SXKO-MLT-48-OS-PE

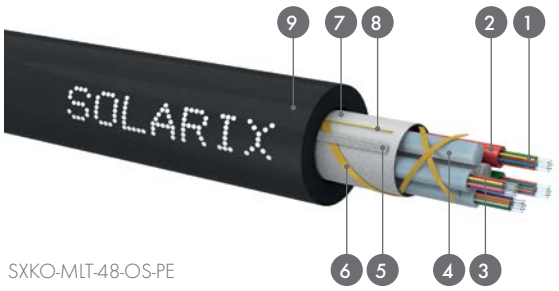
FIBRE OPTIC CABLES

Outdoor singlemode

Outer jacket	PE reaction to fire F_{ca}
Cable secondary protection	gel-filled tube
Cable type acc. to the number of tubes	MLT
Operating/Storage temperature	-40 to +70 °C
Installation temperature	-15 to +40 °C
Fibre type	G.652.D
Diameter of the primary protection	250 µm
Short-term tensile resistance	1 500 N
Short-term pressure resistance	2 000 N/100 mm
Minimum bend radius (short term)	15x D cable
Minimum bend radius (long-term)	20x D cable
Cable diameter	10,7 mm
Cable weight	86 kg/km
The number of fibres in the tube	12

Outdoor fibre optic cables Solarix SXKO-MLT-OS-PE reaction to fire F_{ca} are suitable for outdoor installations thanks to its UV stable PE jacket. The fibres themselves are stored in a gel-filled tube to protect them from moisture. They are always placed with a maximum of 12 fibres per tube. Fibre cable contains no metal elements and therefore is fully dielectric. The fibre itself is a G.652.D type.

Part No.	Description
SXKO-MLT-24-OS-PE	Outdoor cable MLT Solarix 24vl 9/125, PE F_{ca}, black
SXKO-MLT-48-OS-PE	Outdoor cable MLT Solarix 48vl 9/125, PE F_{ca}, black



SXKO-MLT-48-OS-PE

Cable construction
1. Fibres
2. Gel-filled tube
3. Strength member
4. Filling tube
5. Water-proof yarn
6. Aramid yarn
7. Water-proof tape
8. Rip cord
9. Outer jacket

+420 840 505 555 • info@solarix.cz
www.solarix.cz

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

+420 840 505 555 • info@solarix.cz
www.solarix.cz

SOLARIX