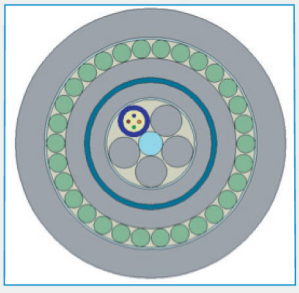
UC$^{FIBRE™}$ LTFMSMNWM Series

SWA, Nylon + LSZH Sheath, Chemical/Corrosive Resistant

Features

- **Central strength member (CSM):** glass fibre reinforced plastic material (FRP) with PE coating when needed.
- **Tube:** thermoplastic material, containing up tp 12 optical fibres and filled with a suitable water tightness compound
- **Stranding**: The required numbers of elements (tubes or fillers) are SZ stranded around the central strength member
- **Core Wrapping**: polyester tape (jelly filled)
- **Inner Sheath**: MDPE (P) or LSZH (M)
- **Inner Armour**: Corrugated steel tape
- **Middle Sheath**: HDPE (P) or LSZH (M)
- **Nylon sheath**: Black Nylon Polyamide 12 (PA 12)
- **Outer Armour**: Galvanized steel wire. WB jelly filled
- **Outer Sheath**: LSZH flame retardant to IEC 60332-3C
- **Suitable for Direct Buried, Rodent /Termites/Corrosive environment. Flame retardant to LSZH to IEC 60332-3C, 61034 & 60754-1&2**



Overview

This cable is especially designed for harsh environments. The double armour combination of corrugated steel tape and galvanized steel provide superior crush protection to the fibers. Water tightness compound within loose tube reinforced by polyster tape and jelly protects the fibers against chemical, corrosion and moisture.

Fire Rating

- IEC 60332-1, IEC 60332-24, IEC 61034-2, IEC 60754-1/2

Main characteristics

Test	Standard	Value	Sanction*
Max. installation tension	IEC 60794-1-2-E1	6000 N	No visible fibre strain, Δα ≤ 0.05 dB
Crush	IEC 60794-1-2-E3	4000N / 100mm	Δα ≤ 0.3 dB(MM), 0.05 dB(SM)
Impact	IEC 60794-1-2-E4	30 Nm, 3 impacts, r=300mm	Δα ≤ 0.3 dB(MM), 0.05 dB(SM)
Temperature Cycling	IEC 60794-1-2-F1	-30 -> +70°C	Δα ≤ 0.3 dB/km(MM), 0.05 dB/km(SM)
Water Penetration	IEC 60794-1-2-F5B	sample=3m, water=1m	No water leakage after 24 hour

*values for single-mode fibres, all optical measurements performed at 1550 nm
values for multi-mode fibres, all optical measurements performed at 1300 nm

Technical data

No. of Fibres		2, 4, 8	6, 12	24, 36, 48	72	96
Design (element × fibre per tube)		5x4	5x6	5x12	6x12	8x12
Loose Tube / Filler - Ø	mm	2.0 nominal			2.0 nominal	2.0 nominal
CSM/sheath diameter	mm	1.5 nominal			2.2 nominal	2.0/3.5
Inner sheath thickness	mm	0.8 nominal			0.8 nominal	0.8 nominal
Middle sheath thickness	mm	1.0 nominal			1.0 nominal	1.0 nominal
Nylon sheath thickness	mm	0.4 nominal			0.4 nominal	0.8 nominal
Galvanized steel wire	mm	1.0 nominal			1.0 nominal	1.25 nominal
Outer sheath thickness	mm	1.9 nominal			1.9 nominal	1.9 nominal
Cable Diameter	mm	17.9 nominal			18.6 nominal	20.4 nominal
Cable Weight	kg / km	523			559	709
Max installation tension	N	6000				
Min. bending radius	mm	Without Tension 15 × Cable-Ø		Under Maximum Tension 25 × Cable-Ø		
Temperature radius	°C	Installation -5 -> +50;		Transport. & Storage -40 -> +70 ;		Operation -30 -> +70

Ordering Information

UC$^{FIBRE™}$ LTFMSMNWM SERIES FO Cable part numbers are made up using the table below.

The part number always starts with the letters LTFMSMNWM to denote that it is a UC$^{FIBRE™}$ LTFMSMNWM SERIES FO Cable. This is followed by 3 numbers which symbolises the core quantity and then 2 letters to denote the fibre type.

Example of a UCFIBRE™ LTFMSMNWM SERIES FO Cable part number:
LTFMSMNWM08M1

The above example describes an OM1 (62.5um, Orange Sheath) UC$^{FIBRE™}$ LTFMSMNWM SERIES FO Cable, with 8 cores.

LTFMSMNWM SERIES	CORE QUANTITY	FIBRE TYPE
LTFMSMNWM	XXX	XX

CORE QUANTITY		FIBRE TYPE
002 - 2 CORES	024 - 24 CORES	SM - SINGLEMODE, G652D, 9um (yellow sheath)
004 - 4 CORES	036 - 36 CORES	M1 - OM1, 62.5um (orange sheath)
006 - 6 CORES	048 - 48 CORES	M2 - OM2, 50um (orange sheath)
008 - 8 CORES	072 - 72 CORES	M3 - OM3, 50um (aqua sheath)
012 - 12 CORES	096 - 96 CORES	M4 - OM4, 50um (aqua sheath)