



FIBRE OPTIC CABLES

Flat DROP singlemode

SXKO-FLAT-DROP-24-OS-HDPE



Outer jacket	HDPE
Cable secondary protection	reaction to fire F_{ca}
Cable type acc. to the number of tubes	gel-filled tube
Operating/Storage temperature	CLT
Installation temperature	-40 to +70 °C
Fibre type	-20 to +60 °C
Diameter of the primary protection	G.652.D
Short-term tensile resistance	250 µm
Short-term pressure resistance	1 500 N
Minimum bend radius (short term)	2 000 N/100 mm
Minimum bend radius (long-term)	12,5x D cable
Cable diameter	25x D cable
Cable weight	12f: 4,3 x 7,5 mm,
The number of fibres in the tube	24f: 4,3 x 9,8 mm
	12f: 35 kg/km,
	24f: 52 kg/km
	12 and 24

Outdoor fibre optic self-supporting Flat DROP cable Solarix SXKO-FLAT-DROP-OS-HDPE reaction to fire F_{ca}. The cable is of flat construction and is ideal for overhead installations with spans up to 80 m using flat cable anchors. The cable can also be installed by pulling into HDPE ducts. The G.657.A1 type fibres are placed in a central gel-filled tube to protect them from moisture. The cable includes two FRP strength members inside the sheath to increase mechanical resistance. The fibre optic cable contains no metal elements and is fully dielectric. Flat DROP cable is available in 12 and 24 fibre versions.

Part No.

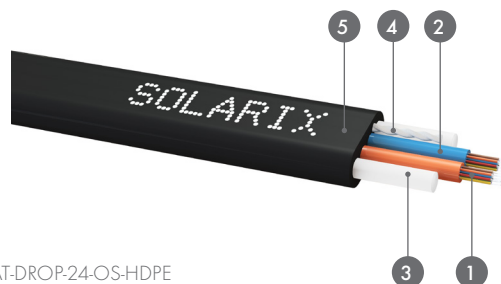
Description

SXKO-FLAT-DROP-12-OS-HDPE

Outdoor cable Flat DROP Solarix 12f 9/125, HDPE F_{ca}, black

SXKO-FLAT-DROP-24-OS-HDPE

Outdoor cable Flat DROP Solarix 24f 9/125, HDPE F_{ca}, black



SXKO-FLAT-DROP-24-OS-HDPE

Cable construction

1. Fibres
2. Gel-filled tube
3. Strength member
4. Ripcord
5. 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