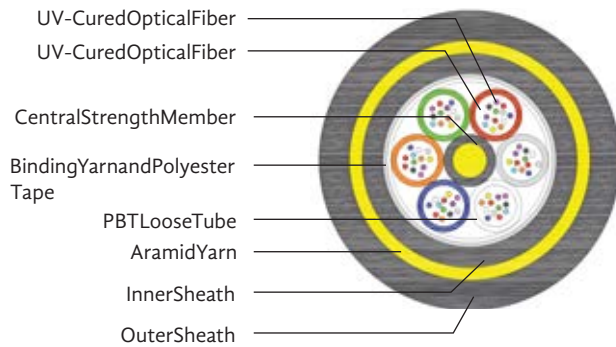


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CABLE FIBRA OPTICA ADSS 48F MONO MODO VANO 200 MTS



CHARACTERISTICS

- This specification covers the construction and properties of All Dielectric Self Support (ADSS) aerial single mode fiber cable.
- The cable will be used in aerial use.
- The optical fiber which used in the cable are also in compliance with ITU-T Rec. G. 652D.
- The cable generally meet any latest relevant ITU-T Recommendation or better.
- The fiber shall operate in 1310 nm and 1550 nm.
- Lift cycle of cable shall be 30 years without any significant deterioration.

CABLE CONSTRUCTION DETAILS

Span(m)		200				
Number of fibers		12~36	38~72	74~96	98~120	122~144
Filling Compound	Material	Thixotropic Jelly Compound				
Loose Tube (mm)	Material	(PBT) Polybutylene Terephthalate with color coding				
	Fiber per Tube	6		12		
	Inner Diameter	1.6		1.8		
	Outer Diameter	2.2		2.4		
Central Strength Member	Material	FRP(Fiber-glassReinforcedPlastic)				
Stranding		Reverse oscillating lay (ROL) technique (SZ Direction)				
Core Filling Compound	Material	Jelly				
Additional strength	Material	Aramid yarns				
Inner Sheath	Material	HDPE				
	Thickness	0.75 - 0.9 mm				
Outer Sheath	Material	LSZH				
	Diameter	1.6 - 1.8 mm				
Cable Diameter±0.1(mm)	Span 80m	11.7	12.9	14.3	15.8	17.6
	Span 120m	11.9	13.0	14.4	15.9	17.7
	Span 200m	12.2	13.3	14.6	16.1	17.9
Cable Weight(kg/km)	Span 80m	114	139	169	206	254
	Span 120m	117	142	172	208	256
	Span 200m	124	147	177	216	264

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CABLE CONSTRUCTION DETAILS

Fiber	Type	Singlemodetype
	material	Ge doped fused silica
Mode field diameter	1310nm	9.2±0.4µm
	1550nm	10.4±0.8µm
Core concentricity error		≤0.6µm
Cladding diameter		125±1.0µm
Cladding non-circularity		≤1%
Coating	material	UV curable acrylic
	diameter	242±7µm
Cladding Coating concentricity error		≤12µm
Coatingnon-circularity		≤6%
Fiberproof-tested		0.7 Gpa(1%) in accordance with the optical fiber proof test by IEC60793-1-B1
Wind gust up to		wind up to 150 Km/h

OPTICAL CHARACTERISTICS

attenuation	1310nm	≤0.35dB/km
	1550nm	≤0.21dB/km
The Temperature dependent of Attenuation Induced Attenuation -10°C to 70°C		The increase or decrease attenuation values not exceed 0.05dB/km
Macrobend Attenuation (100turns–60mm.Diameter)	1310nm	≤ 0.05dB
	1550nm	≤ 0.10dB
Zero-Dispersion Wavelength		1300-1324nm
Zero Dispersion Slope		Max. 0.092ps/(nm ² /km)
Chromatic Dispersion Coefficien	1228~1339 nm	≤3.4(ps/nm.km)
	1550 nm	≤17.5(ps/nm.km)
CableCut-offWavelength(cc)		≤1260nm
Polarization Mode Dispersion (PMD)		≤0.15ps/km1/2

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TENSILE LOADING

Test standard	IEC60794-1-2-E1
Loading	1.8 × Weight of Cable per km (span80m) 2.4 × Weight of Cable per km (span120m) 4.0 × Weight of Cable per km (span200m)
Loading Time	At least 5min.
Test result	Change of attenuation <0.1 dB @1550nm. No fiber break and no sheath damage. The fiber strain is measured during the cable has been subjected to the installation load 5 min. It shall not be greater than 33 % or 1/3 of the proof test.

IMPACT

Test standard	IEC60794-1-2-E4
Impact energy	1kg, 1m hight, Radius of hammer head 250 mm
Number of cycles	20 cycle, 2 second/cycle
Test result	Change of attenuation < 0.1dB @ 1550nm. No fiber break and no cable damage

CRUSH TEST

Test standard	IEC60794-1-2-E3
Steel plate	100 mm
Loading	1.1×Weight of Cable per km
Loading time	At least 10 min.
Test result	Change of attenuation < 0.1dB @ 1550nm. No fiber break and no cable damage

CABLE BENDING TEST

Test standard	IEC60794-1-2-E11
Diameter of mandrel	20 x diameter of cable
Number of cycles	5 cycles
Test result	Change of attenuation <0.1dB @ 1550nm. No fiber break and no cable damage.

FLEXING / REPEAT BENDING TEST

Test standard	IEC60794-1-2-E6
Diameter of mandrel	20 x diameter of cable
Number of cycles	≥25 cycles, 2second/cycle
Test result	Change of attenuation <0.1dB @ 1550nm. No fiber break and no cable damage.

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TWIST TORSION TEST

Test standard	IEC 60794-1-2-E7
Sample length	2 m
Number of cycles	10 cycles, ≤ 1 Min./cycle
Twist angle	$\pm 180^\circ$
Test result	Change of attenuation < 0.1 dB @ 1550 nm. No fiber break and no cable damage.

ENVIROMENT

Span (m)	200 - 300
Wind Velocity (km/hr)	≤ 60
Ice thickness	10

WATER PENETRATION TEST

Test standard	IEC-794-1-2-F5
High of water column	1 m
Sample length	3 m
Test time	At least 24 hour
Test result	At the end, no water shall have leaked from the opposite end of the cable.

TEMPERATURE CYCLING TEST

Test standard	IEC60794-1-2-F1
Number of cycles	2 cycle
Temperature Time	-20°C to $+65^\circ\text{C}$ 8 hours
Test result	Change of attenuation < 0.1 dB.

ORDEN DE PEDIDO

CÓDIGO	DESCRIPCIÓN
TEFOCACE1476	CABLE FIBRA OPTICA ADSS 48F MONO MODO VANO 200 MTS