SXKO-DUCT-24-OS-HDPE

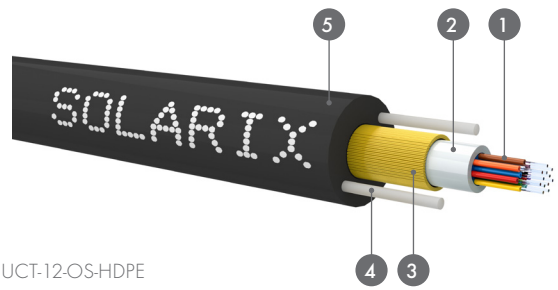
FIBRE OPTIC CABLES

Outdoor DUCT singlemode

Outer jacket	**HDPE, reaction to fire F_{ca}**
Cable secondary protection	**gel-filled tube**
Cable type acc. to the number of tubes	**CLT**
Storage temperature	**-40 to +70 °C**
Installation temperature	**-15 to +50 °C**
Operating temperature	**-20 to +70 °C**
Fibre type	**G.652.D OS2**
Diameter of the primary protection	**250 µm**
Short-term tensile resistance	**400 N**
Long-term tensile resistance	**130 N**
Minimum bend radius (short term)	**30x D cable**
Minimum bend radius (long-term)	**15x D cable**
Cable diameter	**12f: 5,1 mm, 24f: 5,6 mm**
Cable weight	**12f: 20,5 kg/km, 24f: 25 kg/km**
The number of fibres in the tube	**12 and 24**

Outdoor fibre optic DUCT cable Solarix SXKO-DUCT-OS-HDPE reaction to fire F_{ca}. Thanks to its design, the cable is ideal for pulling into HDPE ducts or for overhead installations. G.652.D OS2 type fibres are placed in a central gel-filled tube to protect them from moisture. The cable contains aramid yarns wrapped around a central tube and two FRP strength members inside the sheath to increase mechanical resistance. The fibre optic cable contains no metal elements and is fully dielectric. DUCT cable is available in 12 and 24 fibre versions.

Part No.	Description
SXKO-DUCT-12-OS-HDPE	Outdoor cable DUCT Solarix 12f 9/125, HDPE F_{ca} black
SXKO-DUCT-24-OS-HDPE	Outdoor cable DUCT Solarix 24f 9/125, HDPE F_{ca} black



SXKO-DUCT-12-OS-HDPE

Cable construction
1. Fibres
2. Gel-filled tube
3. Aramid yarn
4. Strength member
5. Outer jacket

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FIBRE OPTICS

Optical Fibres Parameters

Singlemode Fibres Basic Parameters

Geometric Parameters	Unit	ITU-T G.652.D
Mode Field Diameter (MFD)		
@ 1 310 nm	μm	9,2 ± 0,4
@ 1 550 nm	μm	10.4 ± 0,5
Cladding diameter	μm	124,8 ± 0,7
Coating diameter	μm	254 ± 5,0
Core-Cladding Concentricity Error	μm	≤ 0,5
Cladding-Coating Concentricity Error	μm	≤ 12
Transmission Parameters		
Attenuation		
@ 1 310 nm	dB/km	≤ 0,36 [1]
@ 1 550 nm	dB/km	≤ 0,25 [1]
@ 1 625 nm	dB/km	≤ 0,24 [1]
Dispersion Coefficient		
@ 1 550 nm	ps/(nm*km)	≤ 18
@ 1 625 nm	ps/(nm*km)	≤ 22
PMD individual fibre	ps/√km	0,2
Cable Cutoff Wavelenght λcc	nm	≤ 1 260
Fibre Cutoff Wavelenght λc	nm	1 150 - 1 330

[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