

FIBRE OPTIC CABLES

Riser singlemode

SXKO-RISER-48-OS-LSOH-WH



Outer jacket

Cable secondary protection

Operating/Storage temperature

Installation temperature

Fibre type

Diameter of the primary protection

Diameter of the secondary 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 jacket

LSOH
reaction to fire E_{ca}

tight buffer

-20 to +60 °C

-5 to +50 °C

G.657.A1

250 µm

900 µm

300 N

1 000 N/100 mm

12,5 x D cable

25 x D cable

**12f 8,5 mm, 24f 10,5 mm,
48f 13,5 mm**

**12f 71 kg/km, 24f 98 kg/km,
48f 154 kg/km**

12-48

Fibre optic riser cable Solarix SXKO-RISER-OS-LSOH reaction to fire E_{ca}. The cable is ideal for vertical backbones inside the buildings with easy connectivity of individual users. The outer jacket of the cable is made of low smoke and halogen free compound. The fibres in the secondary coating are freely stored in the centre of the cable so they can be easily pull out in the place of the cut and are protected by two FRP strength members, one on each side of the cable. In case of 24f and 48f version the fibres are also marked with black line for correct identification. Our fibre cables contain no metal elements and therefore are fully dielectric. The fibre itself is a G.657.A1 type.

Part No.

Description

SXKO-RISER-12-OS-LSOH-WH

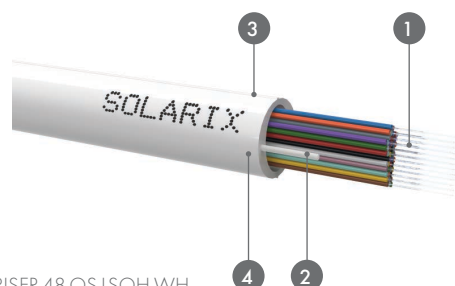
RISER cable Solarix 12f 9/125, LSOH E_{ca}, white

SXKO-RISER-24-OS-LSOH-WH

RISER cable Solarix 24f 9/125, LSOH E_{ca}, white

SXKO-RISER-48-OS-LSOH-WH

RISER cable Solarix 48f 9/125, LSOH E_{ca}, white



SXKO-RISER-48-OS-LSOH-WH

Cable construction

1. Fibres
2. Strength member
3. Cutting point
4. Outer jacket

FIBRE OPTICS

Optical Fibers Parameters

Singlemode Fibers 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 Fibers Basic Parameters

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