

Armada®

Tight Buffered Distribution Fibre Optic Cable

HFFR SHF-1



Cable Design

Fibre Type	Tight Buffered colour coded optical fibres
Strength member	Glass fibre yarns (swellable for longitudinal watertightness and as rodent protection)
Inner Jacket	FR-LSZH FireFighter UV-Stabilised, Black
Armour	DataGuard Galvanised steel wire braid (GSWB)
Outer Jacket:	FR-LSZH FireFighter SHF-1, UV-Stabilised Black

Mechanical & Thermal Characteristics

Crush resistance		2000 N/10cm
Impact resistance		3 impacts (w/20N.m)
Bending Radius (min.)	Static	15 x Ø
	Dynamic	20 x Ø
Compound Flow		30 cm/24h/70°C passed
Temperature range	Storage	-40°C to +60°C
	Installation	-5°C to +40°C
	Operating	-20°C to +50°C

Fire Behaviour

Flame Retardant	EN 60332-3-22 (Cat.A)
Acid Gases	EN 50267-1, EN 50267-2-2, EN 50267-2-3
Smoke Density	EN 61034-1, EN 61034-2



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Specification

Part Number	No. Of Fibres	Inner Jacket Ø ± 10% [mm]	Outer Jacket Ø ± 10% [mm]	Tensile Strength [N]	Weight [kg/km]
2410*044TB-01	4	5,50	8,47	1000	-
2410*084TB-01	8	6,50	9,47	1400	-
2410*124TB-01	12	7,30	10,27	1600	-
2410*244TB-01	24	10,40	10,40	2900	-

* denotes fibre type requires ; 1=62.5/125 | 2 = 50/125 OM2 | 3 = 50/125 OM3 | 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 ≤ λ ≤ 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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