delivery includes reduction sleeves)



All dimensions in mm

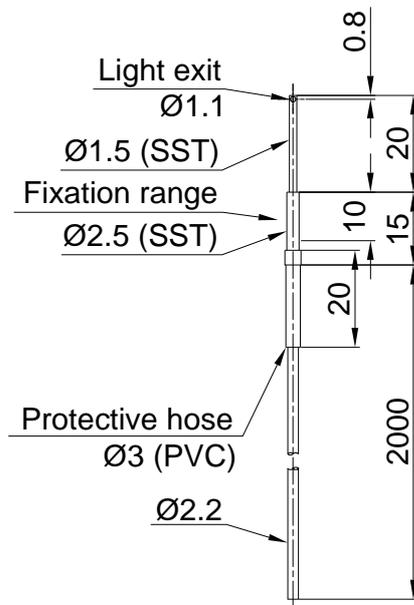
**POF-D/90-200-d2.5/d1.5-(1.0)-2000**

(Item no. 802212)



POF = Plastic optical fiber  
 D/90 = Through-beam operation, optics lateral 90°  
 200 = Sensing range 200mm  
 d2.5/d1.5 = Sensor head type Ø 2.5mm and Ø 1.5mm  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	4mm/10mm
Light emission:	Lateral
Temperature:	-55°C...+80°C
Enclosure rating:	IP30



All dimensions in mm





Through-beam POFs

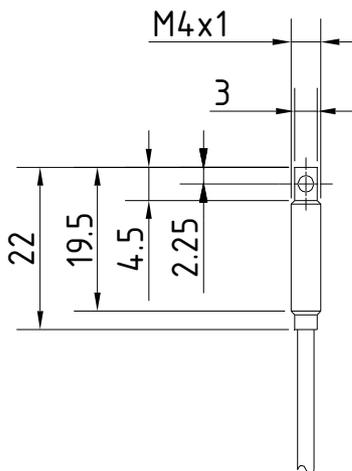
**POF-D/90-200-M4/d3-(1.0)-2000**

(Item no. 802213)



POF = Plastic optical fiber  
 D/90 = Through-beam operation, optics lateral 90°  
 200 = Sensing range 200mm  
 M4/d3 = Sensor head type Ø 3mm  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

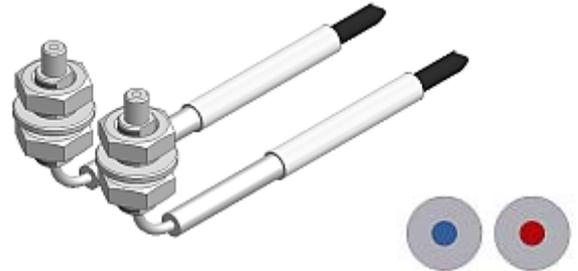
Material sensor head:	Aluminum
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	25mm/--
Light emission:	Lateral
Temperature:	-30°C...+70°C
Enclosure rating:	(to be supplemented)



All dimensions in mm

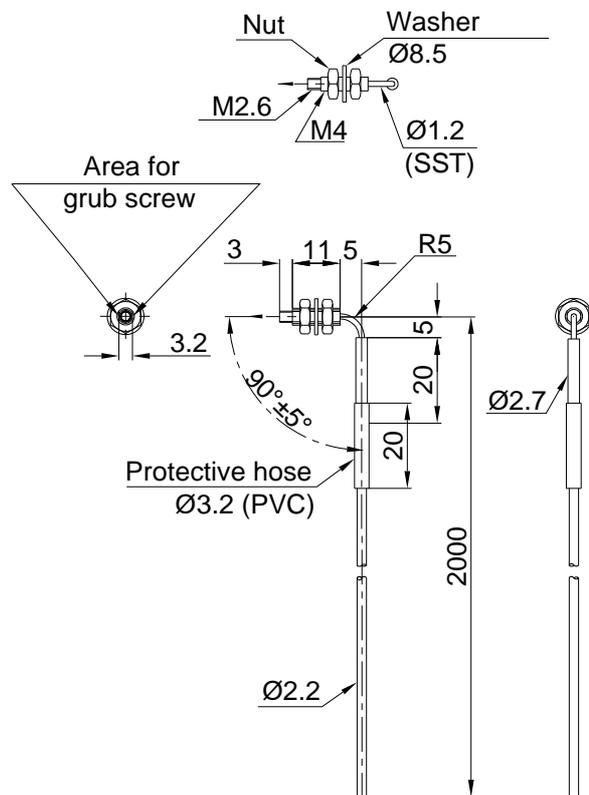
**POF-D/90-230-M4/M2.6-(1.0)-2000**

(Item no. 802202)



