

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.

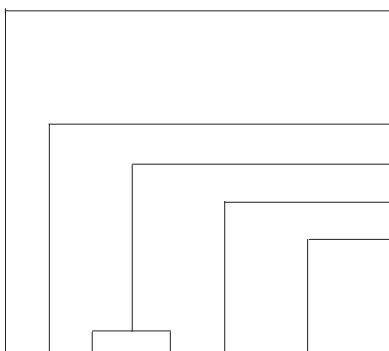
The opto-electronic fiber optic sensor includes transmitter, receiver, evaluation electronics and amplifier. It uses e.g. white light or IR light, which is transmitted through the fiber by the principle of total reflection (see figure „reflection inside a plastic optical fiber“).

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

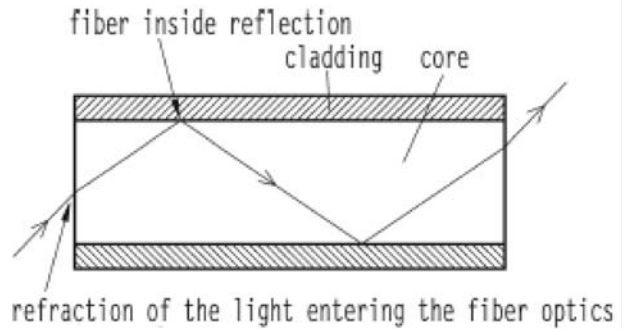
Applications with plastic optical fibers of POF Series

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).

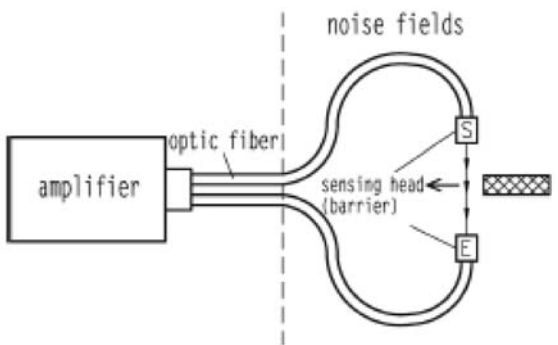
As no electrical energy is transmitted over the fibers it is possible to use them in applications with high magnetic fields and with high levels of electrical noise or in radioactive environments as well as in explosion-hazardous areas. In these cases it is necessary to mount the amplifier away from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

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

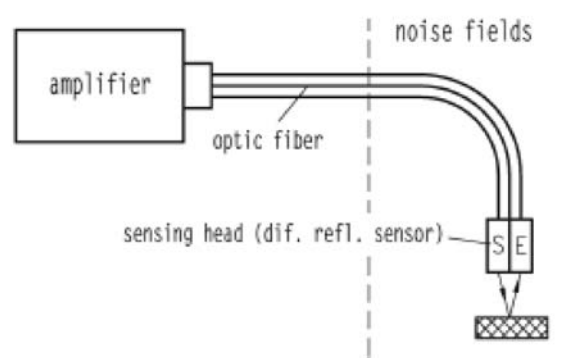
Reflection inside a plastic optical fiber



Through-beam sensor



Diffuse reflection sensor



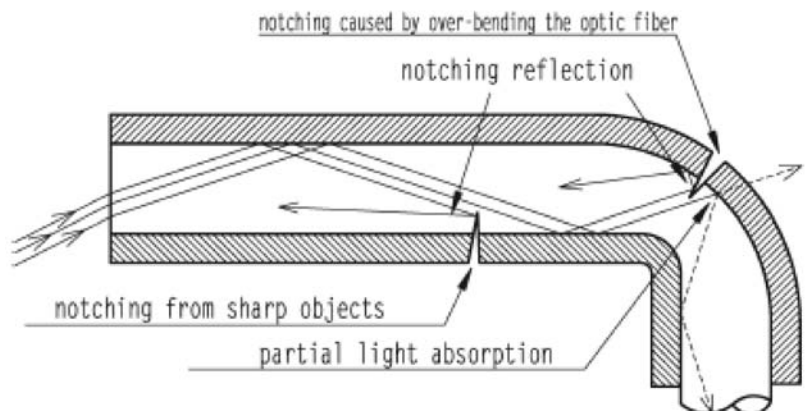
Instructions for use

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

POF-R-12-18x14x6-(0.5)-2000	Page 4
POF-R-25-d4/d1.5-(1.1)-1000	Page 4
POF-R-30-M6x0.75/d2.5-(1.0)-2000	Page 5
POF-R-32-d3-(0.5)-2000	Page 5
POF-R-32-M4/M3-(0.5)-2000	Page 6
POF-R-35-d4/d3-(0.5)-2000	Page 6
POF-R-35-M4/d3-(0.5)-2000	Page 7
POF-R-40-M6x0.75/d4-(1.0)-2000	Page 7
POF-R-45-M4/d2.5-(0.5)-2000	Page 8
POF-R-55-M4/M3-(0.5)-2000	Page 8
POF-R-60-M5x0.5-(0.5)-2000	Page 9
POF-R-75-d6/d4-(1.0)-2000	Page 9
POF-R-75-M6/d4.5-(1.0)-2000	Page 10
POF-R-90-M4-(1.0)-2000	Page 10
POF-R-110-20x20x5-(1.1)-2000	Page 11
POF-R-110-d3-(1.0)-2000	Page 11
POF-R-110-M6/d2.5-(1.1)-2000	Page 12
POF-R-125-M3/d2-(0.5)-2000	Page 12

POF-R-125-M4/d2.5-(0.5)-2000	Page 13
POF-R-220-M6-(1.1)-2000	Page 13
POF-R-230-15x9.5x5.2-(1.1)-2000	Page 14
POF-R-400-M6/d4.5-(1.0)-2000	Page 14

Reflected light optical fibers - high temperature resistant

POF-R-HT-M6x0.75/d4-(1.0)-2000-VA	Page 15
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Reflected light optical fibers - optics lateral 90°

POF-R/90-12-24x21x4-(0.5)-2000	Page 16
POF-R/90-25-d3/d1.5-(0.5)-2000	Page 16
POF-R/90-45-d5/d2-(1.1)-2000	Page 17
POF-R/90-85-M8/d4-(1.0)-2000	Page 17

Reflected light optical fibers - simplex

POF-SPX1-d2.2-(1.0)-(length)	Page 18
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Through-beam sensors:

Through-beam optical fibers - optics axial

POF-D-40-d1-(0.5)-500	Page 19
POF-D-80-15x15x5-(0.5)-2000	Page 19
POF-D-100-d3/d1.5-(0.5)-2000	Page 20
POF-D-100-d4/d3-(0.5)-2000	Page 20
POF-D-100-M3/d2-(0.5)-2000	Page 21
POF-D-100-M4/d1.2-(1.0)-2000	Page 21
POF-D-120-M4/M2.6-(1.0)-2000	Page 22
POF-D-140-d1.5-(0.5)-2000	Page 22
POF-D-140-M3/d0.88-(0.5)-2000	Page 23
POF-D-140-M3/d2-(0.5)-2000	Page 23
POF-D-140-M4/M2.6-(1.0)-2000	Page 24
POF-D-200-M4/d3-(1.0)-2000	Page 24
POF-D-290-d3/d2-(1.1)-2000	Page 25
POF-D-400-M4/d1.48-(1.0)-2000	Page 25
POF-D-440-M4/d3-(1.0)-2000	Page 26
POF-D-530-M4/M2.6-(1.0)-2000	Page 26
POF-D-800-d2.5-(1.0)-2000	Page 27
POF-D-1400-12x8x3-(0.5)-2000	Page 27

POF-D-14000-M14-(1.0)-10000	Page 28
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Through-beam optical fibers - optics lateral 90°

POF-D/90-100-d4-(1.0)-2000	Page 28
POF-D/90-180-d2/d1-(1.0)-2000	Page 29
POF-D/90-200-d2.5/d1.5-(1.0)-2000	Page 29
POF-D/90-200-M4/d3-(1.0)-2000	Page 30
POF-D/90-230-M4/M2.6-(1.0)-2000	Page 30
POF-D/90-350-69x20x5-(1.1)-2000	Page 31
POF-D/90-400-12x8.5x3-(0.5)-2000	Page 31
POF-D/90-700-d4-(1.1)-2000	Page 32
POF-D/90-800-12x8x3-(0.5)-2000	Page 32
POF-D/90-1500-31x13.5x4.2-(1.1)-2000	Page 33
POF-D/90-CSC-31x13.5x4.2-(2.2x11)-2000	Page 34

Through-beam optical fibers - simplex

POF-SPX2-d2.2-(1.0)-(length)	Page 35
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Accessories:

Fiber cutting tool

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

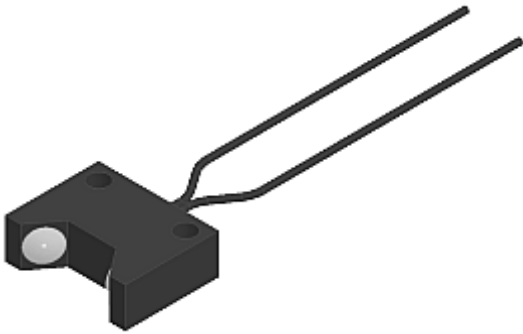
POF-SLV-2.2/1.1	Page 36
POF-SLV-2.2/1.3	Page 36



