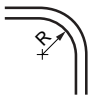
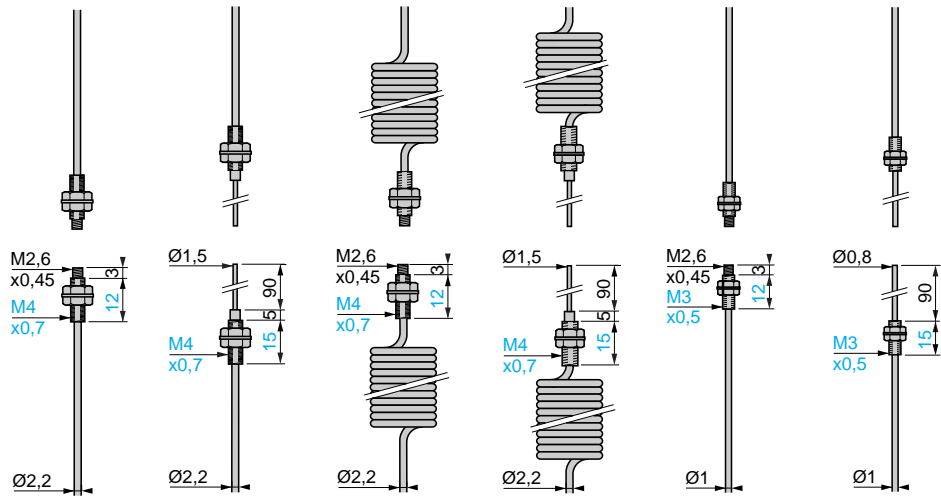


Photo-electric sensors

Fibre optic light guides for Osiris® Optimum and Universal amplifiers
"PLASTIC" with end fittings, thru-beam system



R = minimum bend radius
Fibre of external diameter 2.2 mm,
R = 25 mm
Fibre of external diameter 1 mm,
R = 10 mm
XUF N2S01L●, R = 4 mm



Nominal sensing distance (Sn)	With fibre L = 2 m	200 mm (1)	180 mm	150 mm (1)	150 mm	50 mm (1)	30 mm
	With lens	1500 mm (2)	–	1000 mm (2)	–	1000 mm (2)	–

Application, features	General	Handling, cyclic movements	Accurate positioning
-----------------------	---------	----------------------------	----------------------

References (complete assembly - 2 fibres)

Standard end fittings	L = 2 m	XUF N12301	–	XUF N10302	–	XUF N35301	–
	L = 10 m	XUF N12301L10	–	–	–	–	–
Flexible end fittings	L = 90 mm	–	XUF N12311	–	XUF N10312	–	XUF N35311
Weight (kg)		0.030 (L = 2 m)	0.030	0.070	0.070	0.045	0.045

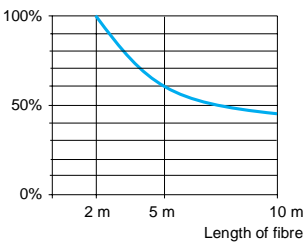
Characteristics

Fibre (view on detection face)						
Core (Ø mm)	1 x Ø 1	1 x Ø 1	1 x Ø 1	1 x Ø 1	1 x Ø 0.5	1 x Ø 0.5
Trimnable to required length (trimmer XUF Z11 included)	Yes	Yes	Yes	Yes	Yes	Yes
Ambient air temperature	Operation: - 25...+ 60 °C. Storage: - 40...+ 80 °C					
Vibration resistance	7 gn, amplitude ± 1.5 mm (f = 10...55 Hz), conforming to IEC 60068-2-6					
Shock resistance	30 gn, duration 11 ms, conforming to IEC 60068-2-27					
Degree of protection	IP 64 conforming to IEC 529 and IP 641 conforming to NF C 20-010					
Materials	Fibres: PMMA ; sheath: PE					

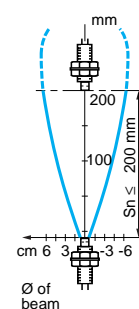
Detection curves

XUF ●●●●●L10

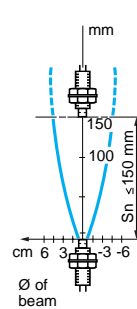
Percentage reduction in sensing distance related to length of fibre



