

12-96 Core Firetuf™ I10S

Fire Resistant Fibre Optic Cable, LSZH

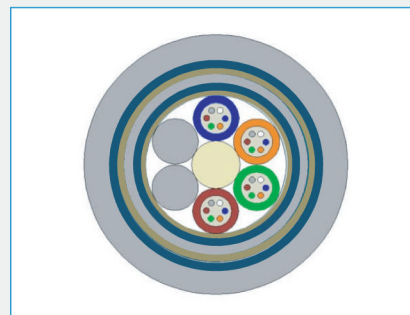
Features

- **Central strength member (CSM)** : steel wire with plastic coating when needed.
- **Tube**: thermoplastic material, containing up 4,6 or 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.
- **Longitudinal Water Tightness**: Water Blocking Tape & Yarn.
- **Fire Barriers**: Inner & outer special fire blocking tapes.
- **Armours**: Inner & outer corrugated steel tapes.
- **Sheaths**: Inner & outer LSZH

Technical Data

No. of Fibres		4,6,12,24	36,48,72	96
Design (Elements x Fibres per Tube)		Up to 4x6	6x6, 4x12, 6x12	8x12
Loose Tube / Filler-Ø	mm	2.1	2.1	2.1
CSM / sheath diameter	mm	2.0	2.2	2.0/3.5
Inner sheath thickness	mm	1.0 nominal	1.0 nominal	1.0 nominal
Outer sheath thickness	mm	2.0 nominal	2.0 nominal	2.0 nominal
Cable Diameter	mm	15.3 nominal	15.3 nominal	16.8 nominal
Cable Weight	kg/km	300	317	340
Max installation tension	N	3000		
Min. bending radius	mm	Without Tension 10 x Cable-Ø	Under Maximum Tension 20 x Cable-Ø	
Temperature range	°C	Installation	Transport & Storage	Operation
Flame Retardant		-10->+60;	-10->+60;	-10->+60;
Fire Resistance		IEC 60332-3-24		
		IEC60331-25, In house test up to 800°C, 2hrs.		

Please refer to our General Installation, Safety & Handling recommendations before handling.



Application

The application of this cable is circumstances where a very high degree of fire safety is required as the cable will function during a fire, has limited fire spread, has limited smoke generation and is halogen free. Widely used in Industrial environment due to its robust construction.

Standards

- EN 60794-3-10

Fire Rating

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

Optional

- Armouring SWA or SWB

Main Characteristics

Test	Standard	Value	Sanction*
Max. installation tension	IEC 60794-1-2-E1	3000 N	fibre strain ≤ 0.33%, Δα reversible
Crush (short term)	IEC 60794-1-2-E3	3000 N / 100mm	Δα ≤ 0.3 dB(MM), 0.1 dB(SM)
Temperature range	IEC 60794-1-2-F1	40->+70°C	Δα ≤ 0.3 dB/km(MM), 0.1 dB/km(SM)
Water Penetration	IEC 60794-1-2-F5B	40->+70°C	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

Ordering Information

FIRETUF® I10S Fire Resistant FO Cable part numbers are made up using the table below.

The part number always starts with the letters I10S to denote that it is a FIRETUF® I10S Fire Resistant 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 I10S part number:

I10S024M1

The above example describes an OM1 (50um) FIRETUF® I10S Fire resistance FO Cable, with 24 cores.