Reflected Light POFs

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

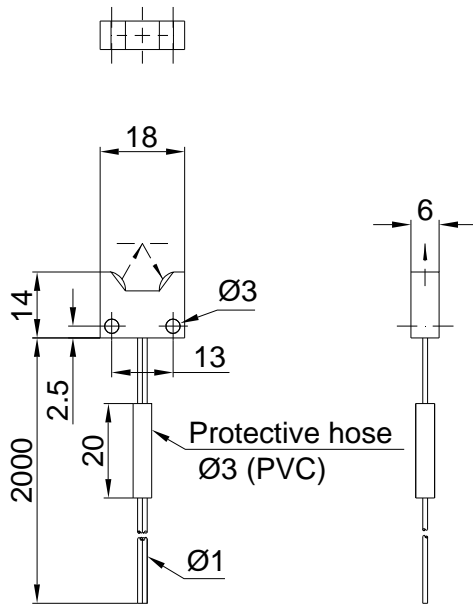
(Item no. 802182)



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

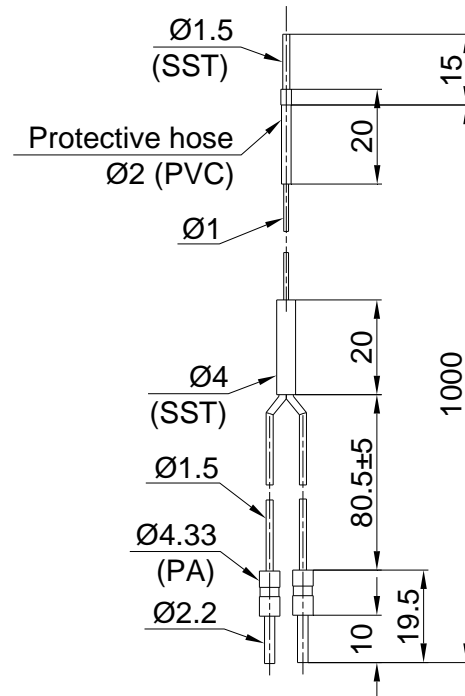
POF-R-25-d4/d1.5-(1.1)-1000

(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





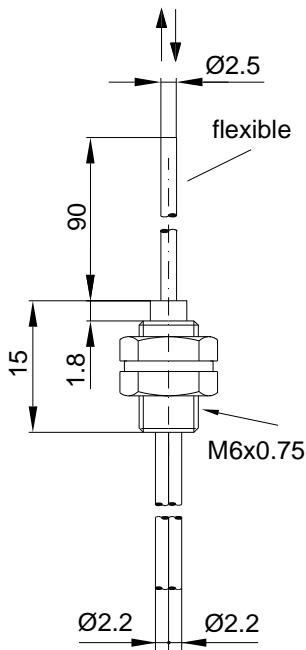
Reflected Light POFs

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

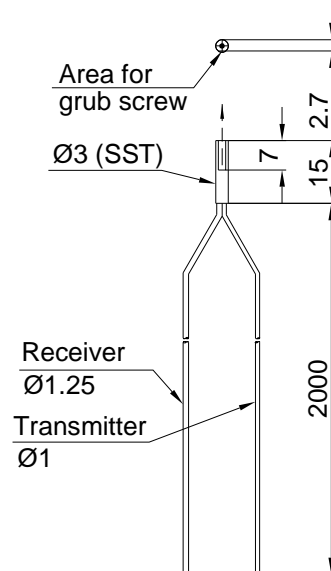
POF-R-32-d3-(0.5)-2000 (Item no. 802183)



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

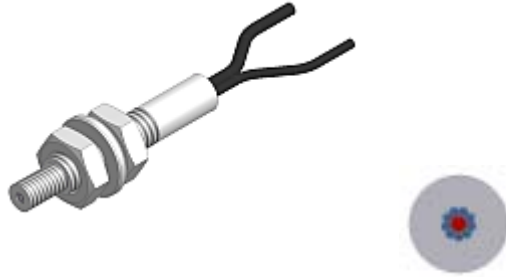




Reflected Light POFs

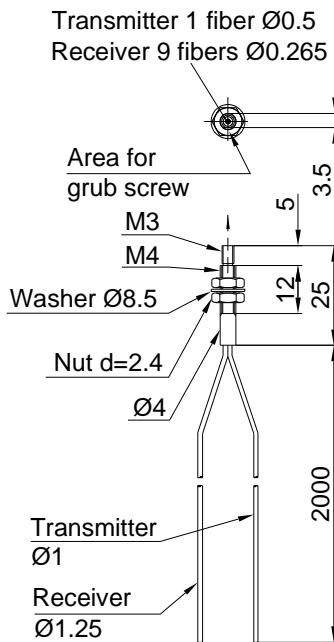
POF-R-32-M4/M3-(0.5)-2000

(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

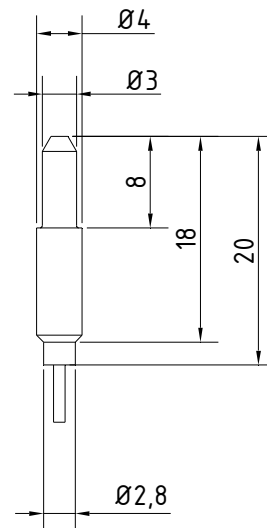
(Item no. 802070)



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)



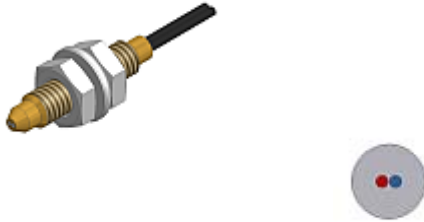
All dimensions in mm



Reflected Light POFs

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

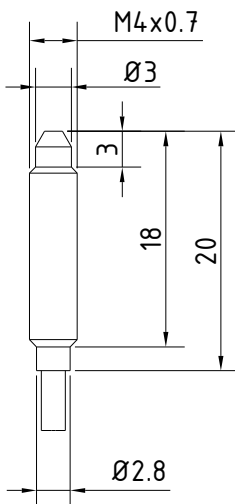
(Item no. 802069)



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

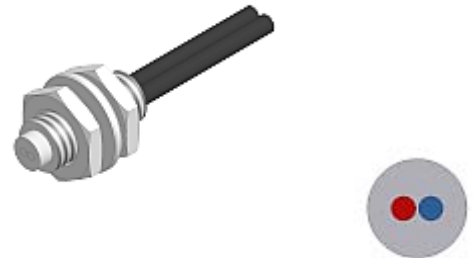
(Delivery includes reduction sleeves)



All dimensions in mm

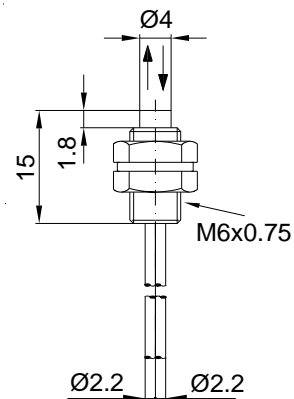
POF-R-40-M6x0.75/d4-(1.0)-2000

(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

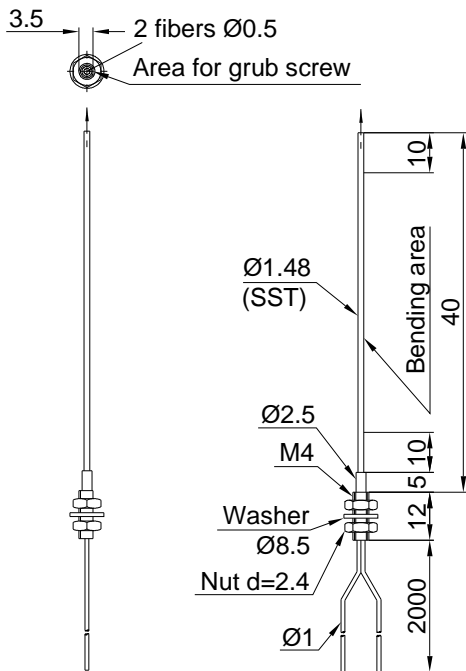
(Item no. 802184)



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

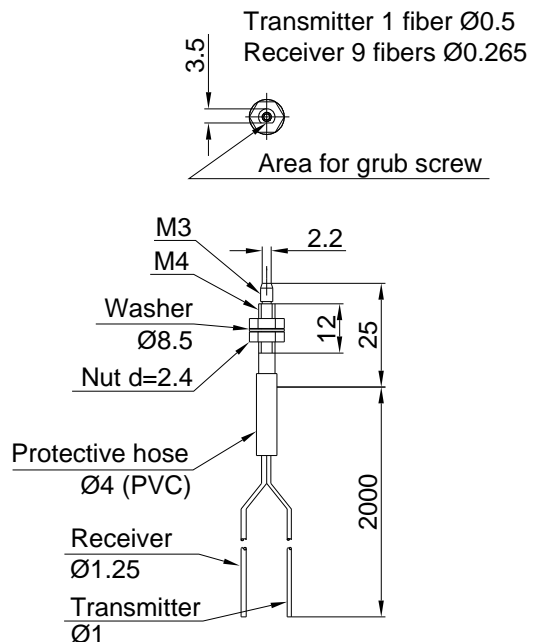
POF-R-55-M4/M3-(0.5)-2000

(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



All dimensions in mm





Reflected Light POFs

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

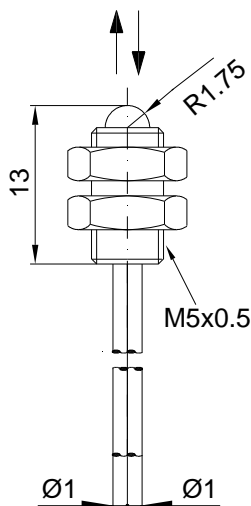
(Item no. 802071)



