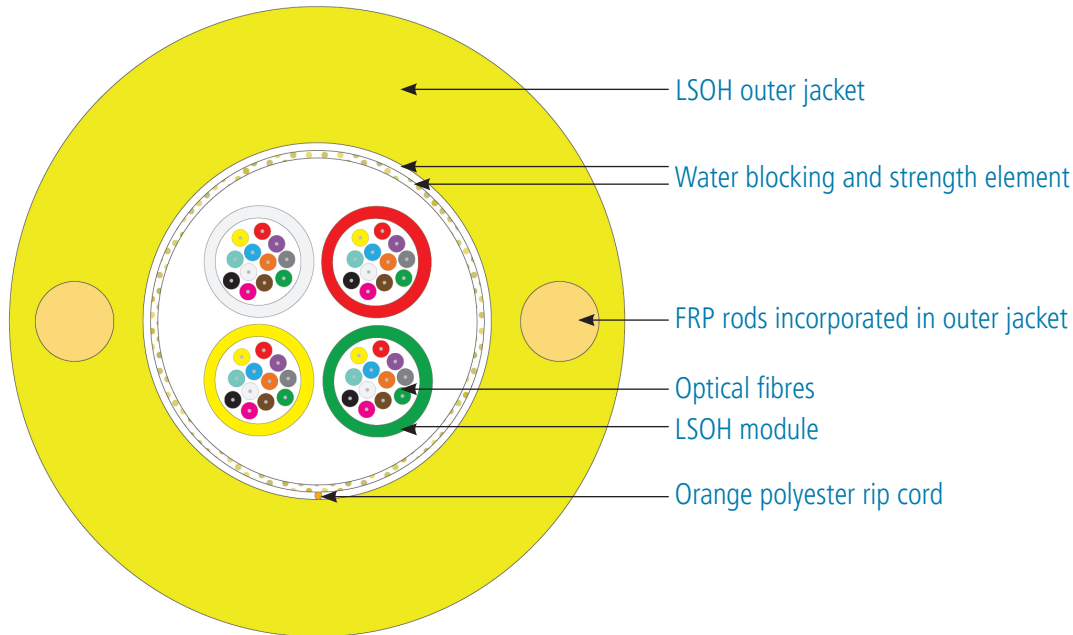


Mikro Sheath Kabel, SM G.657.A1 G12-G144

K-LTMS-Y-7A1-Gxxx



DESIGN

LSOH modules with 12 pcs of optical fibres each
 Water swellable and tensile strength elements
 FRP rods as strength elements (incorporated in outer jacket)
 UV resistant LSOH sheath
 Orange polyester rip cord

FEATURES

- Indoor / Outdoor
- FTTH access networks
- Fully dielectric cable

Variant	Quantity (pcs)				Ø nominal (typ. ±0,3) [mm]	Nominal weight (±10%) [kg/km]	Max allowed tension [N]	Max static tension [N]
	Fibres	Fibres per module	Total elements	Active modules				
1M X 12F	12	12	1	1	5,9 (max 6,4)	35	800	400
2M X 12F	24	12	2	2	7,0 (max 7,5)	45	800	400
3M X 12F	36	12	3	3	7,2 (max 7,7)	50	800	400
4M X 12F	48	12	4	4	7,9 (max 8,4)	55	1000	500
6M X 12F	72	12	6	6	9,0 (max 9,5)	65	1600	800
8M X 12F	96	12	8	8	10,2 (max 10,7)	93	1800	900
12M X 12F	144	12	12	12	11,5 (max 12,0)	110	2200	1100
16M X 12F	192	12	16	16	13,2 (max 13,7)	130	2300	1100
18M X 12F	216	12	18	18	14,2 (max 14,7)	160	2500	1200
24M X 12F	288	12	24	24	15,2 (max 15,7)	170	2700	1300

Other variants, designs, mechanical and environmental properties available on demand

TECHNICAL DATA

Test	Specification	Method	Requirements
Tensile strength	IEC60794-1-2 Method E1	Mandrel diameter: $\geq 30 \times OD$ Load: as provided in table above Mandrel diameter: $\geq 30 \times OD$ Sustained Load: as provided in table above	Fibre strain: < 0.6%(during test) $\leq 0.05\%$ (after test) $\Delta\alpha$ reversible (after test)
Crush resistance	IEC60794-1-2 Method E3	Load: 2000 N / 10 cm / 5 minutes Plate size: 100 mm x 100mm Number of pts: 3 (500mm apart)	Fibre strain: $\leq 0.25\%$
Impact resistance	IEC60794-1-2 Method E4	Impact energy: 5J Radius: 300 mm Distance: 1m No. of impacts: 3 at different points 500mm apart	$\Delta\alpha \leq 0.05dB @ 1550nm$ (after test) No jacket cracking and fibre breakage
Torsion	IEC60794-1-2 Method E7	Cable length to be twisted: 1m No. of cycles: 5 Twist angle: $\pm 180^\circ$ Load: 100N	$\Delta\alpha \leq 0.1dB @ 1550nm$ (after test) No jacket cracking and fibre breakage
Bending	IEC60794-1-2 Method E11	Mandrel radius: $12 \times OD / 5$ turns (wrapped and unwrapped) / 10 flexing cycles	No jacket cracking and fibre breakage $\Delta\alpha \leq 0.05dB @ 1550nm$ (after test) No jacket cracking and fibre breakage
Water penetration	IEC 60794-1-2 Method F5A	Water head: 1m Sample length: 3m (3 samples of each cable) Time: 24 hrs	No water leakage

