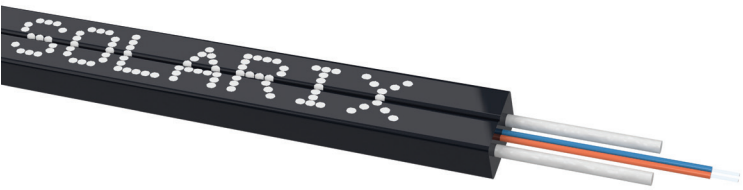


SXKO-MDIC-2-OS-LSOH-BK

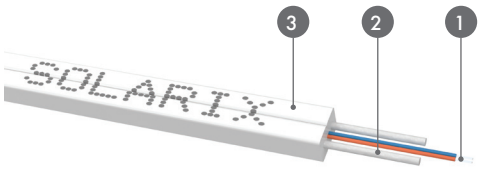
FIBRE OPTIC CABLES

Flat drop MDIC singlemode

Outer jacket	LSOH, UV stable reaction to fire E_{ca}
Operating/Storage temperature	-20 to +60 °C
Installation temperature	-5 to +50 °C
Operating/Storage temperature	-20 to +60 °C
Fibre type	G.657.A1 OS1
Diameter of the primary protection	250 µm
Short-term tensile resistance	150 N
Short-term pressure resistance	1 000 N/100 mm
Minimum bend radius (short term)	15 x D cable
Minimum bend radius (long-term)	20 x D cable
Cable diameter	3,1 x 2,0 mm
Cable weight	10 kg/km
The number of fibres in the jacket	1–4

Fibre optic flat drop cable Solarix SXKO-MDIC-OS-LSOH reaction to fire E_{ca}. The cable is ideal for FTTH applications thanks to its excellent installation performance. The outer jacket of the cable is made of low smoke and halogen free compound. The cable contains two FeZn wires on the sides of the cable and the fibers themselves are placed between these tensile members so that they are sufficiently protected. Thanks to the construction of the cable, fibres are easily accessible without the need for use of stripping tool. The fibre itself is a G.657.A1 OS1 type. The cable is supplied in two, black or white colours.

Part No.	Description
SXKO-MDIC-2-OS-LSOH-BK	MDIC cable Solarix 2f 9/125, 3,1 mm LSOH E_{ca}, black
SXKO-MDIC-2-OS-LSOH-WH	MDIC cable Solarix 2f 9/125, 3,1 mm LSOH E_{ca}, white



SXKO-MDIC-2-OS-LSOH-WH

Cable construction
1. Fibres
2. Strength member
3. Outer jacket

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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 Wavelenght λcc	nm	≤ 1 260	≤ 1 260	≤ 1 260
Fibre Cutoff Wavelenght λc	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