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

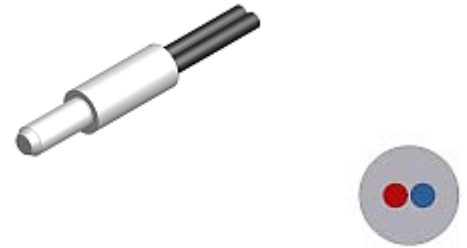
(Delivery includes reduction sleeves)



All dimensions in mm

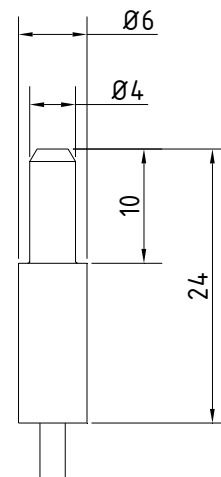
POF-R-75-d6/d4-(1.0)-2000

(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

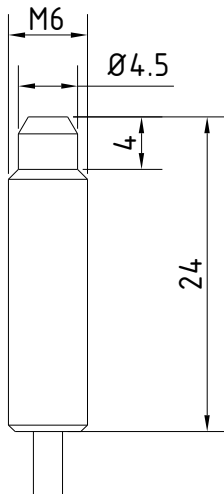
POF-R-75-M6/d4.5-(1.0)-2000

(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

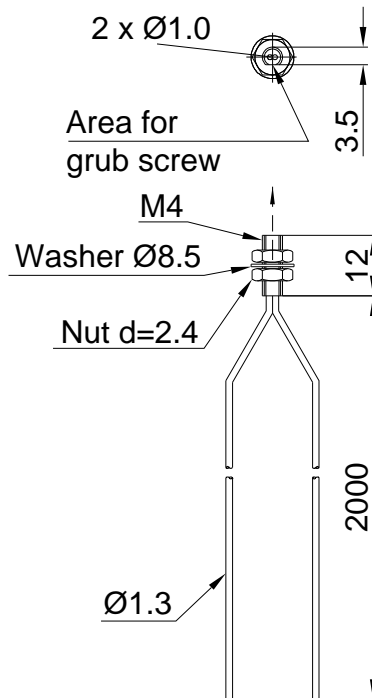
(Item no. 802186)



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

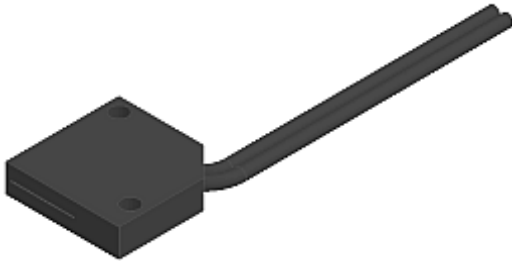




Reflected Light POFs

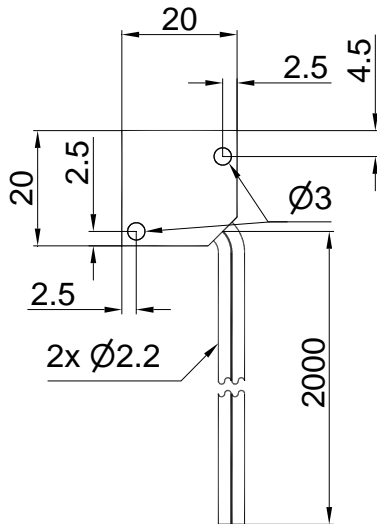
POF-R-110-20x20x5-(1.1)-2000

(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:	Stainless steel 1.4301 (V2A)
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

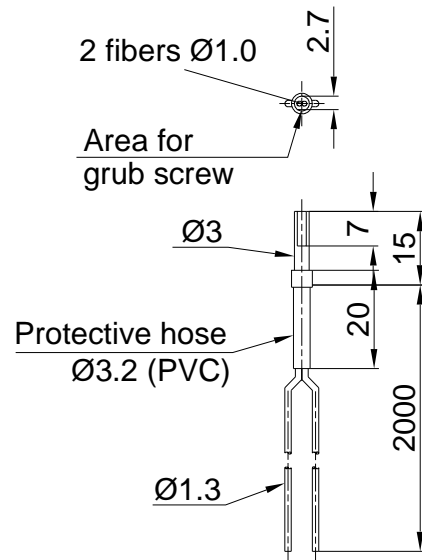
(Item no. 802188)



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

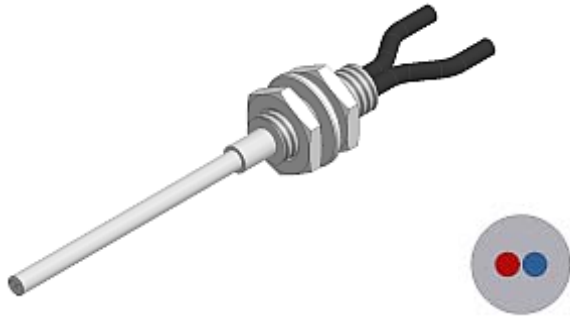




Reflected Light POFs

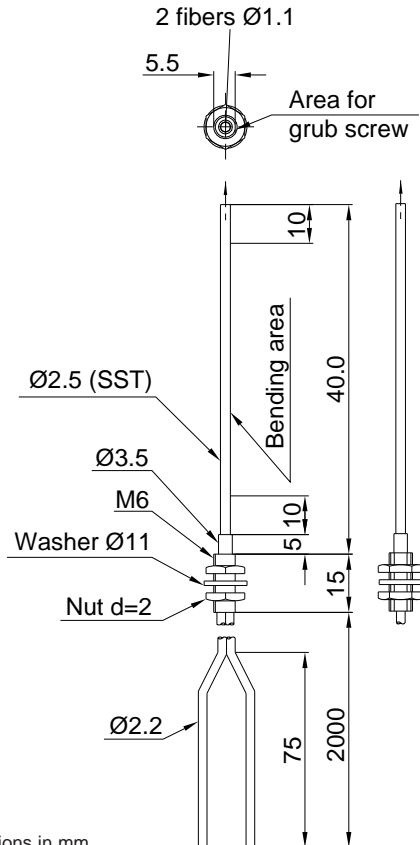
POF-R-110-M6/d2.5-(1.1)-2000

(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

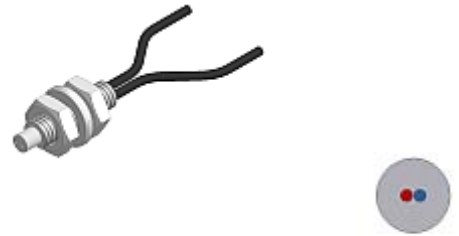
Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.1mm
Bending radius (rigid/flexible):	4mm/10mm
Light emission:	Axial
Temperature:	-55°C...+80°C
Enclosure rating:	IP67



All dimensions in mm

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

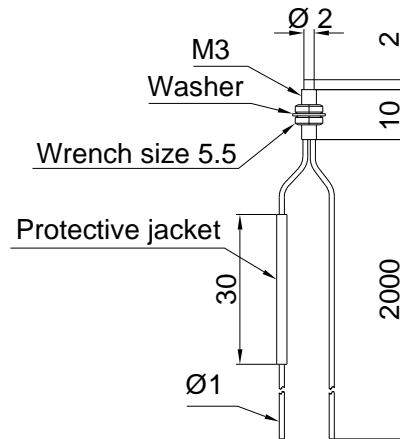
(Item no. 802190)



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

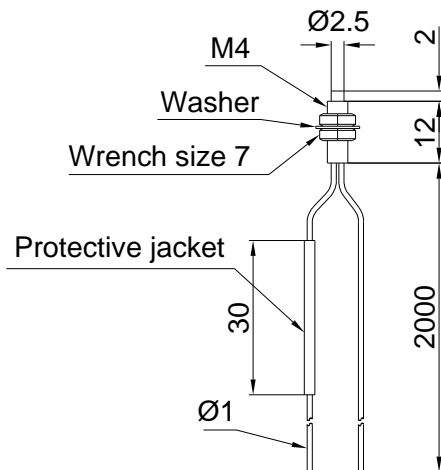
(Item no. 802191)



