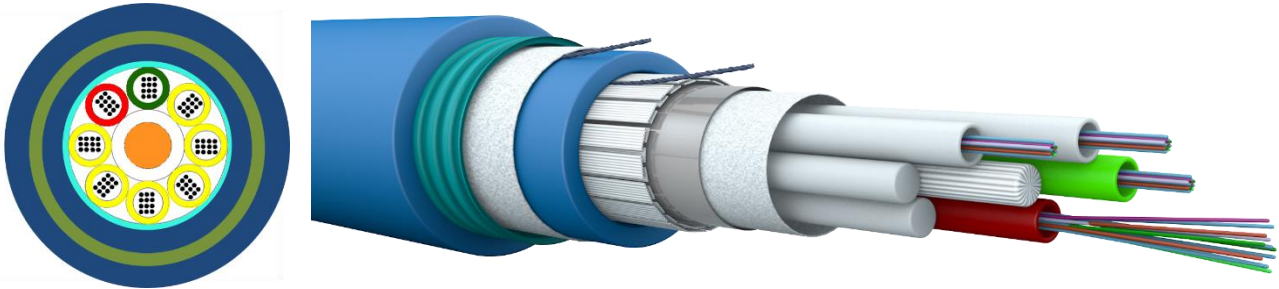


Firetuf® OFC-LT-CST: Fire Resistant Universal Stranded Loose Tube Cable

Steel tape armoured, fire resistant cable, double LSZH sheathed, up to 144 fibres



Application and Installation

Installation in tunnels and subways where there are requirements for reaction to fire
Difficult installation environments where fire safety is a primary concern
For conditions with risk of severe rodent attacks

Standards

EN 187 000, IEC 60794-3, IEC 60794-3-10, IEC 60794-3-12, ISO 11801-1, EN 50 173-1

Flame Resistance

IEC 60331-25 (90)	Fire resistance: 90 minutes at 750 °C (No fibre break)
EN 50200 PH 90 (for D ≤ 20 mm)	Fire resistance with impact 90 minutes 830 °C (No fibre break)
IEC 60331-1 PH 90 (Based on for D > 20 mm)	Fire resistance with impact 90 minutes 830 °C (No fibre break)
IEC 60332-1-2	Single vertical wire test
IEC 60332-3-24 =	Vertically-mounted bunched wires and cables
IEC 332-3C	
IEC 60754-1	No halogens
IEC 60754-2	No acid matters
IEC 61034-2	No dense smoke

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Construction

Central strength member	FRP rod												
Loose tube	Ø 2.3 mm special gel filled loose tubes with max. 12 fibres each, for layup refer to B04												
Fibre colour code	<table border="0"> <tr> <td>1 Red</td> <td>7 Brown</td> </tr> <tr> <td>2 Green</td> <td>8 Violet</td> </tr> <tr> <td>3 Blue</td> <td>9 Turquoise</td> </tr> <tr> <td>4 Yellow</td> <td>10 Black</td> </tr> <tr> <td>5 White</td> <td>11 Orange</td> </tr> <tr> <td>6 Grey</td> <td>12 Pink</td> </tr> </table>	1 Red	7 Brown	2 Green	8 Violet	3 Blue	9 Turquoise	4 Yellow	10 Black	5 White	11 Orange	6 Grey	12 Pink
1 Red	7 Brown												
2 Green	8 Violet												
3 Blue	9 Turquoise												
4 Yellow	10 Black												
5 White	11 Orange												
6 Grey	12 Pink												
Tube colour code	First: Green Middle: Yellow if single mode fibre and white if multi-mode fibres Last: Red												
Stranding	SZ stranding around the FRP rod												
Water blocking	The core is water blocked using swellable tape and/or tread												
Wrapping	Layer of fire blocking tape(s)												
Strength members	Glass yarns												
Ripcord	1												
Inner sheath	1.5 mm blue LSZH compound according to EN 50290-2-27												
Ripcord	1												
Armouring	0.155 mm corrugated steel tape												
Outer sheath	1.4 mm blue LSZH compound according to EN 50290-2-27												
Sheath marking	DRAKA Firetuf OFC-LT-CST <Fibre count> <Fibre type <material code><factory code><production order no><Meter mark>												

Physical Properties

Attribute	IEC 60794-1-21/22 Method	Limits						
		24	36	48	60	72	96	144
Fibre count	-	24	36	48	60	72	96	144
Design (tube x fibre + filler)	-	2x12 +4F	3x12 +3F	4x12 +2F	5x12 +1F	6x12	8x12	12x12
Loose Tube / Filler - Ø	-	2.3 mm						
Nominal diameter [mm]	-	18.4					19.7	22.5
Nominal weight [kg/km]	-	385					438	568
Short term tensile strength (some days) [N]	E1	2700 N ($\Delta l/l$ fibre $\leq 0.33\%$, $\Delta\alpha$ reversible)						
Permanent tensile strength [N]	E1	900 N (no fiber strain, $\Delta\alpha \leq 0.05$ dB)						
Crush (compressive strength) [N/100 mm]	E3	4000N ($\Delta\alpha$ reversible)						
Impact [J]	E4	10 Nm ($\Delta\alpha \leq 0.05$ dB, after the test)						
Repeated bending	E6	R= 20 x cable Ø, 100N, 10 cycles ($\Delta\alpha \leq 0.05$ dB, after the test)						
Torsion	E7	100 N, -+ 180° 5 cycles ($\Delta\alpha \leq 0.05$ dB, after the test)						
Kink	E10	The cable do not form a kink when a loop is drawn together to a diameter 20 times the cable nominal diameter						
Minimum bending radius without tension[mm]	E11	15 x cable diameter						
Minimum bending radius with tension[mm]		20 x cable diameter						
Temperature range	F1	Transport and storage						-40 °C to +80 °C
		Installation						0 °C to +50 °C
		Operation						-30 °C to +70 °C
Water penetration	F5B	No water on free end (core only)						

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***) Values for multi-mode fibres, all optical measurements performed at 850 nm or 1300 nm. 0.10 dB /km or 0.10 dB (tensile and crush test will not be performed for MM fibres). Please note that attenuations will be measured at only 1310 nm and 1550 nm for single mode fibre cables.

Product Codes

Product code	Product description	Fibre count	Fibre type	Fibre data sheet
	FIRETUF OFC-LT-CST 24 G.652.D OS2	24	ESMF single mode G.652.D OS2	C06
	FIRETUF OFC-LT-CST 36 G.652.D OS2	36	ESMF single mode G.652.D OS2	C06
	FIRETUF OFC-LT-CST 48 G.652.D OS2	48	ESMF single mode G.652.D OS2	C06
	FIRETUF OFC-LT-CST 72 G.652.D OS2	72	ESMF single mode G.652.D OS2	C06
	FIRETUF OFC-LT-CST 96 G.652.D OS2	96	ESMF single mode G.652.D OS2	C06
	FIRETUF OFC-LT-CST 144 G.652.D OS2	144	ESMF single mode G.652.D OS2	C06