(*) All values for single-mode optical fibres, all optical parameters for wavelength 1550nm

OTHER PRODUCTS IN THE SAME RANGE

Product	Description	Part number
Mikro Sheath Kabel, SM G.657.A1 G144	Gul, LSZH, 1 meter	K-LTMS-Y-7A1-G144-1m
Mikro Sheath Kabel, SM G.657.A1 G24	Gul, LSZH, 1 meter	K-LTMS-Y-7A1-G24-1m
Mikro Sheath Kabel, SM G.657.A1 G24, 1 m	Gul, LSZH, på 500 meter trommel	K-LTMS-Y-7A1-G24-500
Mikro Sheath Kabel, SM G.657.A1 G48	Gul, LSZH, 1 meter	K-LTMS-Y-7A1-G48-1m
Mikro Sheath Kabel, SM G.657.A1 G48, 1 m	Gul, LSZH, på 500 meter trommel	K-LTMS-Y-7A1-G48-500
Mikro Sheath Kabel, SM G.657.A1 G96	Gul, LSZH, 1 meter	K-LTMS-Y-7A1-G96-1m

NT-FIBER OPTIC - Color mode

FIBRE COLORS IDENTIFICATION												
TELENOR standard												
Fibre 01-12	1	2	3	4	5	6	7	8	9	10	11	12
Code												
Colour	White	Red	Yellow	Green	Blue	Grey	Brown	Black	Violet	Aqua	Orange	Pink

E-LOOSE TUBES - Color mode

LOOSE TUBES COLOR CODE												
TELENOR Standard												
Fibre 01-12	1	2	3	4	5	6	7	8	9	10	11	12
Code												
Colour	White	Red	Yellow	Green	Blue	Grey	Brown	Black	Violet	Aqua	Orange	Pink

OPTICAL SPECIFICATIONS

Maximum Attenuation	
Wavelength (nm)	Maximum Value* (dB/km)
1310	≤0.32
1383**	≤0.32
1490	≤0.21
1550	≤0.18
1625	≤0.20

*Alternate attenuation offerings available upon request.

**Attenuation values at this wavelength represent posthydrogen aging performance.

Point Discontinuity	
Wavelength (nm)	Point Discontinuity (dB)
1310	≤0.05
1550	≤0.05

Cable Cutoff Wavelength (λ_{cc})
$\lambda_{cc} \leq 1260$ nm

Attenuation vs Wavelength		
Range (nm)	Ref. λ (nm)	Max. Difference (dB/km)
1285 - 1330	1310	0.03
1525 - 1575	1550	0.02

The attenuation in a given wavelength range does not exceed the attenuation of the reference wavelength (λ) by more than the value Δ .

Mode-Field Diameter	
Wavelength (nm)	MFD (μ m)
1310	9.2 ±0.4
1550	10.4 ±0.5

Macrobend Loss			
Mandrel Radius (mm)	Number of turns	Wavelength (nm)	Induced Attenuation* (dB)
10	1	1550	≤0.50
10	1	1625	≤1.5
15	10	1550	≤0.05
15	10	1625	≤0.30
25	100	1310, 1550, 1625	≤0.01

*The induced attenuation due to fiber wrapped around a mandrel of a specified radius.

Dispersion	
Wavelength (nm)	Dispersion Value [ps/(nm.km)]
1550	≤18.0
1625	≤22.0

Zero Dispersion Wavelength (λ_0): 1304 nm ≤ λ_0 ≤ 1324 nm
 Zero Dispersion Slope (S_0), $S_0 \leq 0.092$ ps/(nm²•km)

Polarization Mode Dispersion (PMD)	
	Value (ps/Vkm)
PDM Link Design Value	≤0.04*
Maximum Individual Fiber PMD	≤0.1

*Complies with IEC 60794-3, 2001, Section 5.5, Method 1, (m = 20, Q = 0.01%), September 2001.

The PMD link design value is a term used to describe the PMD of concatenated lengths of fiber (also known as PMD₀). This value represents a statistical upper limit for total link PMD. Individual PMD values may change when fiber is cabled.