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

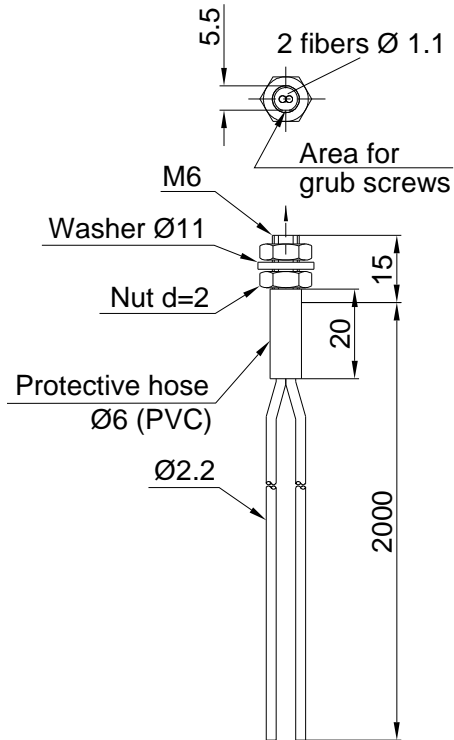
POF-R-220-M6-(1.1)-2000

(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



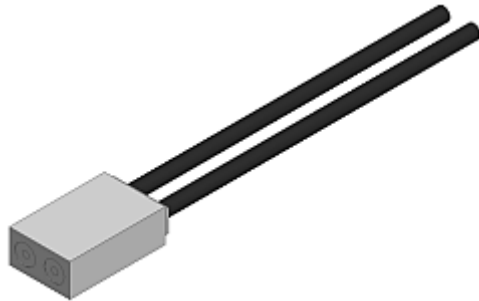
All dimensions in mm





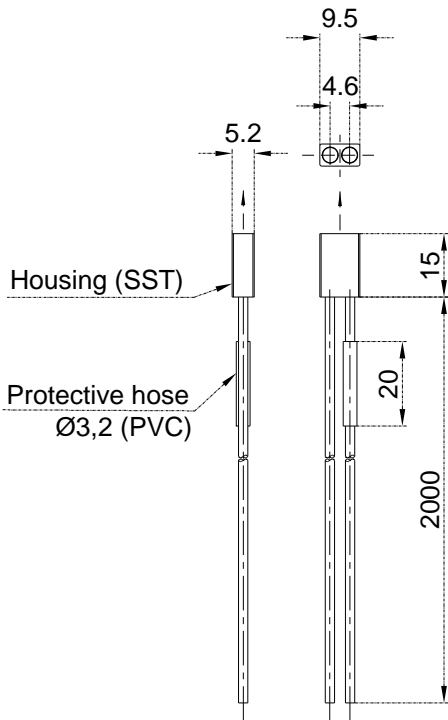
Reflected Light POFs

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



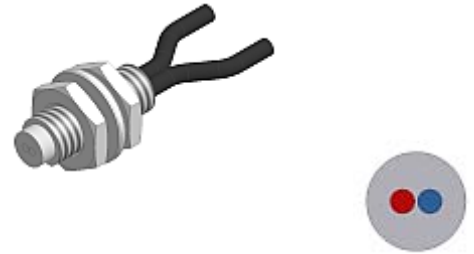
POF = Plastic optical fiber
 R = Reflected light operation
 230 = Sensing range 230mm
 15x9.5x5.2 = Sensor head type 15mm x 9.5mm x 5.2mm
 (1.1) = Fiber cross section Ø 1.1mm (transmitter and receiver)
 2000 = Total length 2000mm

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



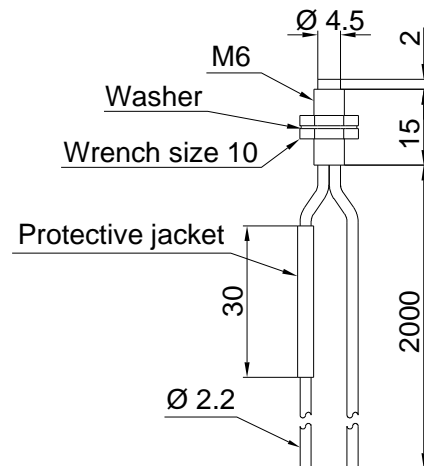
All dimensions in mm

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

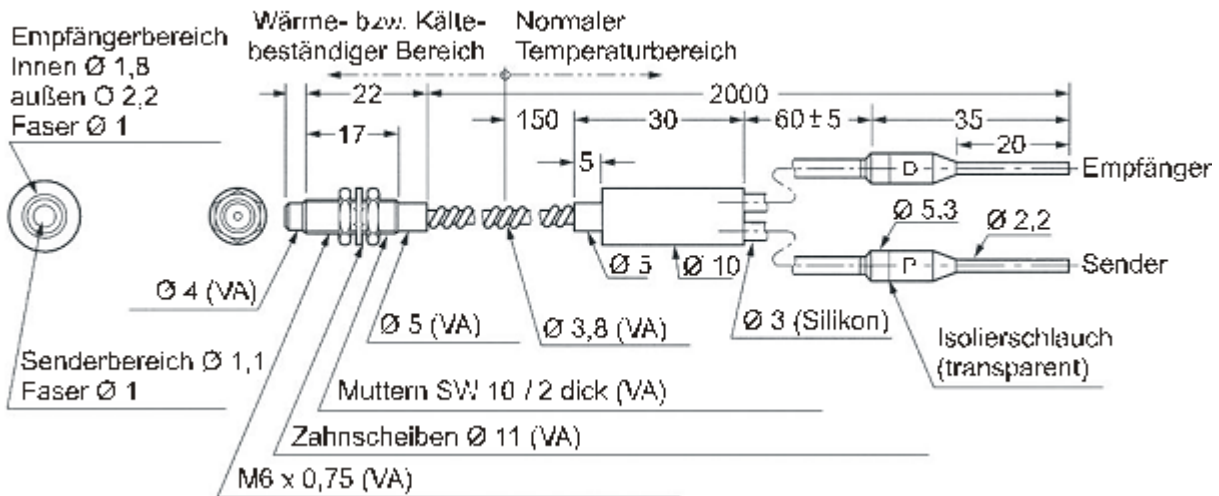
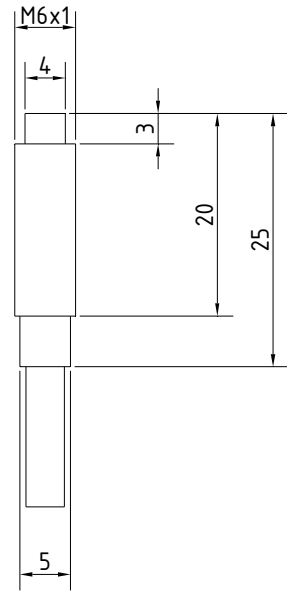
POF-R-HT-M6x0.75/d4-(1.0)-2000-VA

(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)

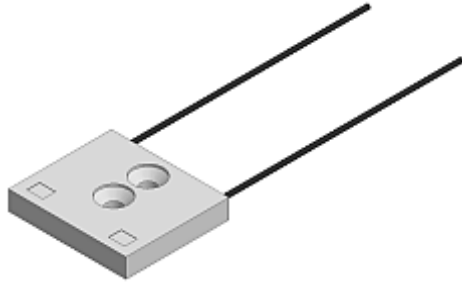


All dimensions in mm



Reflected Light POFs

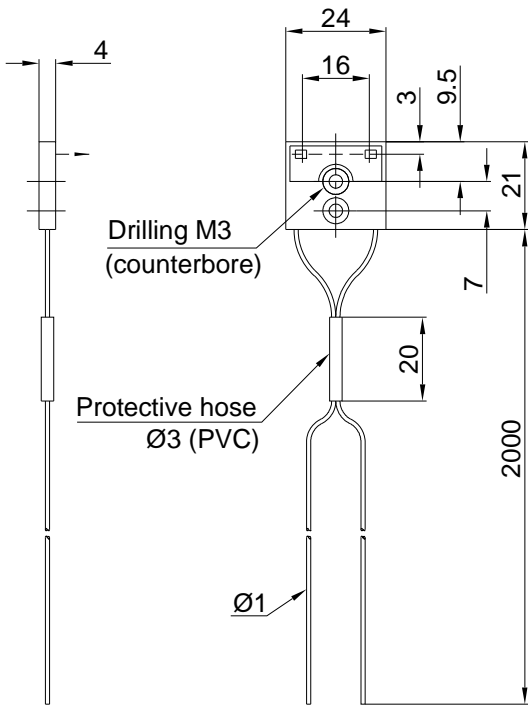
POF-R/90-12-24x21x4-(0.5)-2000 (Item no. 802195)



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

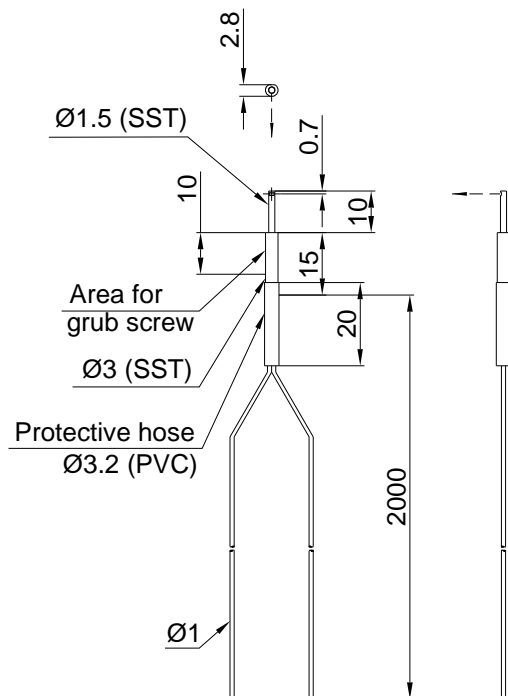
POF-R/90-25-d3/d1.5-(0.5)-2000 (Item no. 802126)



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

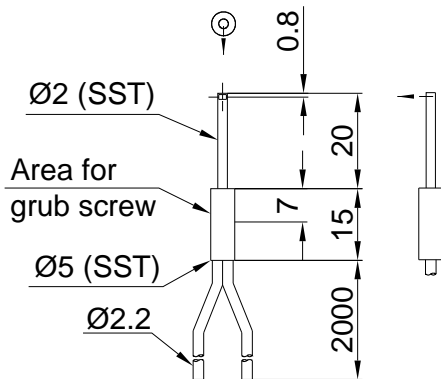
POF-R/90-45-d5/d2-(1.1)-2000

(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

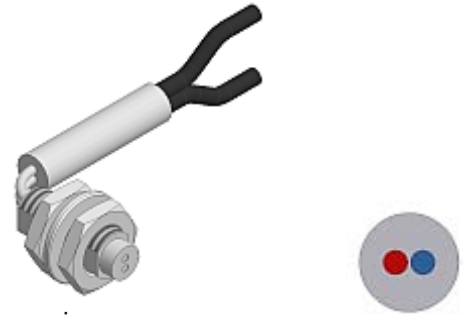
Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.1mm
Bending radius (rigid/flexible):	4mm/10mm
Light emission:	Lateral
Temperature:	-55°C...+80°C
Enclosure rating:	IP30