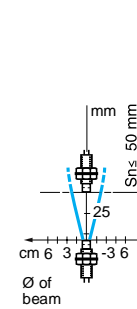
XUF N12301, N12311



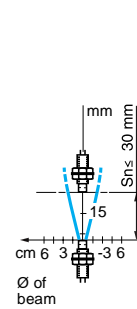
XUF N10302, N10312



XUF N35301

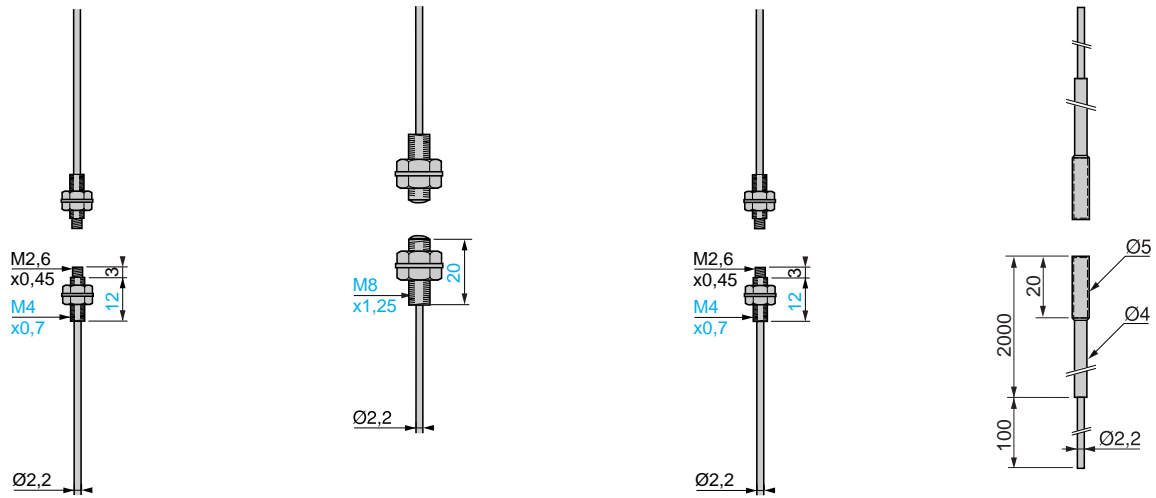


XUF N35311



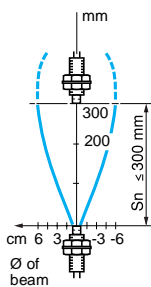
- (1) Can be used with 90° mirror XUF Z02, see page 30131/10.
- (2) With lens accessory XUF Z01, see page 30131/10.
- (3) Fixing clamps included with fibre optic light guide.

References of amplifiers: page 37009/2
Accessories: page 30131/10

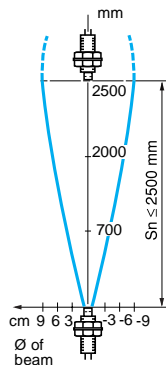


300 mm (1) 2000 mm (2)	2000 mm	100 mm (1) 750 mm (2)	1000 mm
Long sensing distance fibres	Fibres with integral lens Resistant to accumulation of dirt	Flexible fibres for cyclic movements, areas with restricted access	Teflon fibres for food and chemical industries
XUF N2P01L2	XUF N2L01L2	XUF N2S01L2	XUF N2T01L2 (3)
XUF N2P01L10	XUF N2L01L10	XUF N2S01L10	–
–	–	–	–
0.058 (L = 2 m)	0.060 (L = 2 m)	0.062 (L = 2 m)	0.110
1 x Ø 1.5	1 x Ø 1	1 x Ø 1	1 x Ø 1
Yes	Yes	Yes	Yes
Operation: - 25...+ 60 °C. Storage: - 40...+ 80 °C			
7 gn, amplitude ± 1.5 mm (f = 10...55 Hz), conforming to IEC 60068-2-6			
30 gn, duration 11 ms, conforming to IEC 60068-2-27			
IP 64 conforming to IEC 529 and IP 641 conforming to NF C 20-010			IP 671
Fibres: PMMA ; sheath: PE			Fibres: PMMA ; sheath: PFA

