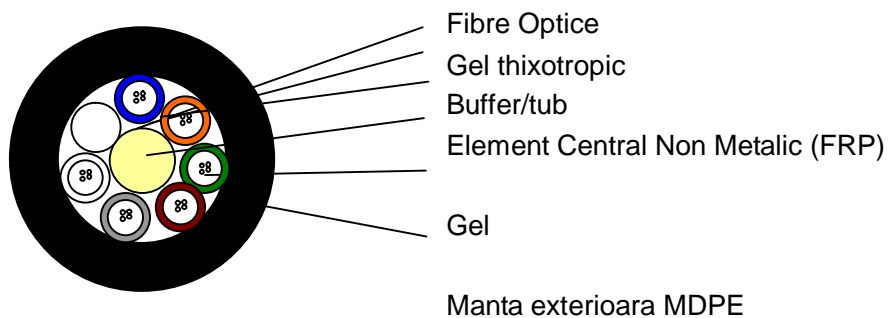


Cablu fibre optice - 1500N

Elemente constructive ale cablului cu fibre optice



Structura		Unitate	Parametru
Nr. de Fibre		Fibre	4/8/12/24
Nr. Max de fibre per buffer/tub		--	6
Diametru buffer		mm	Nom.Φ1.9
Diametru Cablu		mm	Nom.10.5
Gosime manta ext.		mm	Nom.2.0
Masa		Kg/km	Nom.94
Raza min. de indoire permisa	Dinamic		≥20× Diametru Cablu
	Static		≥10× Diametru Cablu
Limite de temperatura		□	-40 --- +60

Codare culori fibre

Nr. fibra	1	2	3	4	5	6
Culoare fibra	Albastru	Portocaliu	Verde	Maro	Gri	Alb
Nr. fibra	7	8	9	10	11	12
Culoare fibra	Rosu	Negru	Galben	Violet	Roz	Turquoise

Codare culori buffer/tub

Nr. buffer	1	2	3	4	5	6
Culoare buffer	Albastru	Portocaliu	Verde	Maro	Gri	Alb

Detalii constructive ale cablului, nr. de fibre per buffer/tub

Nr. Fibre	Nr. Tub		1	2	3	4	5	6	7	8
4	1	Culoare Tub	Albastru	F	F	F	F	F	F	F
		Nr. Fibre	4							
8	2	Culoare Tub	Albastru	Portocaliu	F	F	F	F	F	F
		Nr. Fibre	6	2						
12	2	Culoare Tub	Albastru	Portocaliu	F	F	F	F	F	F
		Nr. Fibre	6	6						
24	4	Culoare Tub	Albastru	Portocaliu	Verde	Maro	F	F	F	F
		Nr. Fibre	6	6	6	6				

FIBRA OPTICA

CARACTERISTICI TEHNICE FIBRA OPTICA SINGLE MODE (G.652D FIBER)

Category	Description		Specifications
			G.652D
Optical Specifications	Attenuation	@1310nm	≤0.35dB/km
		@1383nm	≤0.35dB/km
		@1550nm	≤0.22dB/km
		@1625nm	≤0.25dB/km
	Attenuation discontinuity		≤0.05 dB
	Attenuation vs. Wavelength	@1285-1330nm	≤0.05 dB/km
		@1525-1575nm	≤0.05 dB/km
	Zero Dispersion Wavelength		1300-1324nm
	Zero Dispersion Slope		≤0.092ps/(nm ² .km)
	Dispersion	@1310nm	≤3.5 ps/nm.km
		@1550nm	≤18 ps/nm.km
	Polarization Mode Dispersion(PMD)		≤0.2ps/km ^{1/2}
	Cable Cutoff Wavelength(λ _c)		≤1260nm
Effective Group Index of Refraction	@1310nm	1.4675	
	@1550nm	1.4681	
Macro bend loss (30mm radius ,100turns) 1625nm		≤0.1 dB	
Geometric Specifications	Mode Field Diameter	@1310nm	9.2±0.6μm
		@1550nm	10.4±0.8μm
	Cladding Diameter		125±1μm
	Cladding Non-Circularity		≤1.0%
	Coating Diameter		245±7μm
	Coating/Cladding Concentricity Error		≤8μm
Core/Cladding Concentricity Error		≤0.8μm	
Mechanical Specifications	Proof Test level		≥1.0%
	Fiber Curl Radius		≥4.0m
	Peak Coating Strip Force		1.3-8.9N

TEST REQUIREMENTS

No	Item	Test standard	Method	Acceptance criteria
1	Tensile test	IEC-60794-1-E1	-Max. Tensile strength:1500N -Sample length:50 meters -Time: 1minutes;	-Fiber strain at maximum Load: max. 0.33% -Attenuation increases \leq 0.10dB
2	Crush test	IEC-60794-1-E3	-Load:1000N -Time: 1 minutes -Length: 100mm	-No splits or cracks in the outer jacket; -Attenuation increase $<$ 0.10dB,
3	Impact test	IEC-60794-1-E4	-Impact energy: 450g - Height:1 meter -Impact points: min.1 --Number of impacts: 5	-No splits or cracks in the outer jacket -Attenuation increases \leq 0.10dB
4	Repeated bending	IEC-60794-1-E6	-R=20 \times cable outer diameter -1m cable length with 150N weight, 30 cycles	- No splits or cracks in the outer jacket -Attenuation increase \leq 0.10dB
5	Torsion test	IEC-60794-1-E7	-1m cable length with 150N weight - \pm 180 degrees, 10 cycles	- No splits or cracks in the outer jacket -Attenuation increase \leq 0.10B
6	Bending test	IEC-60794-1-E11	-Diameter of mandrel: 20 \times D -Number of turns/helix:10 -Number of cycles: 5	- No splits or cracks in the outer jacket - No fiber break
7	Temperature cycling test	IEC-60794-1-F1	-Temperature step: +20 \square \rightarrow -40 \square \rightarrow +60 \square \rightarrow -40 \square \rightarrow +60 \square \rightarrow +20 \square -Time per each step: 12 hrs -Number of cycles: 2 cycles	-Attenuation variation for reference value(the attenuation to be measured before test at +20 \pm 3 \square) \leq 0.05dB,
8	Water penetration test	IEC-60794-1-F5	-Water height: 1m -Sample length:3m -Duration of test: 24hrs	-No water leakage at the end of the sample
9	Drip test	IEC-60794-1-E14	-Five 0.3m samples suspended vertically in a climate chamber, raised temperature to +70 \square	-No filling compound shall drip from tubes after 24 hr