POF = Plastic optical fiber  
 D/90 = Through-beam operation, optics lateral 90°  
 230 = Sensing range 230mm  
 M4/M2.6 = Sensor head type M4 and M2.6  
 (1.0) = Fiber cross section Ø 1.0mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	4mm/10mm
Light emission:	Lateral
Temperature:	-55°C...+80°C
Enclosure rating:	IP67



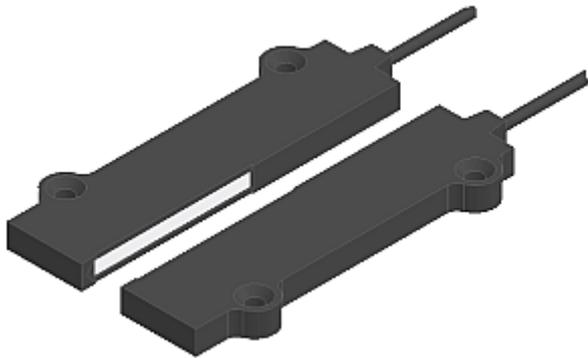
All dimensions in mm





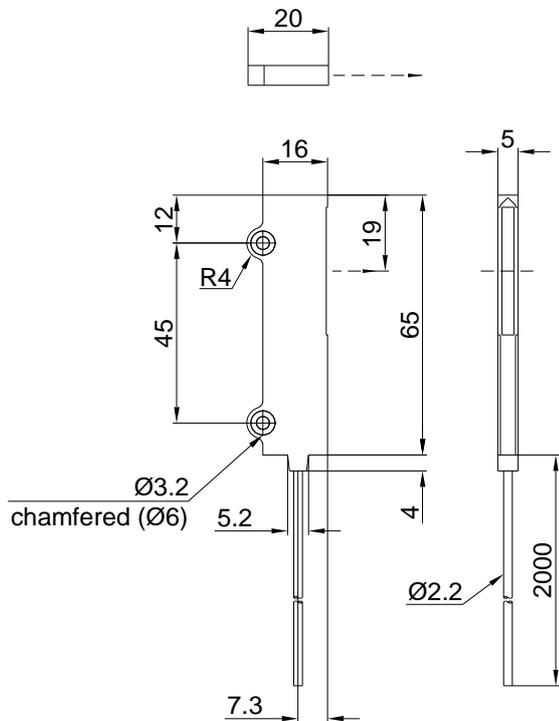
Through-beam POFs

**POF-D/90-350-69x20x5-(1.1)-2000** (Item no. 802214)



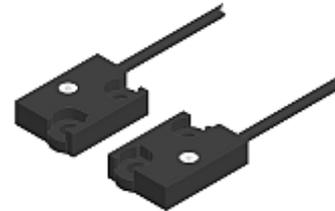
POF = Plastic optical fiber  
 D/90 = Through-beam operation, optics lateral 90°  
 350 = Sensing range 350mm  
 69x20x5 = Sensor head type 69mm x 20mm x 5mm  
 (1.1) = Fiber cross section Ø 1.1mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Polycarbonat (PC)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.1mm
Bending radius (rigid/flexible):	1mm/-
Light emission:	Lateral, line 32mm
Temperature:	-40°C...+55°C
Enclosure rating:	IP40



All dimensions in mm

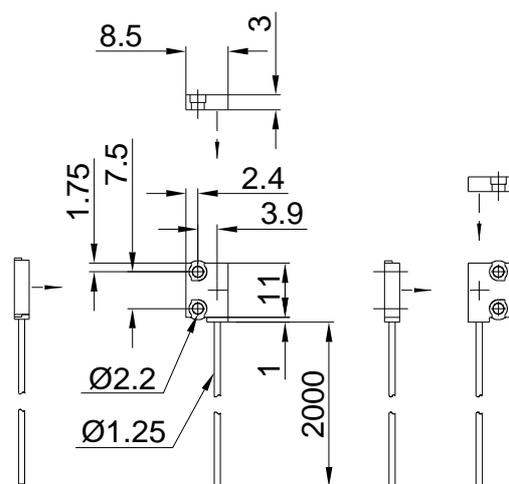
**POF-D/90-400-12x8.5x3-(0.5)-2000** (Item no. 802215)



