

Armada®

FFCi Loose Tube Fibre Optic Cable

Fire Resistant • HFFR SHF-1



Cable Design

Central tube:	Thermoplastic material (PBT), jelly filled
Colour Code:	EIA/TIA 598
Strength member:	Glass fibre yarns
Fire Barrier:	Fire resistant Glass tape
Inner Jacket:	LSZH FireFighter SHF-1, Black
Armour:	DataGuard Galvanised steel wire braid (GSWB)
Outer Jacket:	LSZH FireFighter SHF-1, UV-Stabilised Black

Mechanical & Thermal Characteristics

Pulling Tension	Installation	1700 N
	Operation	500 N
Bending Radius (min.)	Static	10 x Ø
	Dynamic	20 x Ø
Crush		3000 N/10cm
Temperature range	Storage	-40 °C to +80 °C
	Installation	-10 °C to +60 °C
	Operating	-30 °C to +80 °C

Fire Behaviour

Fire resistance	IEC 60331-25		CEI 20-36/2-5
Flame retardant	IEC 60332-1-2	EN 50265-2-1	CEI 20-35/1-1
Fire No-fire propagation	IEC 60332-3-24	EN 50266-2-4	CEI 20-22/3-4
Halogen content	IEC 60754-1	EN 50267-2-1	CEI 20-37/2-1
Smoke density	IEC 61034-2	EN 50268-2	CEI 20-37/3-1



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Specification

Part Number	No. of Fibres	Tube Diameter [mm]	Overall Diameter [mm]	Weight [kg/km]
2410*0443CLT-01	4	2,70	9,50	130
2410*0843CLT-01	8	2,70	9,50	130
2410*1243CLT-01	12	2,70	9,50	130
2410*1643CLT-01	16	2,70	10,0	140
2410*2443CLT-01	24	2,70	10,0	140

*denotes fibre type required 1 = 62.5/125 | 2 = 50/125 | 8 = 9/125

Characteristics of Optical Fibre ITU-T G652D

Nominal MFD range at 1310 nm		8,6 - 9,4	µm
Nominal MFD range at 1550 nm		9,6 - 10,6	µm
Cladding diameter		125±0,7	µm
Coating diameter		245±10	µm
Core/cladding concentricity error		≤ 0,50	µm
Cladding non-circularity		≤ 0,70	%
Attenuation	1310 nm	≤ 0,36	dB/km
Attenuation	1383 nm	≤ 0,36	dB/km
Attenuation	1550 nm	≤ 0,23	dB/km
Attenuation	1285÷1330 nm	≤ 0,40	dB/km
Attenuation	1530÷1565 nm	≤ 0,25	dB/km
Attenuation	1565÷1625 nm	≤ 0,27	dB/km
Chromatic Dispersion coefficient	1285÷1330 nm	≤ 3,0	ps/nm • km average
Chromatic Dispersion coefficient	1285÷1330 nm	≤ 3,5	ps/nm • km maximum
Chromatic Dispersion coefficient	1550 nm	≤ 18	ps/nm • km
Chromatic Dispersion coefficient	1625 nm	≤ 22	ps/nm • km
Zero chromatic dispersion wavelength		1302 ≤ 1322	nm
Cut-off wavelength		≤ 1260	nm
Individual fibre polarization mode dispersion (PMD)		≤ 0,20	

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Characteristics Of Optical Fibre Multimode 62,5/125 IEC 60793-2-10 A1b

Core Diameter		62,5 ± 3	µm
Cladding Diameter		125 ± 2	µm
Coating Diameter		245 ± 10	µm
Core non-circularity		≤ 6	%
Cladding non-circularity		≤ 2	%
Numerical aperture		0,275 ± 0,015	
Attenuation	850 nm	≤ 3,5	dB/km
Attenuation	1300 nm	≤ 1,5	dB/km
Attenuation	850 nm	Min. 200	MHz • km
Attenuation	1300 nm	Min. 500	MHz • km

Characteristics of Optical Fibre MULTIMODE 50/125 IEC 60793-2-10 TYPE A1a.1

Core diameter		50 ± 3	µm
Cladding diameter		125 ± 2	µm
Coating diameter		245±10	µm
Core non-circularity		≤ 6	%
Cladding non-circularity		≤ 2	%
Numerical aperture		0,2 ± 0,02	
Attenuation	850 nm	≤ 3	dB/km
Attenuation	1300 nm	≤ 0,8	dB/km
Bandwidth	850 nm	Min. 500	MHz • km
Bandwidth	1300 nm	Min. 500	MHz • km

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