All dimensions in mm

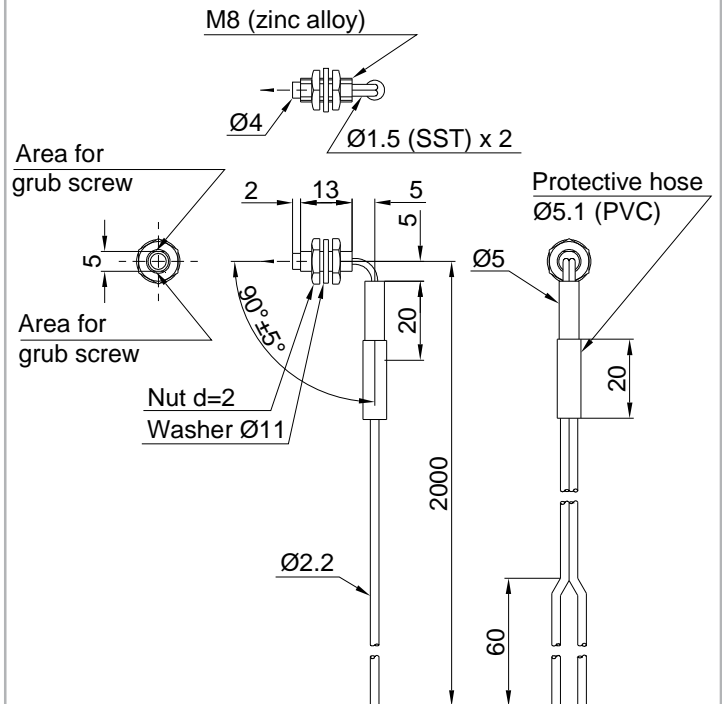
POF-R/90-85-M8/d4-(1.0)-2000

(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

Sensor

Instruments



Through-beam POFs

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

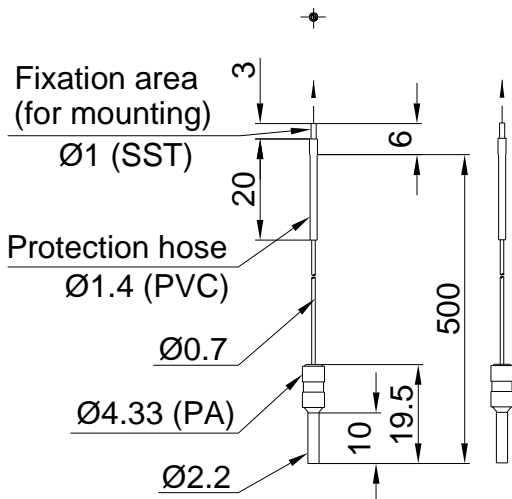
(Item no. 802196)



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

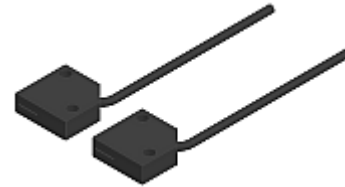
(Delivery includes reduction sleeves)



All dimensions in mm

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

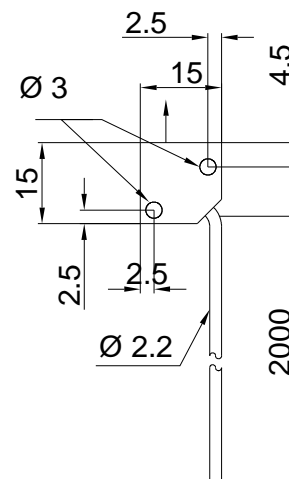
(Item no. 802146)



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

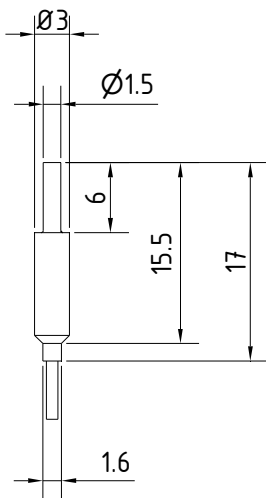
(Item no. 802141)



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

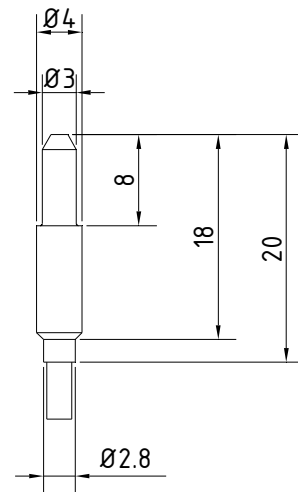
POF-D-100-d4/d3-(0.5)-2000

(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

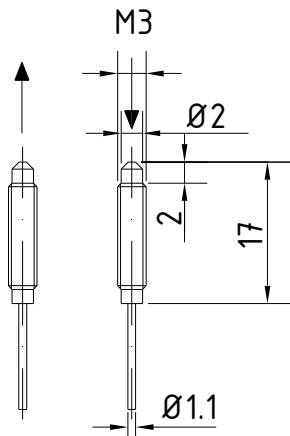
(Item no. 802142)



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

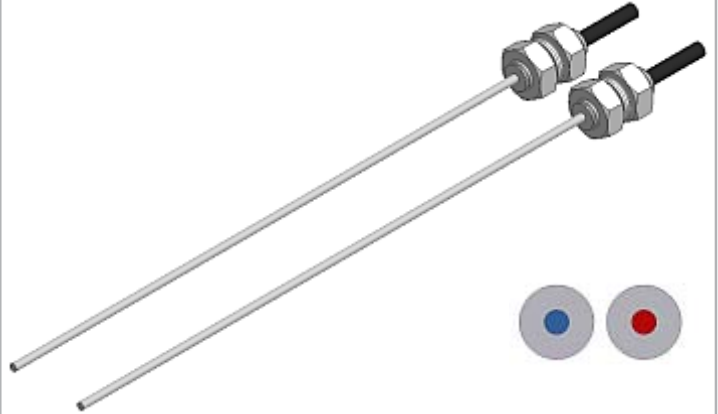
(Delivery includes reduction sleeves)



All dimensions in mm

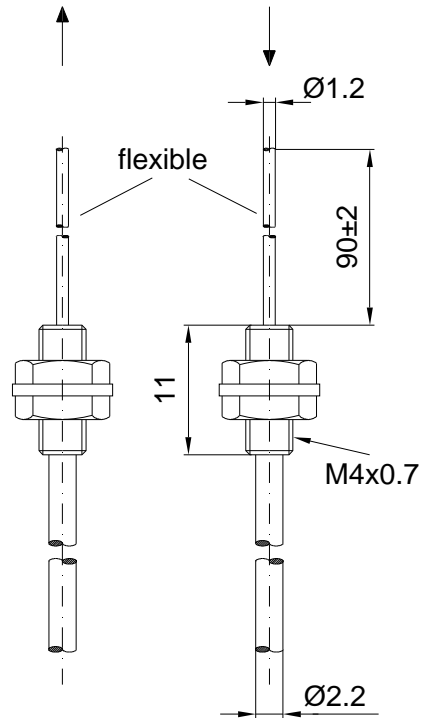
POF-D-100-M4/d1.2-(1.0)-2000

(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

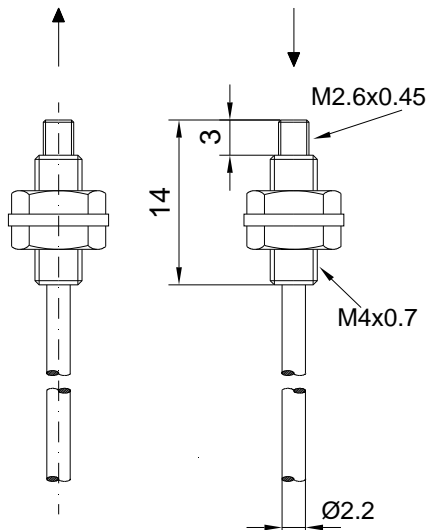
POF-D-120-M4/M2.6-(1.0)-2000

(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

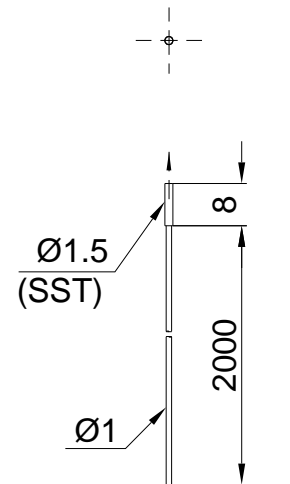
(Item no. 802197)



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

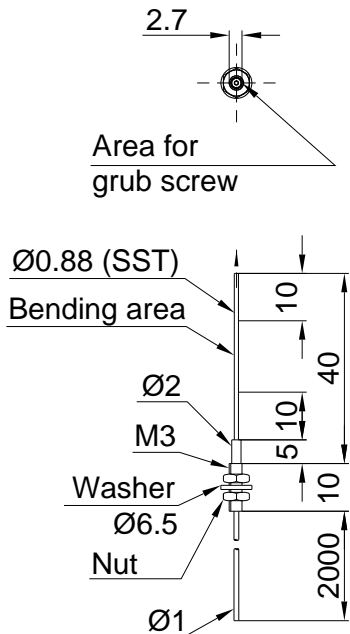
(Item no. 802198)



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

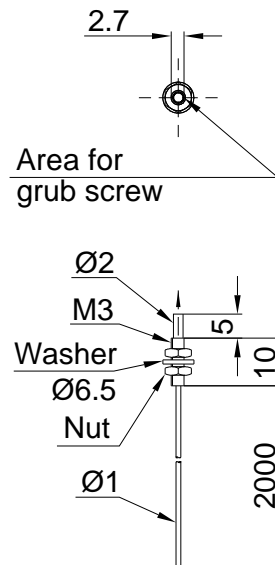
(Item no. 802199)