POF = Plastic optical fiber  
 D/90 = Through-beam operation, optics lateral 90°  
 400 = Sensing range 400mm  
 12x8.5x3 = Sensor head type 12mm x 8.5mm x 3mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Polycarbonat (PC)
Design sheath:	2x Ø 1.25mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	2mm/10mm
Light emission:	Lateral
Temperature:	-40°C...+60°C
Enclosure rating:	IP40

(Delivery includes reduction sleeves)



All dimensions in mm

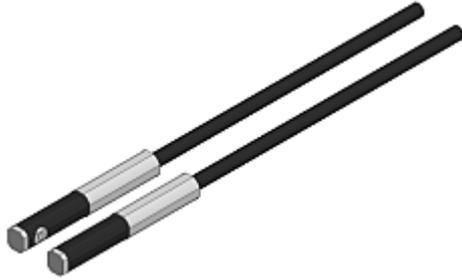




Through-beam POFs

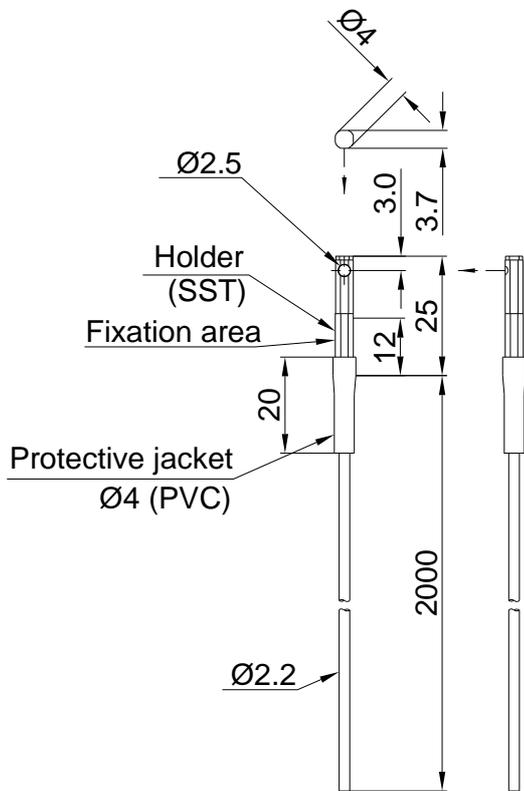
**POF-D/90-700-d4-(1.1)-2000**

(Item no. 802206)



POF = Plastic optical fiber  
 D/90 = Through-beam operation, optics lateral 90°  
 700 = Sensing range 700mm  
 d4 = Sensor head type Ø 4mm  
 (1.1) = Fiber cross section Ø 1.1mm (transmitter and receiver)  
 2000 = Total length 2000mm

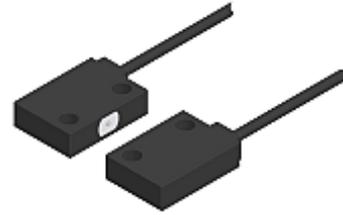
Material sensor head:	Polycarbonat (PC)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.1mm
Bending radius (rigid/flexible):	1mm/--
Light emission:	Lateral
Temperature:	-40°C...+60°C
Enclosure rating:	IP30



All dimensions in mm

**POF-D/90-800-12x8x3-(0.5)-2000**

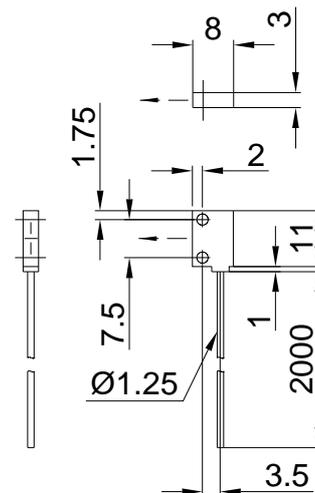
(Item no. 802143)



