

PATCH CORDS, PIGTAILS, ADAPTERS

Fibre Optic Pigtailes



SXPI-ST-UPC-OM2-1,5M

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 pigtailes 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 pigtailes or APC (angled physical contact) type for singlemode pigtailes. Singlemode pigtailes use the G.652.D or G.657.A1 type fibres, on the other hand, multimode pigtailes use the G.651.1 type. Solarix fibre optic pigtailes 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-ST-UPC-OS-1,5M	Pigtail 9/125 STupc SM OS 1,5m
SXPI-ST-UPC-OM1-1,5M	Pigtail 62,5/125 STupc MM OM1 1,5m
SXPI-ST-UPC-OM2-1,5M	Pigtail 50/125 STupc MM OM2 1,5m
SXPI-ST-UPC-OM3-1,5M	Pigtail 50/125 STupc MM OM3 1,5m
SXPI-ST-UPC-OM4-1,5M	Pigtail 50/125 STupc MM OM4 1,5m
SXPI-ST-UPC-OM5-1,5M	Pigtail 50/125 STupc 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
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.