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

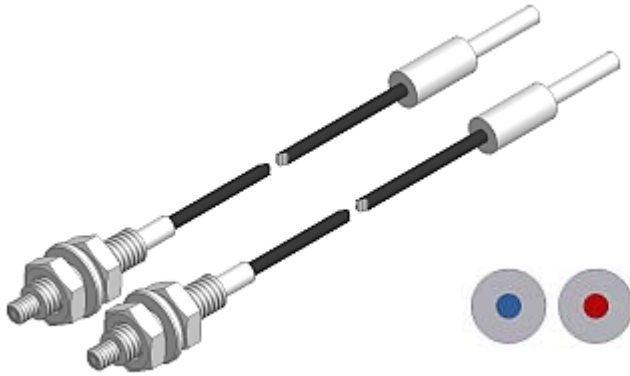




Through-beam POFs

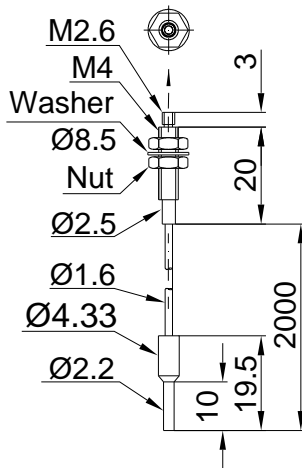
POF-D-140-M4/M2.6-(1.0)-2000

(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

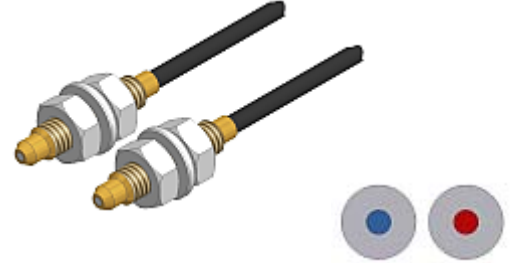
Material sensor head:	(to be supplemented)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	10mm/10mm
Light emission:	Axial
Temperature:	-60°C...+200°C
Enclosure rating:	IP40



All dimensions in mm

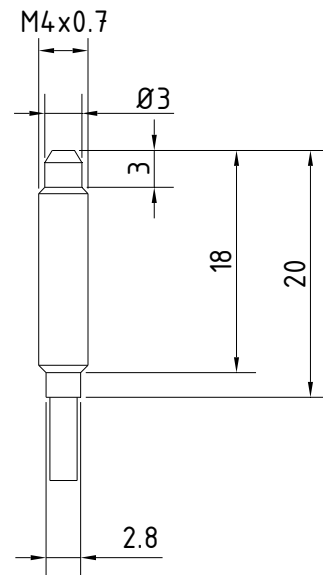
POF-D-200-M4/d3-(1.0)-2000

(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

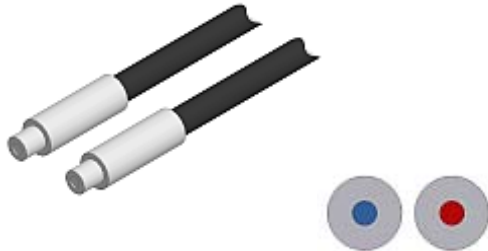




Through-beam POFs

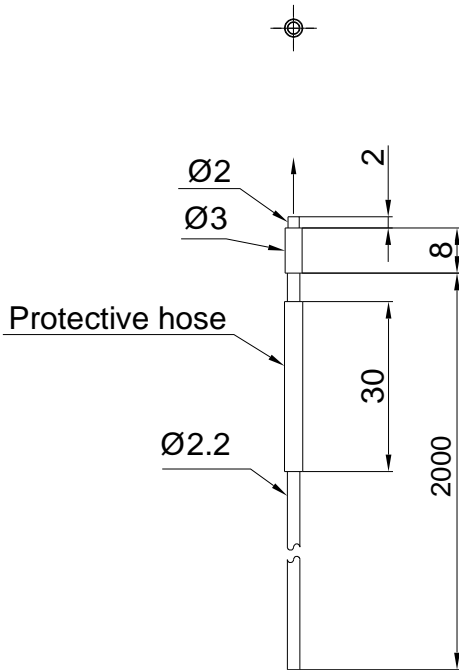
POF-D-290-d3/d2-(1.1)-2000

(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

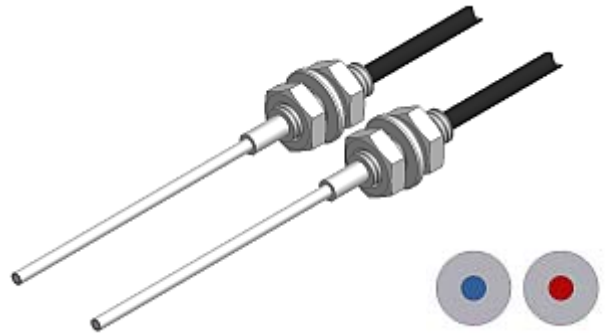
Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.1mm
Bending radius (rigid/flexible):	1mm/--
Light emission:	Axial
Temperature:	-40°C...+60°C
Enclosure rating:	IP67



All dimensions in mm

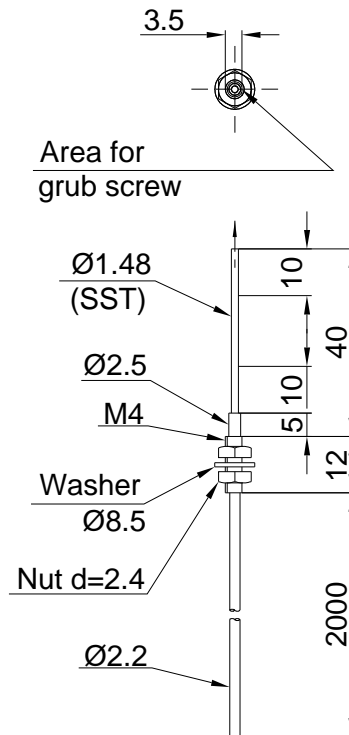
POF-D-400-M4/d1.48-(1.0)-2000

(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

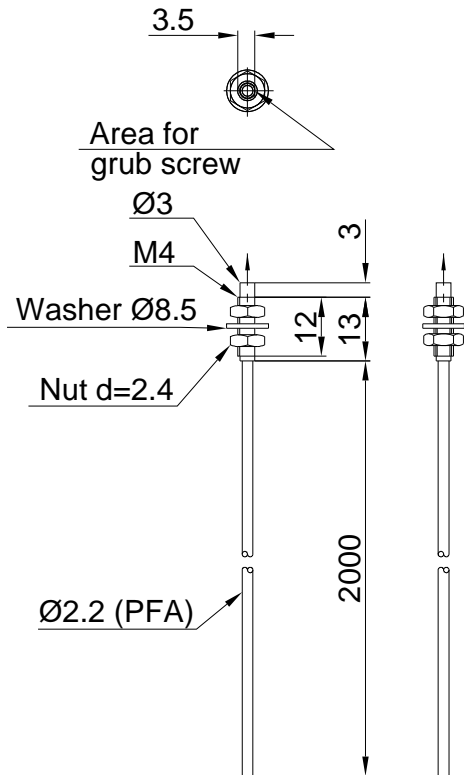
POF-D-440-M4/d3-(1.0)-2000

(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

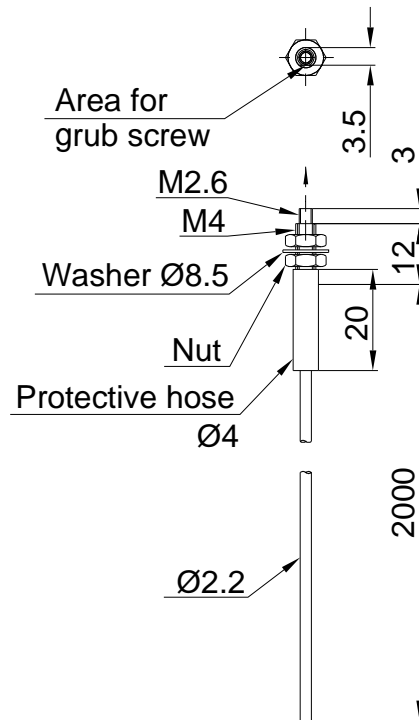
POF-D-530-M4/M2.6-(1.0)-2000

(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

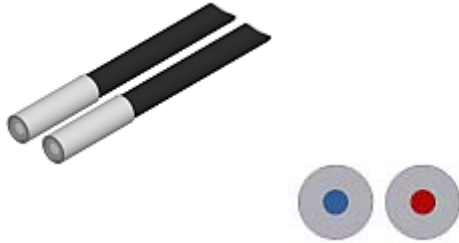




Through-beam POFs

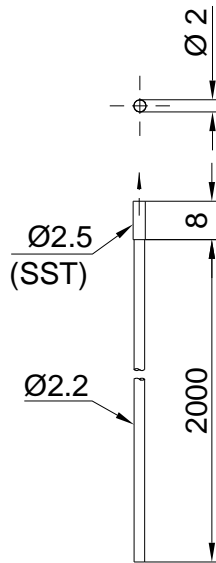
POF-D-800-d2.5-(1.0)-2000

(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

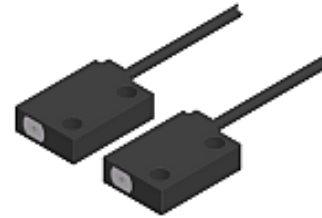
Material sensor head:	Stainless steel 1.4301 (V2A)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.0mm
Bending radius (rigid/flexible):	10mm/--
Light emission:	Axial
Temperature:	-40°C...+70°C
Enclosure rating:	IP40



