

FA-LOFC-ADSS-3,0

Aerial Fiber optic cable to use in FTTH network.



Cable view in cross section

features:

- multitube construction,
- singlemode fiber 9 / 125µm G.652D standard (option available with G657A1 fiber),
- peripheral strength elements made of aramid yarns,
- central FRP member,
- outer sheath made of black HDPE,
- span length up to 60m (NESC Heavy, SAG 1%).

standards and certificates:

- IEC 60793
- IEC 60794-1-2
- IEC-60304
- EIA/TIA 598

sectors:



FA-LOFC-ADSS-3,0

technical parameters:

FA-LOFC-ADSS-3,0	12	24	36	48	72	96	144
number of tubes/fillers	6			8			12
diameter of tubes[mm]	2,2						
coating material	HDPE						
thickness of outer sheath [mm]	1,5						
fiber type	G.652D/G.657A1						
tensile force [N]	3000					3200	
crush [N]	2000						
cable diameter [mm]	10,1					11,6	14,6
transport temperature [°C]	-40 to +70						
installation temperature [°C]	-10 to +60						
operating temperature [°C]	-40 to +70						
cable weight [kg /km]	79					102	157
bending radius [mm]	20xD						
water penetration	3m sample, 1m height, 24h						
tensile test	tensile, 5min, $\Delta\alpha$ reversible, fiber strain ≤ 0.60 %						

cabled fiber performance :

G652D	characteristics	acceptance value
attenuation	@1310nm	$\leq 0.35\text{dB/km}$
	@1383nm	$\leq 0.34\text{dB/km}$
	@1550nm	$\leq 0.22\text{dB/km}$
	@1625nm	$\leq 0.23\text{dB/km}$
mode field diameter	@1310nm	$9,2\pm 0,4\mu\text{m}$
	@1550nm	$10.4\pm 0.5\mu\text{m}$
dispersion	@1300+30/-15nm	$\leq 3.5\text{ps}/(\text{nm}\cdot\text{km})$
	@1550nm	$\leq 18\text{ps}/(\text{nm}\cdot\text{km})$
	@1625nm	$\leq 22\text{ps}/(\text{nm}\cdot\text{km})$
zero-dispersion wavelength		$1300\text{nm} \sim 1324\text{nm}$
zero-dispersion slope		$\leq 0.092\text{ps}/(\text{nm}^2\cdot\text{km})$
cable cutoff wavelength $\lambda_{cc}(\text{nm})$		$\leq 1260\text{nm}$
cladding diameter		$125\pm 1,0\mu\text{m}$
PMD		$\leq 0.04\text{ps}/\sqrt{\text{km}}$
cladding non-circularity		$\leq 0.8\%$
core/cladding concentricity error		$\leq 0.6\mu\text{m}$
proof test		$\geq 0.69\text{GPa}(100\text{kpsi})$
dynamic fatigue		≥ 20

G657A1	characteristics	acceptance value
attenuation	@1310nm	≤0.34dB/km
	@1383nm	≤0.37dB/km
	@1550nm	≤0.22dB/km
	@1625nm	≤0.24dB/km
mode field diameter	@1310nm	8.6-9.6μm
	@1550nm	10.4±0.5μm
dispersion	@1300+30/-15nm	≤3.5ps/(nm·km)
	@1550nm	≤18ps/(nm·km)
	@1625nm	≤22ps/(nm·km)
zero-dispersion wavelength		1300nm~1324nm
zero-dispersion slope		≤0.092ps/(nm ² ·km)
able cutoff wavelength λ _{cc} (nm)		≤1260nm
macrobend loss	15mm radius, 10 turn, @1550	≤0.25dB
	15mm radius, 10 turn, @1625	≤0.10dB
cladding diameter		125±0.7μm
cladding non-circularity		≤0.7%
core/cladding concentricity error		≤0.6μm
coating diameter	uncolored	242±5μm
	colored	253±12μm
proof test		≥0.69GPa(100kpsi)
dynamic fatigue		≥20

tube color sequence:

	red	green	blue	white	violet	orange	grey	yellow	brown	pink	black	aqua
NO.	1	2	3	4	5	6	7	8	9	10	11	12