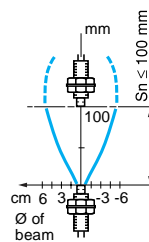
XUF N2P01L2



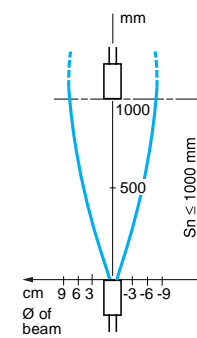
XUF N2L01L2



XUF N2S01L2



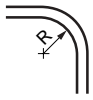
XUF N2T01L2



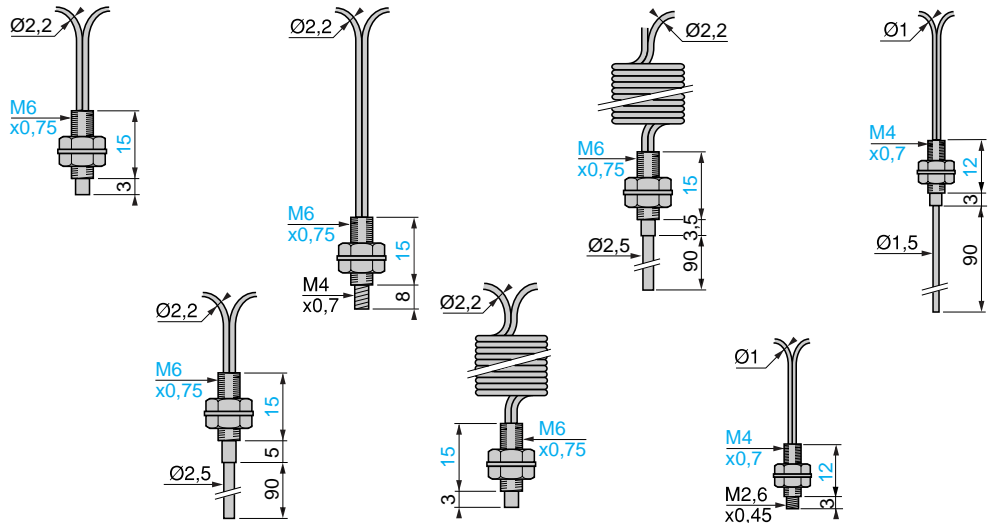
*Dimensions,
references,
characteristics,
curves*

Photo-electric sensors

Fibre optic light guides for Osiris® Optimum and Universal amplifiers
"PLASTIC" with end fittings, diffuse system



R = minimum bend radius
Fibre of external diameter 2.2 mm,
R = 25 mm
Fibre of external diameter 1 mm,
R = 10 mm
XUF N5S01L, R = 4 mm



Nominal sensing distance (Sn)	70 mm	60 mm	60 mm	20 mm	20 mm	18 mm	18 mm
Application	General		Positioning	Cyclic movements		Positioning	

References

Standard end fittings	L = 2 m	XUF N05321	-	XUF N05323	XUF N15322	-	XUF N01321	-
	L = 10 m	XUF N05321L10	-	-	-	-	-	-
Flexible end fittings	L = 90 mm	-	XUF N05331	-	-	XUF N15332	-	XUF N01331
Weight (kg)		0.030 (L = 2 m)	0.030	0.060	0.070	0.070	0.045	0.045

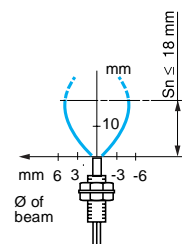
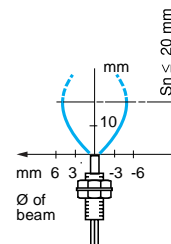
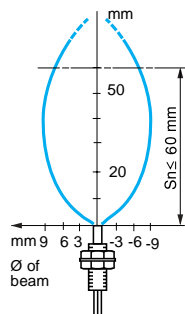
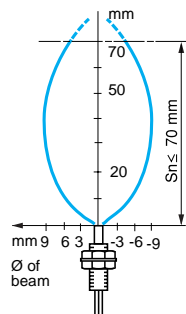
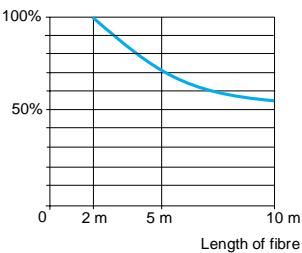
Characteristics