All dimensions in mm

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

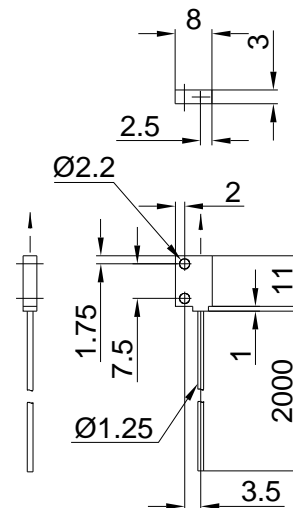
(Item no. 802148)



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

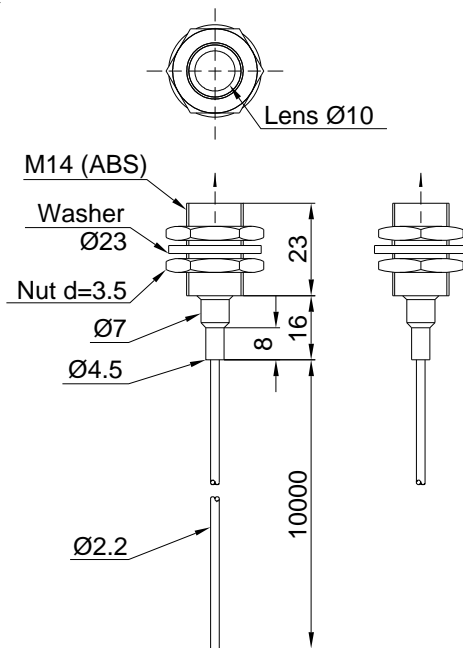
POF-D-14000-M14-(1.0)-10000

(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 Ø 1.0mm (transmitter and receiver)
 10000 = Total length 10000mm

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



All dimensions in mm

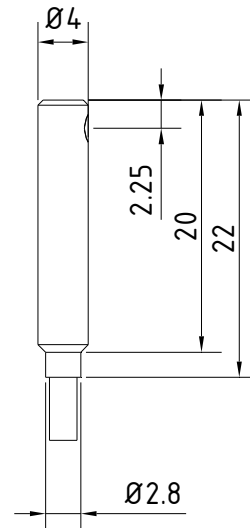
POF-D/90-100-d4-(1.0)-2000

(Item no. 802210)



POF = Plastic optical fiber
 D/90 = Through-beam operation, optics lateral 90°
 100 = Sensing range 100mm
 d4 = Sensor head type Ø 4mm
 (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)



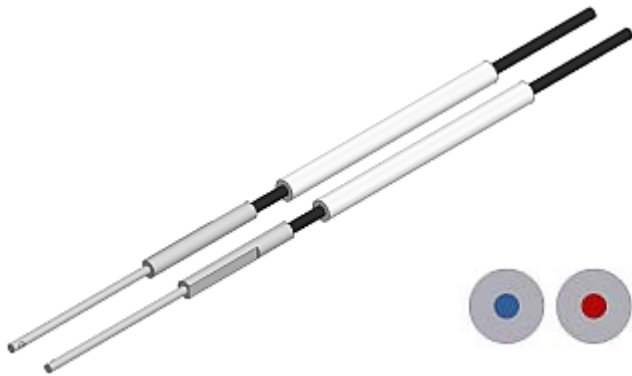
All dimensions in mm



Through-beam POFs

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

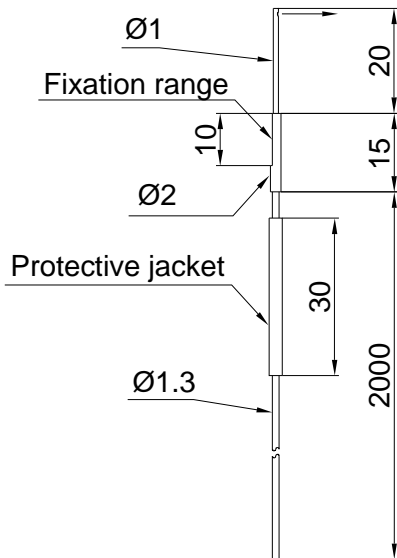
(Item no. 802211)



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

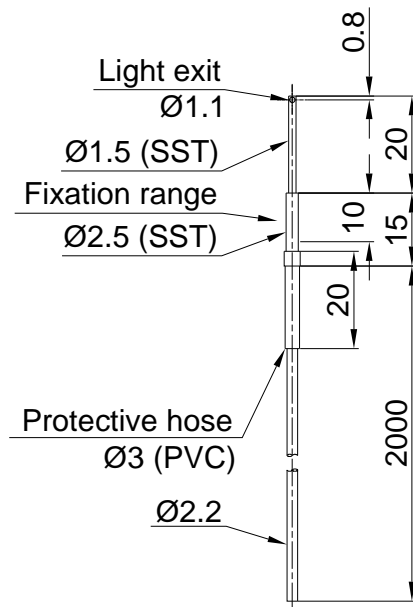
POF-D/90-200-d2.5/d1.5-(1.0)-2000

(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

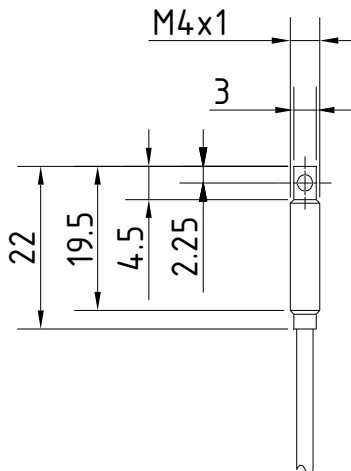
POF-D/90-200-M4/d3-(1.0)-2000

(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

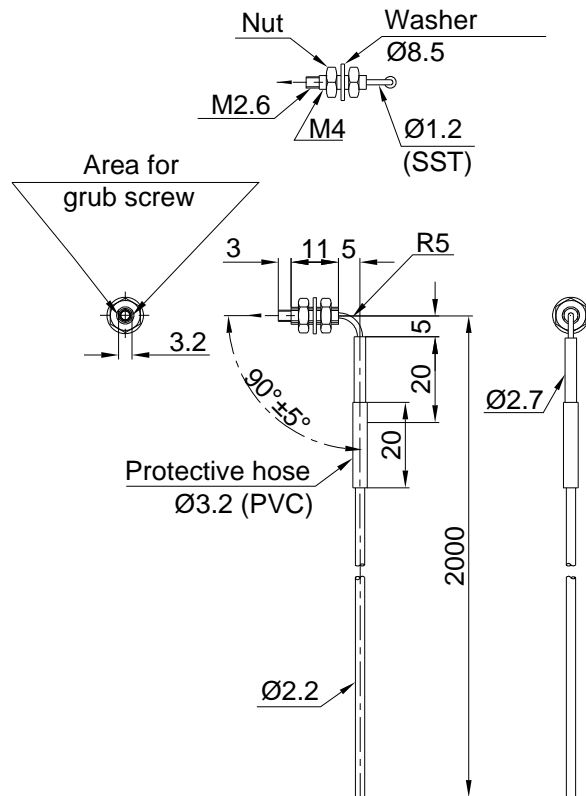
POF-D/90-230-M4/M2.6-(1.0)-2000

(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



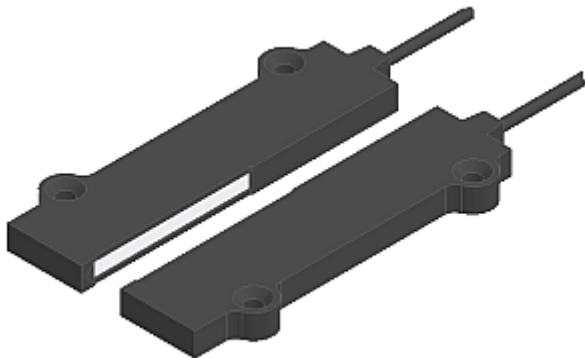
All dimensions in mm





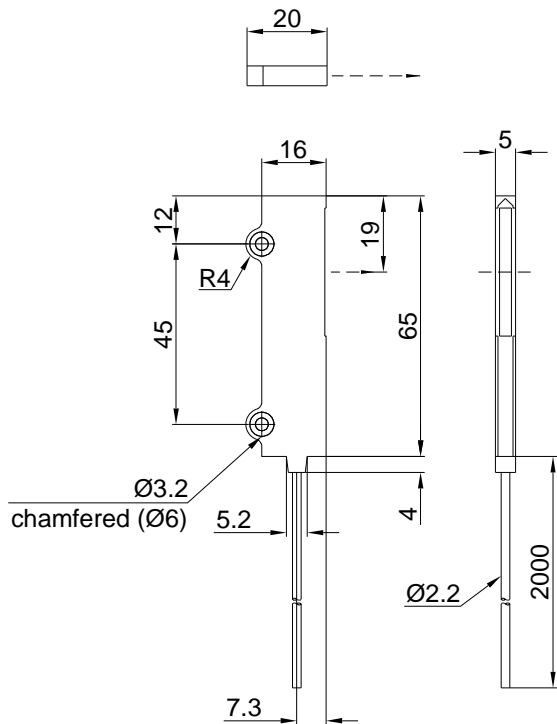
Through-beam POFs

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



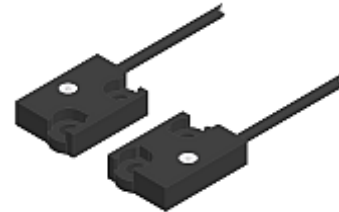
POF = Plastic optical fiber
 D/90 = Through-beam operation, optics lateral 90°
 350 = Sensing range 350mm
 69x20x5 = Sensor head type 69mm x 20mm x 5mm
 (1.1) = Fiber cross section Ø 1.1mm (transmitter and receiver)
 2000 = Total length 2000mm

