

Firetuf[®] FIBRE I/O ST D MA LSHF-FR 1.8 kN

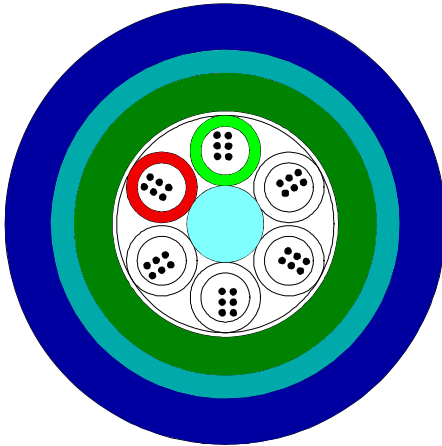
Steel tape armoured fire resistant cable, 6 – 96 fibres

DIN/VDE U-DQ H B H

NO

FR

DK LTnnmm-51-xxx



Application

Installation in tunnels and subways

Difficult installation environments where fire safety is a primary concern

Standards

EN 187 000
IEC 60794-3
IEC 60794-3-10
IEC 60794-3-12
ISO 11801 2nd edition
EN 50 173-1

Construction

Central strength member	Ø2.5 mm FRP rod	
Loose tube	Ø2.3 mm jelly filled loose tubes with up to 12 fibres each	
Fibre colour code	1 Red	7 Brown
	2 Green	8 Violet
	3 Blue	9 Turquoise
	4 Yellow	10 Black
	5 White	11 Orange
	6 Grey	12 Pink
Water blocking	The core is wrapped with swellable tape	
Inner sheath	Black FireRes [®] , EN 50290-2-27 (1.3 mm for 6 element construction and 0.8 mm for 8 element construction)	
Armouring	0.155 mm corrugated steel tape	
Outer sheath	2.0 mm FireRes [®] , EN 50290-2-27	

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Fire rating

IEC 60331-25 (90)	Fire resistance, 90 minutes at 750°C
IEC 60332-1-2	Single vertical wire test
IEC 60332-3A	Vertically-mounted bunched wires and cables
IEC 60332-3-24 = IEC 332-3C	Vertically-mounted bunched wires and cables
IEC 60754-1	No halogens
IEC 60754-2	No acid matters
IEC 61034-2	No dense smoke
EN 50200:2000	Fire resistance, 120 minutes at 860°C, with mechanical shock (1 per 5 minutes)

Physical properties

IEC 60794-1-2

Property	Test method	Value
Tensile strength (dynamic)	E1	1800 N
Tensile strength (permanent)	E1	1200 N
Compressive strength (crush)	E3	3000N
Impact	E4	20 Nm
Reverse bending	E6	30 reversed bends; R = 300 mm;
Torsion	E7	5 cycles ±1 turn
Kink	E10	No kink at 12x cable diameter
Temperature range	F1	Storage: -60 °C to 60 °C Installation: -30 °C to 60 °C Operation -60 °C to 70 °C In the interval -60 °C to 70 °C there is no attenuation variation (≤ 0.05 dB) for a single mode fibre, when tested according to the standard mentioned.
Water penetration	F5B	No water on free end (core only)

Mechanical properties

Fibre count; 6 fibre/tube	Fibre count; 8 fibre/tube	Fibre count; 12 fibre/tube	Nominal diameter	Nominal cable weight	Minimum bending radius
6-36	8-48	8-72	15.5 mm	290 kg/km	290 mm
42-48	56-64	84-96	15.5 mm	290 kg/km	290 mm

Product codes – ordering information

Item No.	Fibre count	Product code	Fibre type	Fibre data sheet
o. request				