Fibre (view on detection face)							
Core (Ø mm)	2 x Ø 1	2 x Ø 1	1 x Ø 1 + 16 x Ø 0.265	2 x Ø 1	2 x Ø 1	2 x Ø 0.5	2 x Ø 0.5
Trimnable to required length (trimmer XUF Z11 included)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ambient air temperature	Operation: - 25...+ 60 °C. Storage: - 40...+ 80 °C						
Vibration resistance	7 gn, amplitude ± 1.5 mm (f = 10...55 Hz), conforming to IEC 60068-2-27						
Shock resistance	30 gn, duration 11 ms, conforming to IEC 60068-2-27						
Degree of protection	IP 64 conforming to IEC 529 and IP 641 conforming to NF C 20-010						
Materials	Fibres: PMMA ; sheath: PE						

Detection curves (object 10 x 10 cm, white 90 %)

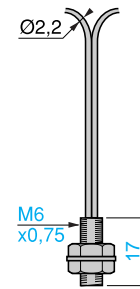
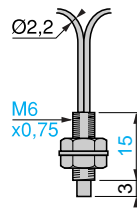
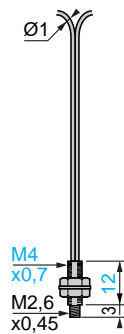
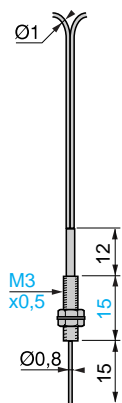
XUF N05321L10 XUF N05321 XUF N05331, XUF N05323 XUF N15322, N15332 XUF N01321, N01331

Percentage reduction in sensing distance related to length of fibre



(1) Fixing clamps included with fibre optic light guide.

References of amplifiers: page 37009/2 Accessories: page 30131/10



6 mm	15 mm	95 mm	55 mm
Areas with restricted access	Positioning	Long sensing distance fibres	Flexible fibres for cyclic movements, areas with restricted access
XUF N04331	XUF N02323	XUF N5P01L2	XUF N5S01L2
-	-	XUF N5P01L10	XUF N5S01L10
-	-	-	-
0.045	0.040	0.058 (L = 2 m)	0.062 (L = 2 m)
ø			
2 x Ø 0.265	1 x Ø 0.5 + 4 x Ø 0.25	2 x Ø 1.5	2 x Ø 1
Yes	Yes	Yes	Yes
Operation: - 25...+ 60 °C . Storage: - 40...+ 80 °C			
7 gn, amplitude ± 1.5 mm (f = 10...55 Hz), conforming to IEC 68-2-6			
30 gn, duration 11 ms, conforming to IEC 68-2-27			
IP 64 conforming to IEC 529 and IP 641 conforming to NF C 20-010			
Fibres: PMMA ; sheath: PE			

