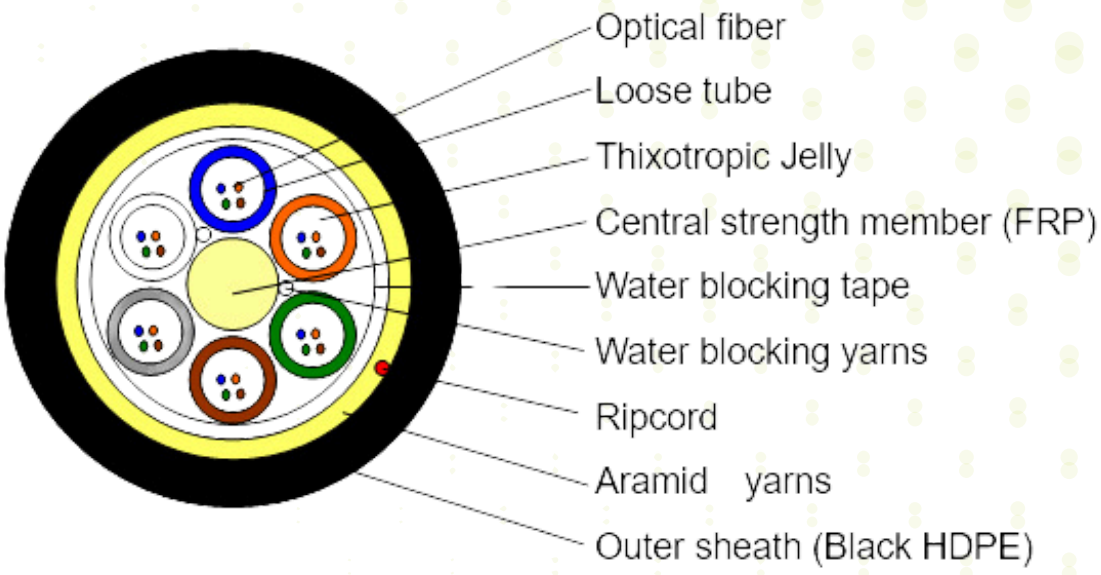
FICHA TÉCNICA

FO ADSS 48H SPAM 100, 5KM

MODELO ADSS-48B1-100-S

1.1 CONSTRUCTION OF CABLE



Cable type		48
element	--	6
Central Strength Member	Material	Fiberglass Reinforce with Plastic (FRP)
Loose Tube	Material	PBT
	Fibers/Tube	8
Filling compound in loose tube	Material	Thixotropic jelly
Water blocking	Material	Water blocking yarns and tape
Strength Member	Material	Aramid yarns
Outer Sheath	Material	Black HDPE
	Thickness	Norminal: 1.6mm
Outer Diameter	mm	10
Cable Weight	kg/km	80
Short term tensile	N	2100

Lanly TECHNOLOGY

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Optical fiber characteristics (FPC G.652D FIBER)

Category	Description		Specifications
			G.652D
Optical Specifications	Attenuation	@1310nm	≤0.36dB/km
		@1550nm	≤0.22dB/km
	Attenuation discontinuity		≤0.05 dB
	Attenuation vs. Wavelength	@1285~1330nm	≤0.04 dB/km
		@1525~1575nm	≤0.03 dB/km
	Zero Dispersion Wavelength		1300~1324nm
	Zero Dispersion Slope ps/(nm².km)		0.073~0.092
	Dispersion ps/nm.km	@1310nm	≤3.5
		@1550nm	13.3~18.6
		@1625nm	17.2~23.7
	Cable Cutoff Wavelength(λcc)		≤1260nm
	PMD		≤0.20ps/km1/2
	Effective Group Index of Refraction	@1310nm	1.4675
		@1550nm	1.4681
Geometric Specifications	Mode Field Diameter	@1310nm	9.2±0.4μm
		@1550nm	10.4±0.8μm
	Cladding Diameter		125±0.7μm
	Cladding Non-Circularity		≤1.0%
	Coating Diameter		243±7μm
	Coating/Cladding Concentricity Error		≤12μm
	Core/Cladding Concentricity Error		≤0.6μm
Mechanical Specifications	Proof Test level		≥1.0%
	Fiber Curl Radius		≥4.0m
	Fiber tensile strength		Proof-tested, at least 0.69 Gpa (100 kpsi)

2. TEST REQUIREMENTS

No	Item	Test standard	Method	Acceptance criteria
1	Tensile test	IEC-60794-1-E1	-Max. Tensile strength -Sample length:50 meters -Time: 10minutes;	-Fiber strain at maximum Load: max. 0.33% -Attenuation increase≤0.10dB
2	Crush test	IEC-60794-1-E3	-Load:1000N -Time: 5minutes -Length: 100mm - Position: One point and one time	-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: 1 --Number of impacts: 5	-No splits or cracks in the outer jacket -Attenuation increase≤0.10dB(after the test)
4	Torsion test	IEC-60794-1-E7	-1m cable length with 150N weight -±180°, 10 cycles	- No splits or cracks in the outer jacket -Attenuation increase ≤0.10dB(after the test)
5	Repeated bending	IEC-60794-1-E6	-Radius=20×cable outer diameter -1m cable length with 150N weight,25 cycles	- No splits or cracks in the outer jacket -Attenuation increase ≤0.10dB(after the test)
6	Temperature cycling test	IEC-60794-1-F1	-Temperature step: +20 ℃ →-40℃→+60℃→-40℃→+60℃ →+20℃ -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±3 ℃) ≤0.10dB/km,
7	Cable bending test	IEC 60794-1-E11B	-Diameter of mandrel : 20×diameter of cable - Number of cycles:1 cycle	Change of attenuation shall not be greater than 0.1dB. No fiber break and no cable damage.
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℃	-No filling compound shall drip from tubes after 24 hr