



PATCH CORDS, PIGTAILS, ADAPTERS

Fibre Optic Pigtaills

SXPI-SC-UPC-OS-1,5M-12PCK

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

Solarix fibre optic pigtaills 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 pigtaills or APC (angled physical contact) type for singlemode pigtaills. Singlemode pigtaills use the G.652.D or G.657.A1 type fibres, on the other hand, multimode pigtaills use the G.651.1 type. Solarix fibre optic pigtaills are available with different connectors, such as LC, SC, ST, and E2000. E2000 connectors are supplied by R & M. The standard length of Solarix pigtail 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-12PCK	Pigtail 9/125 SCupc SM OS 1,5m, packing 12pcs
SXPI-SC-UPC-OM2-1,5M-12PCK	Pigtail 50/125 SCupc MM OM2 1,5m, packing 12pcs
SXPI-SC-UPC-OM3-1,5M-12PCK	Pigtail 50/125 SCupc MM OM3 1,5m, packing 12pcs
SXPI-SC-UPC-OM4-1,5M-12PCK	Pigtail 50/125 SCupc MM OM4 1,5m, packing 12pcs
SXPI-SC-UPC-OM5-1,5M-12PCK	Pigtail 50/125 SCupc MM OM5 1,5m, packing 12pcs



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
Mode Field Diameter (MFD)				
@ 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
Transmission Parameters				
Attenuation				
@ 1 310 nm	dB/km	≤ 0,35 ¹⁾	≤ 0,38 ¹⁾	≤ 0,35 ¹⁾
@ 1 550 nm	dB/km	≤ 0,21 ¹⁾	≤ 0,22 ¹⁾	≤ 0,20 ¹⁾
@ 1 625 nm	dB/km	≤ 0,24 ¹⁾	≤ 0,25 ¹⁾	≤ 0,23 ¹⁾
Dispersion Coefficient				
@ 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 _{cc}	nm	≤ 1 260	≤ 1 260	≤ 1 260
Fibre Cutoff Wavelength λ _c	nm	1 150 - 1 330	1 150 - 1 330	1 150 - 1 330

¹⁾ 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
Transmission Parameters					
Numerical aperture	-	0,200 ± 0,015	0,200 ± 0,015	0,200 ± 0,015	0,200 ± 0,015
Attenuation					
@ 850 nm	dB/km	≤ 2,7 ¹⁾	≤ 3,0 ¹⁾	≤ 3,0 ¹⁾	≤ 3,0 ¹⁾
@ 1 300 nm	dB/km	≤ 0,8 ¹⁾	≤ 1,0 ¹⁾	≤ 1,0 ¹⁾	≤ 1,0 ¹⁾
Bandwidth					
@ 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

¹⁾ A typical value for fibres in loose tube cables.