XUF N04331

XUF N02323

XUF N5P01L2

XUF N5S01L2

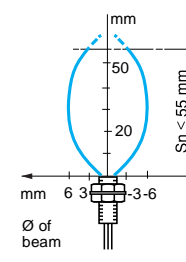
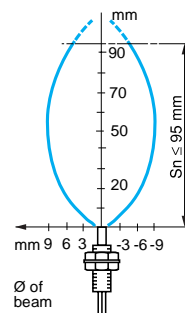
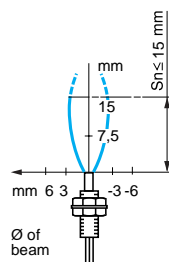
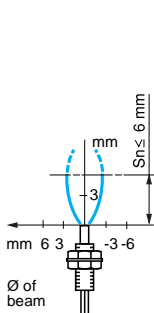
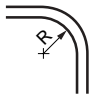
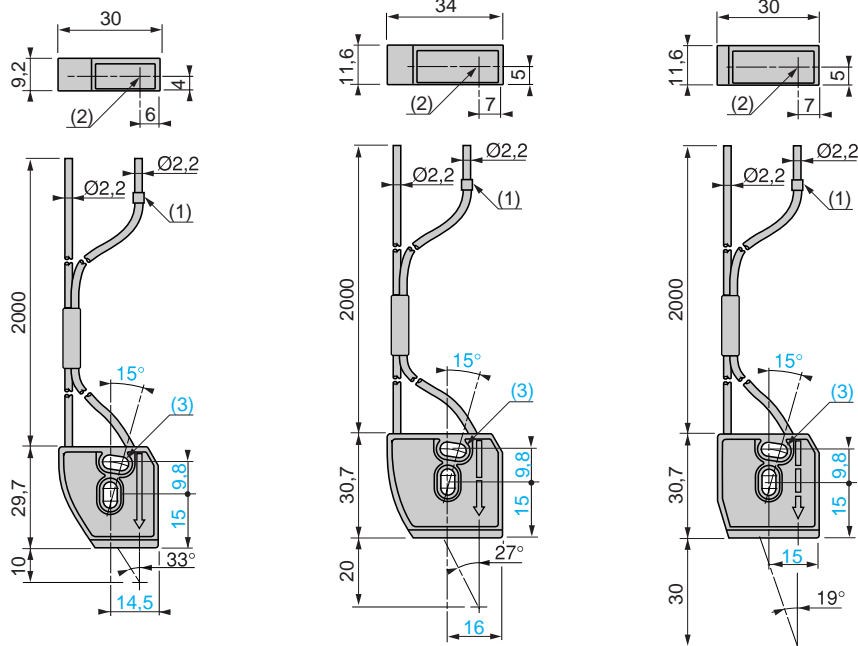


Photo-electric sensors

Fibre optic light guides for Osiris® "Full color" amplifiers
"PLASTIC" with end fittings, diffuse system



R = minimum bend radius
R = 40 mm



- (1) Fibre reference ring for transmitter
 - (2) Transmitter
 - (3) 2 elongated holes $\varnothing 3.2 \times 6.7$ for M3 screws
- Maximum tightening torque: 0.3 N.m

Nominal sensing distance (Sn) with fibre L = 2 m	10 mm	20 mm	30 mm
---	-------	-------	-------

Application, features Focused fibres, for Osiris "Full color" sensor XUR-C4PML2.

References

With specific end fittings for detection of colours	L = 2 m	XUF N5L01L2	XUF N5L02L2	XUF N5L03L2
Weight (kg)		0.030	0.030	0.030

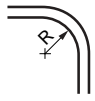
Characteristics

Fibre cross-section			
Core (\varnothing mm)	Transmitter: 1 x $\varnothing 1$ Receiver: 1 x $\varnothing 1.5$	Transmitter: 1 x $\varnothing 1.5$ Receiver: 1 x $\varnothing 1.5$	Transmitter: 1 x $\varnothing 1.5$ Receiver: 1 x $\varnothing 1.5$
Trimnable to required length	No	No	No
Spot diameter	2.5 mm	5 mm	8 mm
Ambient air temperature	Operation: - 10...+ 55 °C. Storage: - 20...+ 70 °C		
Vibration resistance	7 gn, amplitude ± 1.5 mm (f = 10...55 Hz), conforming to IEC 60068-2-6		
Shock resistance	30 gn, duration 11 ms, conforming to IEC 60068-2-27		
Degree of protection	IP 65 conforming to IEC 529 and IP 651 conforming to NF C 20-010		
Materials	Fibres: PMMA ; sheath: PE. Head: PA 66, lens PC		

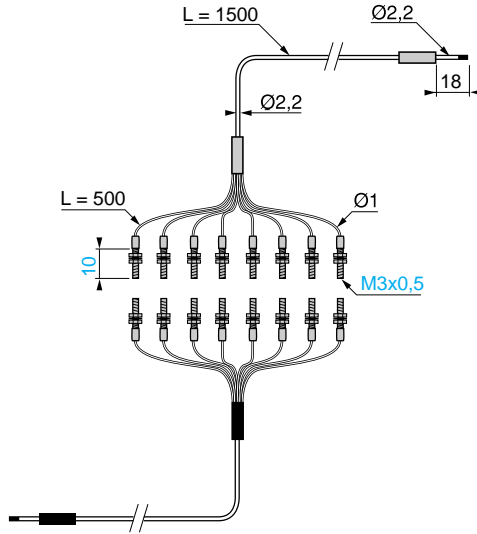
Dimensions,
references,
characteristics,
curves