POF = Plastic optical fiber  
 D/90 = Through-beam operation, optics lateral 90°  
 800 = Sensing range 800mm  
 12x8x3 = Sensor head type 12mm x 8mm x 3mm  
 (0.5) = Fiber cross section Ø 0.5mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Polycarbonat (PC)
Design sheath:	2x Ø 1.25mm
Design fiber:	2x Ø 0.5mm
Bending radius (rigid/flexible):	2mm/10mm
Light emission:	Lateral
Temperature:	-40°C...+60°C
Enclosure rating:	IP40

(Delivery includes reduction sleeves)

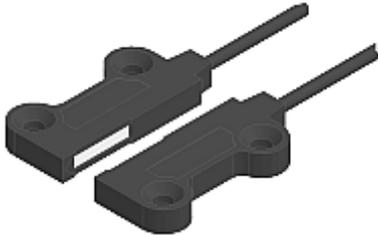


All dimensions in mm



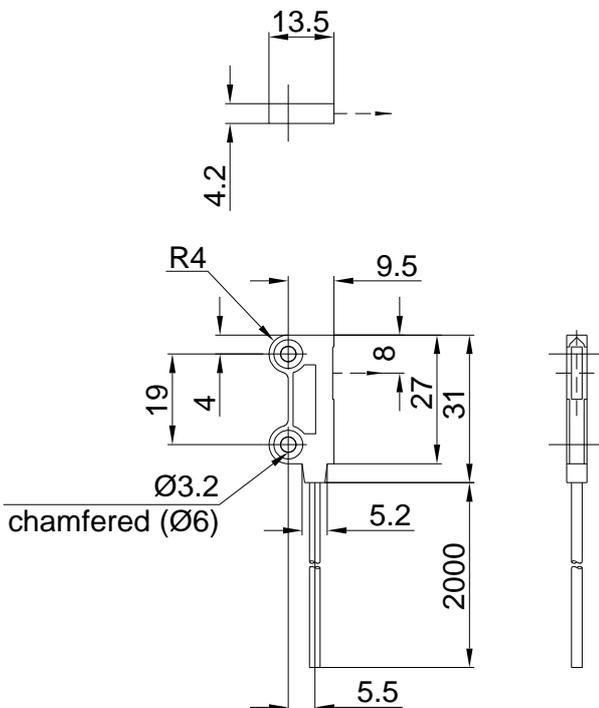
Through-beam POFs

**POF-D/90-1500-31x13.5x4.2-(1.1)-2000** (Item no. 802216)



POF = Plastic optical fiber  
 D/90 = Through-beam operation, optics lateral 90°  
 1500 = Sensing range 1500mm  
 31x13.5x4.2 = Sensor head type 31mm x 13.5mm x 4.2mm  
 (1.1) = Fiber cross section Ø 1.1mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Polycarbonat (PC)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.1mm
Bending radius (rigid/flexible):	1mm/--
Light emission:	Lateral, line 11mm
Temperature:	-40°C...+55°C
Enclosure rating:	IP40



All dimensions in mm



## Through-beam POFs

POF-D/90-CSC-31x13.5x4.2-(2.2x11)-2000

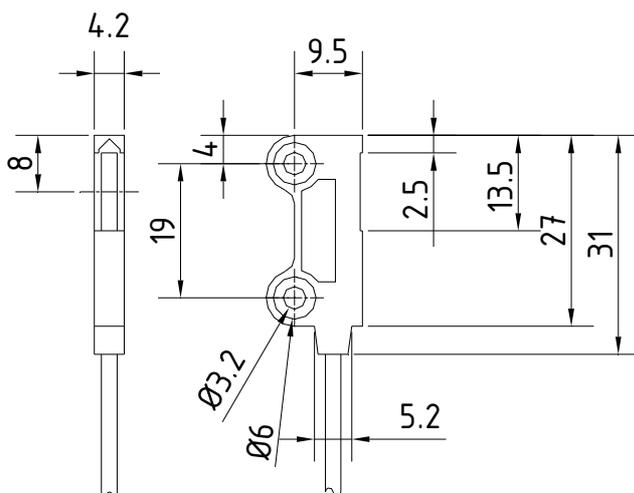
(Item no. 802144)



