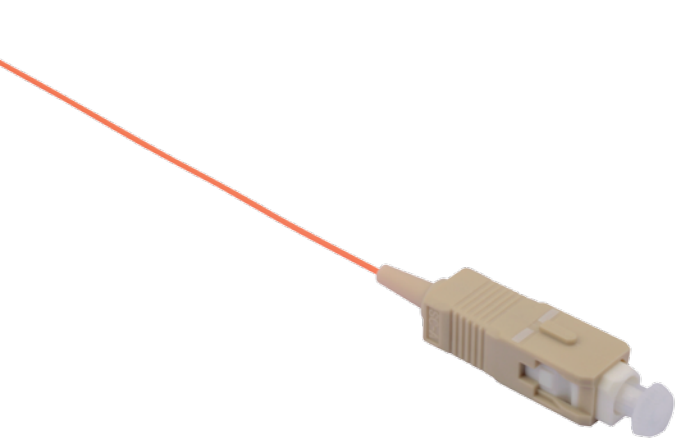


# PATCH CORDS, PIGTAILS, ADAPTERS

## Fibre Optic Pigtailed



SXPI-SC-UPC-OM1-1,5M

Operating temperature	<b>-40 to +70 °C</b>
Storage temperature	<b>-40 to +70 °C</b>
The diameter of the primary protection	<b>250 µm</b>
The diameter of the secondary protection	<b>900 µm</b>
Singlemode fibre type	<b>G.652.D, G.657.A1</b>
Multimode fibre type	<b>G.651.1</b>
Ferrule	<b>UPC, APC</b>
Life cycle	<b>min. 1 000 insertions</b>
Ferrule diameter of the LC connector	<b>1,25 mm</b>
Ferrule diameter of the SC/ST/E2000 connector	<b>2,5 mm</b>

Solarix fibre optic pigtailed are designed for terminating optical fibres within various fibre optics patch panels and boxes. Their ferrules are of the UPC (ultra physical contact) type for both single mode and multimode pigtailed or APC (angled physical contact) type for singlemode pigtailed. Singlemode pigtailed use the G.652.D or G.657.A1 type fibres, on the other hand, multimode pigtailed use the G.651.1 type. Solarix fibre optic pigtailed are available with different connectors, such as LC, SC, ST, and E2000. E2000 connectors are supplied by R & M. The standard length of Solarix pigtailed is 1,5 m.

Parameter	Multimode UPC	Singlemode UPC	Singlemode APC
Max IL – insertion loss	< 0,3 dB	< 0,3 dB	< 0,3 dB
Max RL – return loss	> 35 dB	> 50 dB	> 60 dB

Part No.	Description
SXPI-SC-UPC-OS-1,5M	Pigtailed 9/125 SCupc SM OS 1,5m
SXPI-SC-APC-OS-1,5M	Pigtailed 9/125 SCapc SM OS 1,5m
SXPI-SC-UPC-OM1-1,5M	Pigtailed 62,5/125 SCupc MM OM1 1,5m
SXPI-SC-UPC-OM2-1,5M	Pigtailed 50/125 SCupc MM OM2 1,5m
SXPI-SC-UPC-OM3-1,5M	Pigtailed 50/125 SCupc MM OM3 1,5m
SXPI-SC-UPC-OM4-1,5M	Pigtailed 50/125 SCupc MM OM4 1,5m
SXPI-SC-UPC-OM5-1,5M	Pigtailed 50/125 SCupc MM OM5 1,5m



# FIBRE OPTICS

## Optical Fibres Parameters

### Singlemode Fibres Basic Parameters

Geometric Parameters	Unit	ITU-T G.652.D	ITU-T G.657.A1	ITU-T G.657.A2
<b>Mode Field Diameter (MFD)</b>				
@ 1 310 nm	µm	9,2 ± 0,4	9,0 ± 0,4	8,6 ± 0,4
@ 1 550 nm	µm	10.4 ± 0,5	9,2 ± 0,4	9,6 ± 0,4
Cladding diameter	µm	125 ± 1,0	125 ± 0,7	125 ± 0,7
Coating diameter	µm	247 ± 7,0	245 ± 5,0	242 ± 5,0
Core-Cladding Concentricity Error	µm	≤ 0,6	≤ 0,5	≤ 0,5
Cladding-Coating Concentricity Error	µm	≤ 12	≤ 10	≤ 12
<b>Transmission Parameters</b>				
<b>Attenuation</b>				
@ 1 310 nm	dB/km	≤ 0,35 <sup>1)</sup>	≤ 0,38 <sup>1)</sup>	≤ 0,35 <sup>1)</sup>
@ 1 550 nm	dB/km	≤ 0,21 <sup>1)</sup>	≤ 0,22 <sup>1)</sup>	≤ 0,20 <sup>1)</sup>
@ 1 625 nm	dB/km	≤ 0,24 <sup>1)</sup>	≤ 0,25 <sup>1)</sup>	≤ 0,23 <sup>1)</sup>
<b>Dispersion Coefficient</b>				
@ 1 550 nm	ps/(nm*km)	≤ 18	≤ 18	≤ 18
@ 1 625 nm	ps/(nm*km)	≤ 22	≤ 22	≤ 23
PMD individual fibre	ps/√km	0,1	0,1	0,06
Cable Cutoff Wavelength λ <sub>cc</sub>	nm	≤ 1 260	≤ 1 260	≤ 1 260
Fibre Cutoff Wavelength λ <sub>c</sub>	nm	1 150 - 1 330	1 150 - 1 330	1 150 - 1 330

<sup>1)</sup> A typical value for fibres in loose tube cables.

### Multimode Fibres Basic Parameters

Geometric Parameters	Unit	ITU-T G.651.1 OM2	ITU-T G.651.1 OM3	ITU-T G.651.1 OM4	ITU-T G.651.1 OM5
Core diameter	µm	50 ± 2,0	50 ± 2,0	50 ± 2,0	50 ± 2,0
Cladding diameter	µm	125 ± 1,0	125 ± 1,0	125 ± 1,0	125 ± 1,0
Core-Cladding Concentricity Error	µm	≤ 1,0	≤ 1,0	≤ 1,0	≤ 1,0
Cladding-Coating Concentricity Error	µm	≤ 6,0	≤ 6,0	≤ 10,0	≤ 10,0
<b>Transmission Parameters</b>					
Numerical aperture	-	0,200 ± 0,015	0,200 ± 0,015	0,200 ± 0,015	0,200 ± 0,015
<b>Attenuation</b>					
@ 850 nm	dB/km	≤ 2,7 <sup>1)</sup>	≤ 3,0 <sup>1)</sup>	≤ 3,0 <sup>1)</sup>	≤ 3,0 <sup>1)</sup>
@ 1 300 nm	dB/km	≤ 0,8 <sup>1)</sup>	≤ 1,0 <sup>1)</sup>	≤ 1,0 <sup>1)</sup>	≤ 1,0 <sup>1)</sup>
<b>Bandwidth</b>					
@ 850 nm	MHz*km	≥ 500	≥ 1 500	≥ 3 500	≥ 3 500
@ 953 nm	MHz*km	-	-	-	≥ 1 850
@ 1 300 nm	MHz*km	≥ 500	≥ 500	≥ 500	≥ 500

<sup>1)</sup> A typical value for fibres in loose tube cables.