Photo-electric sensors

Fibre optic light guides for Osiris® Optimum and Universal amplifiers
"PLASTIC" with multiple end fittings, thru-beam system



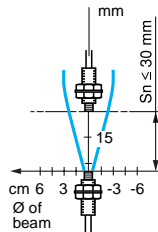
R = minimum bend radius
Fibre of external Ø 2.2 mm, R = 25 mm
Fibre of external Ø 1 mm, R = 10 mm



Nominal sensing distance (Sn) L = 2 m	30 mm
Application, features	Fibres with 8 end fittings. For assembly and packaging applications
References	
Set of 2 fibres with end fittings	XUF N02801
Weight (kg)	0.050
Characteristics	
Fibre (view on detection face)	⊙
Core (Ø mm)	2 x Ø 0.265
Length	2 m
Trimmable to required length	No
Ambient air temperature	Operation: - 25...+ 60 °C. Storage: - 40...+ 80 °C
Vibration resistance	7 gn, amplitude ± 1.5 mm (f = 10...55 Hz), conforming to IEC 60068-2-6
Shock resistance	30 gn, duration 11 ms, conforming to IEC 60068-2-27
Degree of protection	IP 64 conforming to IEC 529 and IP 641 conforming to NF C 20-010
Materials	Fibres: PMMA ; sheath: PE

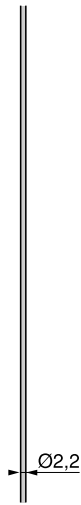
Detection curves

XUF N02801





R = minimum bend radius
Fibre of external diameter 2.2 mm,
R = 25 mm



Nominal sensing distance (Sn) L = 2 m	See detection curves below (1)		
---------------------------------------	--------------------------------	--	--

Application	General	General
-------------	---------	---------

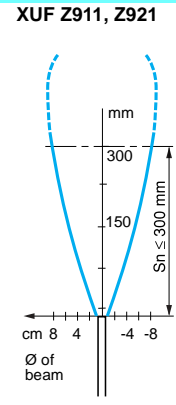
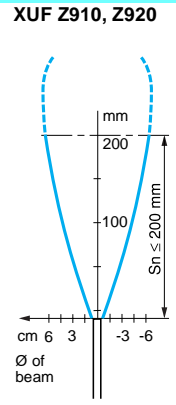
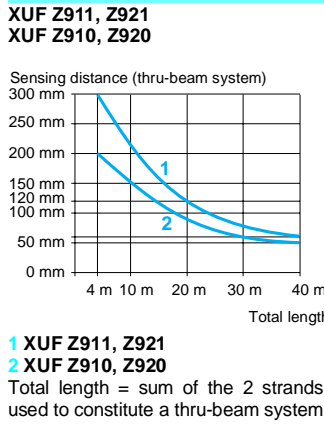
References

Fibre without end fitting	XUF Z910	XUF Z920	XUF Z911	XUF Z921
Weight (kg)	0.020	0.040	0.040	0.080

Characteristics

Fibre	●		●	
Core (Ø mm)	1 x Ø 1		1 x Ø 1.4	
Length	10 m	20 m	10 m	20 m
Trimmmable to required length (trimmer XUF Z11 included)	Yes	Yes	Yes	Yes
Ambient air temperature	Operation: - 25...+ 60 °C. Storage: - 40...+ 80 °C			
Vibration resistance	7 gn, amplitude ± 1.5 mm (f = 10...55 Hz), conforming to IEC 60068-2-6			
Shock resistance	30 gn, duration 11 ms, conforming to IEC 60068-2-27			
Degree of protection	IP 64 conforming to IEC 529 and IP 641 conforming to NF C 20-010			
Materials	Fibres: PMMA ; sheath: PE			

Detection curves



(1) It is possible to increase the sensing distance of fibres without end fittings by using fixing clamps with lens (XUF Z03, Z04 or Z05), see page 30131/10.