POF = Plastic optical fiber  
 D/90 = Through-beam operation, optics lateral 90°  
 CSC = Cross Section Converter  
 31x13.5x4.2 = Sensor head type 31mm x 13.5mm x 4.2mm  
 (2.2x11) = Fiber cross section 2.2mm x 11mm (transmitter and receiver)  
 2000 = Total length 2000mm

Material sensor head:	Polycarbonat (PC)
Design sheath:	2x Ø 1.3mm
Design fiber:	2x (2.2mm x 11mm)
Sensing range:	up to 1900mm
Bending radius (rigid/flexible):	2mm/--
Light emission:	Lateral
Temperature:	-40°C...+70°C
Enclosure rating:	IP40
Special feature:	Can be used in moving applications

(Delivery includes reduction sleeves)



All dimensions in mm



Through-beam POFs

**POF-SPX2-d2.2-(1.0)-(length)** (Item no. see below)



POF = Plastic optical fiber  
 SPX2 = Simplex, fiber 2-fold  
 d2.2 = Sheath Ø 2.2mm  
 (1.0) = Fiber cross section 1.0mm (transmitter and receiver)  
 (length) = Length as per request (e.g. 1000mm, 2000mm)

Design sheath: 2x Ø 2.2mm  
 Design fiber: 2x Ø 1.0mm  
 Bending radius (rigid/flexible): 10mm/--  
 Temperature: -20°C...+50°C  
 Enclosure rating: IP67

**POF-SPX2-d2.2-(1.0)-1000** (Item no. 802079)  
**POF-SPX2-d2.2-(1.0)-2000** (Item no. t.b.d.y.)



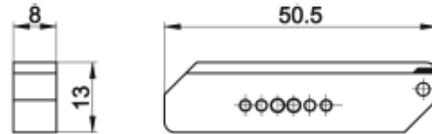
All dimensions in mm

**POF-CUTTER** (Item no. 802091)



Fiber cutting tool  
 for optical fibers of POF Series

Material: Plastic  
 Dimensions: 50.5 mm x 8 mm x 13 mm



All dimensions in mm



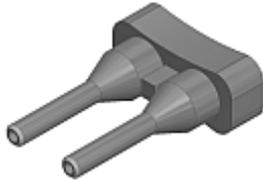


Accessories

**POF-SLV-2.2/1.1**

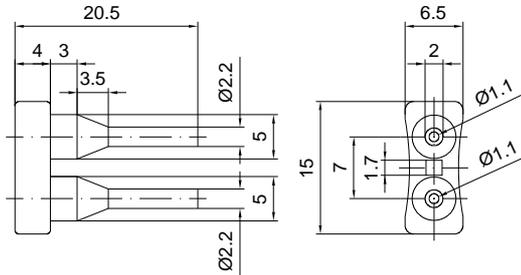
(Item no. 802080)

(in case of a plastic optical fiber with a sheath  $\varnothing$  1.0 mm or  $\varnothing$  1.1 mm included, but can be ordered separately as well)



Reduction sleeve 2.2/1.1 (plastic, black)  
(delivery as a set = 1 pair for 1 transmitter and 1 receiver)

Set includes:      2 end sleeves +  
                         2 crimp connections +  
                         1 leadthrough

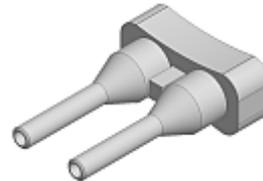


All dimensions in mm

**POF-SLV-2.2/1.3**

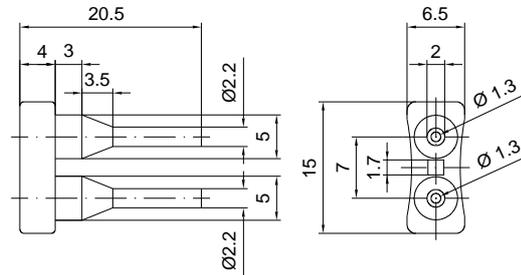
(Item no. 802092)

(in case of a plastic optical fiber with a sheath  $\varnothing$  1.25 mm or  $\varnothing$  1.3 mm included, but can be ordered separately as well)



Reduction sleeve 2.2/1.3 (plastic, grey)  
(delivery as a set = 1 pair for 1 transmitter and 1 receiver)

Set includes:      2 end sleeves +  
                         2 crimp connections +  
                         1 leadthrough



All dimensions in mm