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

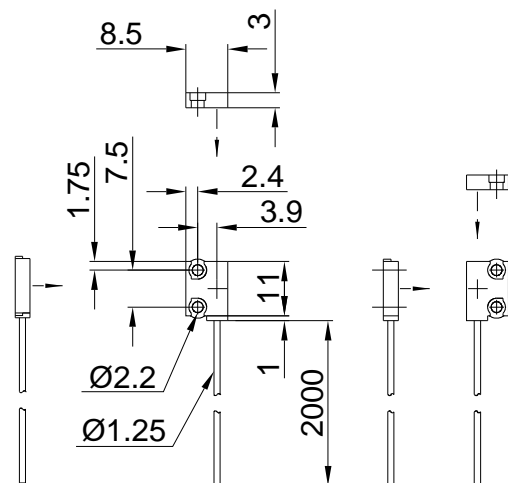
POF-D/90-400-12x8.5x3-(0.5)-2000 (Item no. 802215)



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)



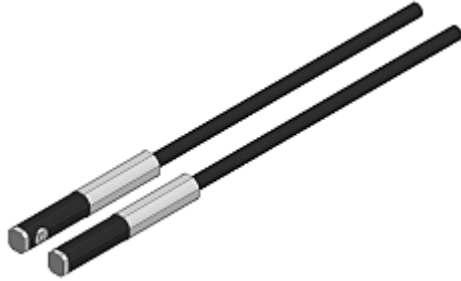
All dimensions in mm



Through-beam POFs

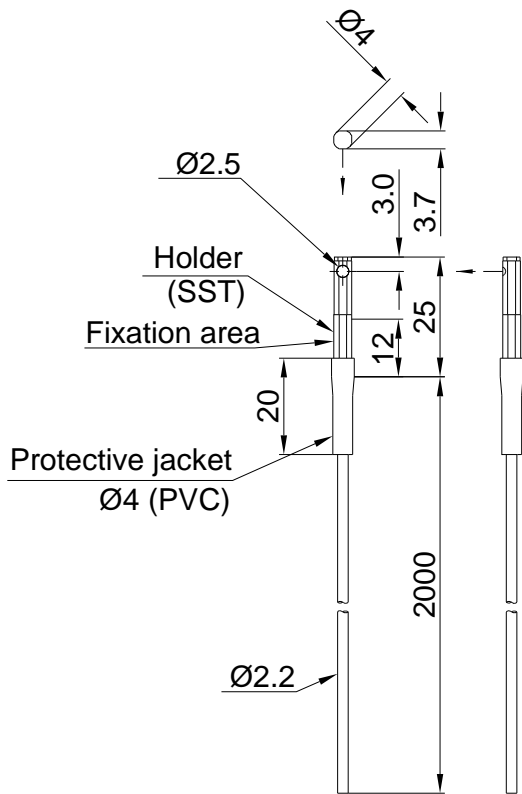
POF-D/90-700-d4-(1.1)-2000

(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

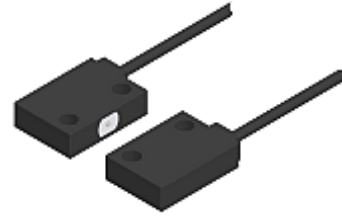
Material sensor head:	Polycarbonat (PC)
Design sheath:	2x Ø 2.2mm
Design fiber:	2x Ø 1.1mm
Bending radius (rigid/flexible):	1mm/--
Light emission:	Lateral
Temperature:	-40°C...+60°C
Enclosure rating:	IP30



All dimensions in mm

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

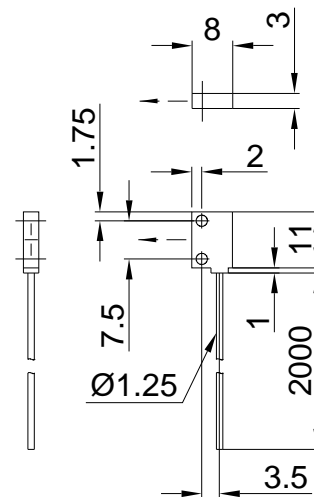
(Item no. 802143)



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)

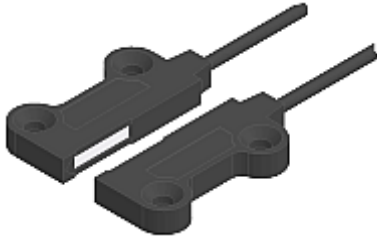


All dimensions in mm



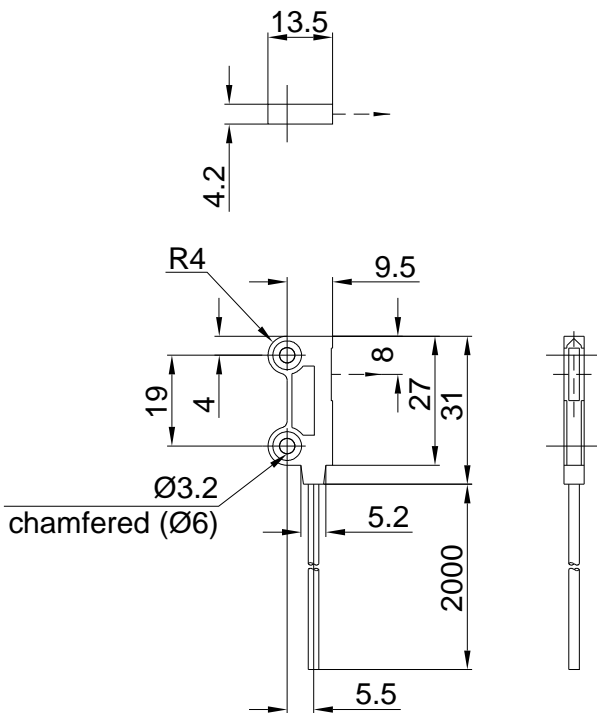
Through-beam POFs

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



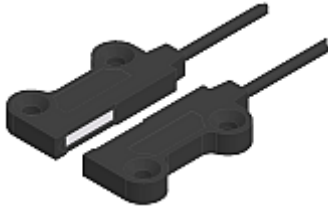
All dimensions in mm



Through-beam POFs

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

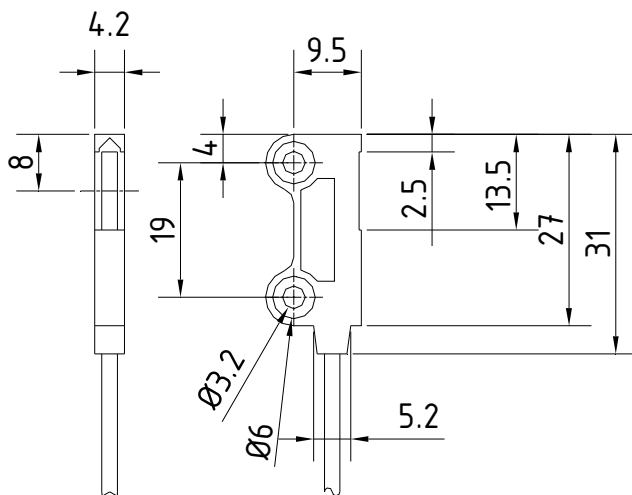
(Item no. 802144)



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

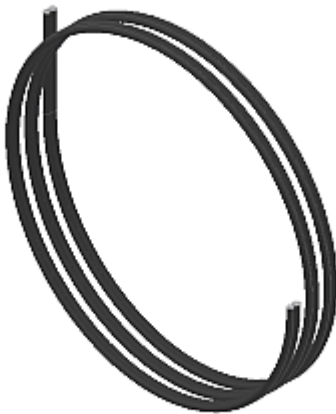
POF-SPX2-d2.2-(1.0)-(length) (Item no. see below)



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.)

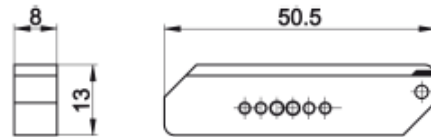


All dimensions in mm

POF-CUTTER (Item no. 802091)



Fiber cutting tool
 for optical fibers of POF Series



All dimensions in mm



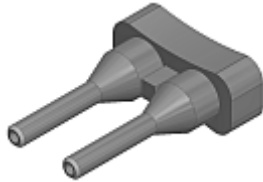


Accessories

POF-SLV-2.2/1.1

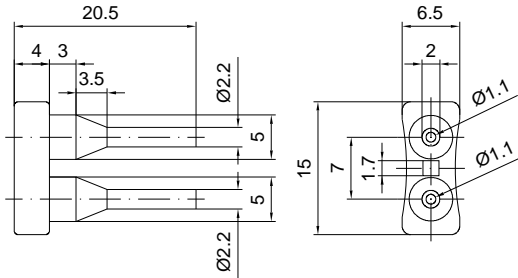
(Item no. 802080)

(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

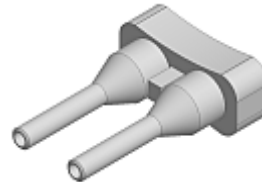


All dimensions in mm

POF-SLV-2.2/1.3

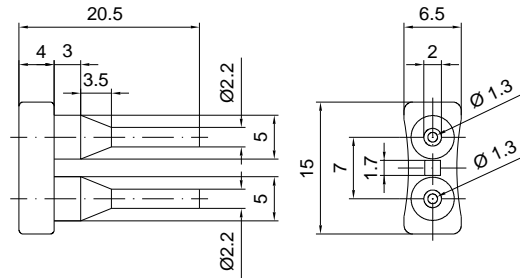
(Item no. 802092)

(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