

SXKO-DUCT-24-OS-HDPE

FIBRE OPTIC CABLES

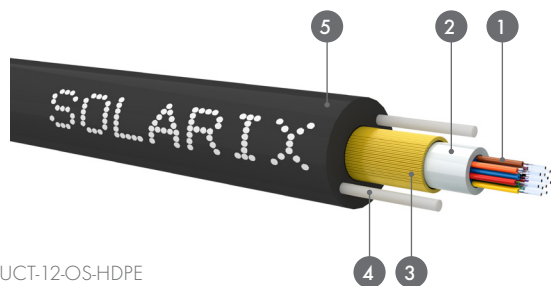
Outdoor DUCT singlemode



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
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 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



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 Wavelength λ _{cc}	nm	≤ 1 260
Fibre Cutoff Wavelength λ _c	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