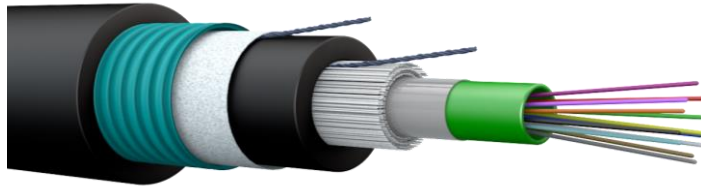


Firetuf™ OFC-UT-CST: Fire Resistant Armoured Central Tube Cable

Indoor/Outdoor, steel tape armoured (CST), double LSHF-FR sheathed optical cable, up to 24 fibres.
VDE: A/I-DQ(ZN)H(SR)H



A/I-DQ(ZN)H(SR)H FR CLT 1x24E9/125



3rd party verification of the fire tests by BUREAU VERITAS December 2014

Application and Installation

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.

The typical installation environment is indoor and indoor/outdoor in and between public buildings, in tunnels, metro lines and other places where one need very high degree of fire safety and support for critical communication.

This cable is also suitable for shipboard application.

The steel tape armouring makes the cable rodent proof.

The primary means of installation are on cable ladders, raceways and cable trays. The cable may however also be directly buried. The cable can be installed outdoor in the open, but shall be not be installed directly exposed the sun.

Standards

ISO 11801, EN 50173, IEC 60794-1, IEC 60794-2-

Fire Rating

Fire resistance tests

IEC 60331-25 (120)	Fire resistance: 120 minutes at 750 °C (No fibre break)
EN 50200 PH 120	Fire resistance with fire and impact 120 minutes 830 °C (No fibre break)
EN 50200 ANNEX E PH 30	Fire resistance until 15 minutes of fire and impact alone , followed by 15 minutes of fire , impact and water spray at 830 °C (No fibre break)
BS 8434 - 2	Fire resistance until 60 minutes of fire and impact alone , followed by 60 minutes of fire , impact and water spray at 930 °C (No fibre break)

Flame retardant tests

IEC 60332-1-2	Single vertical wire test
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Flame propagation test

IEC 60332-3-24 = IEC 332-3C	Vertically-mounted bunched wires and cables
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Halogen acid & gas tests

IEC 60754-1	No halogens
IEC 60754-2	No acid matters

Smoke emission tests

IEC 61034-2	No dense smoke
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Construction

Loose tube	Ø4.0 mm jelly filled loose tube green colored with up to 24 fibres		
Fibre colour code	1	Red	13 Yellow w/mark per 100 mm
	2	Green	14 White w/mark per 100 mm
	3	Blue	15 Grey w/mark per 100 mm
	4	Yellow	16 Turquoise w/mark per 100 mm
	5	White	17 Orange w/mark per 100 mm
	6	Grey	18 Pink w/mark per 100 mm
	7	Brown	19 Yellow w/mark every 50 mm
	8	Violet	20 White w/mark every 50 mm
	9	Turquoise	21 Grey w/mark every 50 mm
	10	Black	22 Turquoise w/mark every 50 mm
	11	Orange	23 Orange w/mark every 50 mm
	12	Pink	24 Pink w/mark every 50 mm
Fire barrier	Tape(s)		
Strength member	Water blocked E-Glass fibre elements		
Ripcord	1		
Inner sheath	2.5 mm black LSHF-FR sheath according to EN 50290-2-27 , UV stabilised		
Armouring	Coated and corrosion protected corrugated steel tape (CST), thickness 0.15 mm		
Ripcord	1		
Outer sheath	1.4 mm black LSHF-FR sheath according to EN 50290-2-27, UV stabilised		
Print legend	Draka Firetuf OFC-UT-CST <Fibre count> <Fibre type><Fibre brand><Item No>22<Batch Number> <Fibre count> <Fibre family> <Mode field diameter> /125 <Transmission Class> <Meter mark>		

Physical Properties

IEC 60794-1

Property	Test method	Value
Nominal outer diameter	-	17 mm
Nominal weight	-	351 kg/km
Maximum installation tensile strength	E1	3500 N ($\Delta l/l$ fibre $\leq 0.5\%$, $\Delta\alpha$ reversible) *
Compressive strength (crush)	E3	5000 N / 100 mm, max 5 min ($\Delta\alpha$ reversible) *
Impact	E7	50 Nm, No fibre break, 3 impacts, r=300mm,
Torsion	E7	5 cycles ± 1 turn
Kink	E10	The cables do not form a kink when a loop is drawn together to a diameter of 20xD (Cable diameter) mm
Min. bending radius, unloaded	E11	R = 255 mm
Min. bending radius, loaded	-	R = 340 mm
Temperature range	F1	Storage: -40°C to +80°C Installation: 0°C to +50°C Operation: -40°C to +70°C. ($\Delta\alpha$ 0.05 dB /km)**
Water penetration	F5B	No water leakage after 24 hour, sample=3m, water=1m,

**) 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.

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Product Codes

Product code	Product description	Fibre count	Fibre type	Fibre data sheet

Delivery: Wooden drum with protection.
 Standard delivery length: 4 km with a tolerance of +- 5%.

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All sizes and values without tolerances are reference values. Specifications are for product as supplied by Prysmian Group: any modification or alteration afterwards of product may give different result.

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