



SXKO-CLT-24-OS-LSOH

FIBRE OPTIC CABLES

Universal singlemode



Outer jacket

Cable secondary protection

Cable type acc. to the number of tubes

Operating/Storage temperature

Installation temperature

Fibre type

Diameter of the primary protection

Short-term tensile resistance

Short-term pressure resistance

Minimum bend radius (short term)

Minimum bend radius (long-term)

Cable diameter

Cable weight

The number of fibres in the tube

**LSOH, UV stable
reaction to fire E_{ca}**

gel-filled tube

CLT

-30 to +70 °C

-5 to +40 °C

G.652.D

250 µm

1 000 N

1 000 N/100 mm

10x D cable

20x D cable

2-12: 5,9 mm, 14-24: 6,5 mm

**2-12: 40 kg/km,
14-24: 50 kg/km**

2-24

Solarix universal fibre optic cables SXKO-CLT-OS-LSOH reaction to fire E_{ca} are designed to be used for both indoor and outdoor environments. The outer jacket of the cables are made of low smoke, and halogen free compound, which is also complemented by UV stable material. The fibres are stored in a central gel-filled tube, thus they are protected against moisture. Our fibre optic cables contain no metal elements and therefore they are fully dielectric. The fibre itself is a G.652.D type.

Part No.

Description

SXKO-CLT-4-OS-LSOH

Universal cable CLT Solarix 4f 9/125, LSOH, black

SXKO-CLT-8-OS-LSOH

Universal cable CLT Solarix 8f 9/125, LSOH, black

SXKO-CLT-12-OS-LSOH

Universal cable CLT Solarix 12f 9/125, LSOH, black

SXKO-CLT-24-OS-LSOH

Universal cable CLT Solarix 24f 9/125, LSOH, black



Cable construction

1. Fibres
2. Gel-filled tube
3. Water-proof tape
4. Outer jacket

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.

FIBRE OPTICS

Color Coding for Fibres and Tubes

Fibres Color Coding

Fibre	1	2	3	4	5	6	7	8	9	10	11	12
Colour	blue	orange	green	braun	grey	white	red	black	yellow	purple	pink	turquoise
												

Fibre	13	14	15	16	17	18	19	20	21	22	23	24
Colour ¹⁾	blue	orange	green	braun	grey	white	red	black	yellow	purple	pink	turquoise
												

¹⁾ Colour with a strip

Tubes Color Coding for MLT Cables

Tube	1	2	3	4	5	6	7	8	9	10	11	12
Colour	blue	orange	green	braun	grey	white	red	black	yellow	purple	pink	turquoise
												

Tubes Color Coding for MLT Cables

Tube	1	2	3	4
Colour	red	green	natural	natural
				