

Armada[®]

Loose Tube Fibre Optic Cable

HFFR SHF-1



Cable Design

Optical Fibres	Primary coated, Ø 250 ± 15µm
Central tube	Jelly filled (non-dripping silicon free with up to 24 fibres)
Colour Code	to IEC 60304
Strength member	Glass fibre yarns (swellable for longitudinal watertightness and as rodent protection)
Inner Jacket	LSZH FireFighter, 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
Watertightness	acc. to IEC 60794-1-2-F5	YES
	Storage	-30°C to +70°C
Temperature range	Installation	-5°C to +50°C
	Operating	-30°C to +70°C

Fire Behaviour

Halogen content	IEC 60754-2 (602)
Flame retardant	IEC 60332-3C



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Specification

Part Number	No. of Fibres	Tube Diameter [mm]	Overall Diameter [mm]	Weight [kg/km]
2410*044CLT-01	4	3,20	9,06	145
2410*084CLT-01	8	3,20	9,06	145
2410*124CLT-01	12	3,20	9,06	145
2410*164CLT-01	16	3,20	9,06	145
2410*244CLT-01	24	3,20	9,06	145

*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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