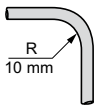
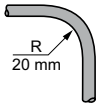
Photo-electric sensors
OsiSense XU Application
Fibre optics for amplifier
“GLASS” fibres with end fittings
For diffuse and thru-beam systems

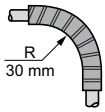
“GLASS” fibre optics for diffuse system



Standard sheath
External Ø
XUYFVP: 5 mm
XUYFVER: 3 mm

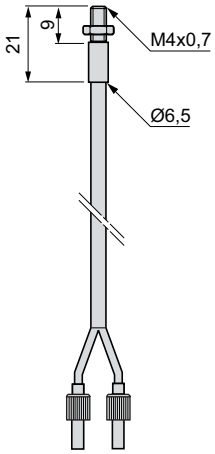


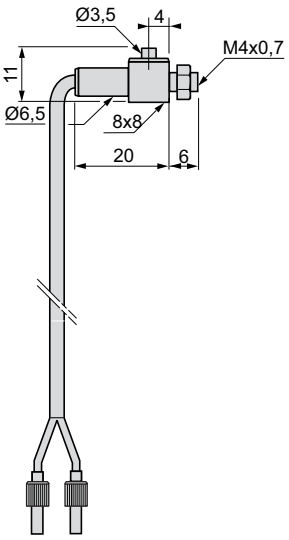
Metal reinforced sheath
XUYFVP: 5 mm
XUYFVER: 3.5 mm



High temperature sheath
XUYFVP: 5 mm
XUYFVER: 5 mm

R = minimum bend radius





Applications
- Detection in high temperature environment (up to 200 °C)
- Detection in aggressive environment
- Application requiring high level of performance

References

Type of end fitting	Straight			Lateral		
Sheath	Standard	Metal reinforced	High temperature	Standard	Metal reinforced	High temperature
References with 0.60 m long fibre *(1)*	**XUYFVPSD61**	**XUYFVPMD61**	**XUYFVPTD61**	**XUYFVPSL61**	**XUYFVPML61**	**XUYFVPTL61**
Nominal sensing distance Sn (mm)	80	80	80	80	80	80
Weight (kg)	0.040	0.045	0.052	0.042	0.056	0.056

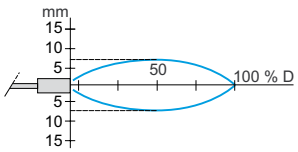
Characteristics

Fibre		400 strands per mm²
Usable diameter of fibre		1.2 mm
Ambient air temperature	For operation	**Standard**: - 25…+ 60 °C **Metal reinforced**: - 25…+ 120 °C **High temperature** :-25…+ 200 °C
Detection end fitting		Nickel plated brass
Materials	Fibre	50 µ glass
	Sheath	**Standard**: PVC + thermo polyolefine, **Metal reinforced**: spiralled metal + polyolefine **High temperature**: flexible stainless steel

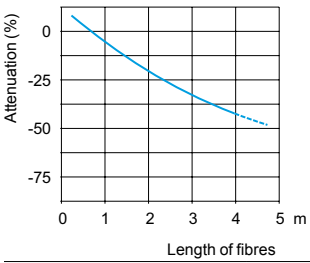
*(1) For 1 m long fibre, replace 61 in the reference by **101**. Example: XUYFVPSD61 becomes **XUYFVPSD101** for a 1 m long fibre.*
*For 1.5 m long fibre, replace 61 in the reference by **151**. Example: XUYFVPMD61 becomes **XUYFVPMD151** for a 1.5 m long fibre.*
*For 2 m long fibre, replace 61 in the reference by **201**. Example: XUYFVPTD61 becomes **XUYFVPTD201** for a 2 m long fibre.*

Detection and attenuation curves

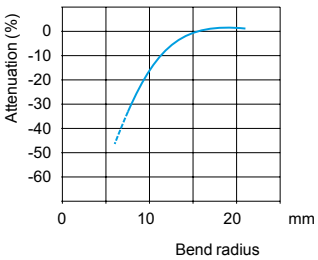
XUYFVP●●61



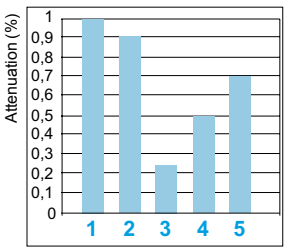
Attenuation related to length



Bending influence



Material influence



1 White paper
2 Wood, beige cardboard
3 Black paper
4 Raw steel
5 Raw aluminium

References of amplifiers:
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