

Flat Drop Dielectric/Toneable

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Product Details

Advantage fiber™ flat drop dielectric/ tone able fiber optic cable offers the ease of installation in an easy-access, single tube design. This is a central tube cable using optical fibers presented in tube filled with a thixotropic gel, and is enclosed in a thermoplastic sheath. The cables have two embedded strength members for anti-buckling property. The dielectric version eliminates any bonding and grounding requirements. Tone able version adds a 24 AWG conductor that provides underground location tracing, attached by a web for easy tear-away separation from the cable the most popular option for underground and multi-purpose installation.

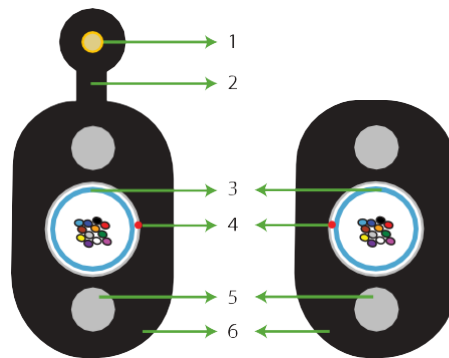
Product Application

This cable is well suitable for self-supporting aerial, duct, buried applications and as outdoor cable for all OSP drop cable applications. The dielectric version eliminates any bonding and grounding requirements. The cables offer exceptional crush resistance. UT Flat Drop provides easy FTTx (Fiber-To-The-X) installation and termination using existing hardware and methods for drops to homes and businesses. Its flat profile is compatible with economical wedge clamps for self-support aerial spans up to 90 meters, depending on environmental loading

Features & Benefits

- Available up to 12 fiber count in either single-mode or multi-mode optical fibers
- Embedded strength members for anti-buckling properties
- Longitudinal water protection is enabled by water blocking compounds in Tube
- Easy access to fiber due to its unitube construction
- Available with steel wire as embedded strength member for higher tensile strengths
- Toning wire enables underground location
- Industry standard connectors can be used for direct termination
- Tensile and crush resistant
- UV protected
- Tightly controlled physical parameters
- Combination of fiber types available on request

Typical construction of Cable



- COPPER CONING WIRE
- NECK
- LOOSE TUBE WITH FIBERS & GEL
- RIPCORD(S)
- EMBEDDED STRENGTH MEMBER
- OUTER SHEATH



Water blocked



UV Protected



Aerial

Performance standards

Cable complies to the following main Standards IEC.60794 series, ANSI/ICEA S-87-640, Telcordia GR-20, ITU-T Recommendations

Specifications

Physical Characteristics				
Fiber Count		Up To 12 (Dielectric)	Up To 12 (Tone Able)	
Nominal Cable Diameter (Mm) ± 0.5mm		4.4 * 8.2	4.4*10.2	
Nominal Cable Weight (Kg/Km) ± 10%		35	55	
Mechanical and Environmental Characteristics*				
Test	Standard / Notes	Product Performance		
Max. Tensile Strength (N)	IEC-60794-1-21-E1	1300	1300	
Bending Radius	IEC-60794-1-21-E11	Dynamic = 15D, Static = 10D		
Crush Resistance (N/100mm)	IEC-60794-1-21-E3	2500	2500	
Impact Strength (N.M)	IEC-60794-1-21-E4	25		
Torsion	IEC-60794-1-21-E7	±180°		
Drip Test	IEC-60794-1-21-E14	30 Cm, 70°C, 24 Hr.		
Temperature Cycling	IEC-60794-1-22-F1	Installation: -10°C To +60°C	Operation: -20°C To +70°C	Storage: -30°C To +70°C
Water Penetration	IEC-60794-1-22-F5B	1m Water Head, 3m Samples, 24 Hrs. No Water Leakage		

** After one test the change in attenuation shall be ≤ 0.05 dB/km. No damage or crack on cable & no fiber break

Cabled Optical Fiber Characteristics

The optical fibers are in accordance to the specifications ITU-T G.652D and ITU-T G.657A1. Refer to specific data Sheets for details.

Transmission Characteristics						
Fiber Type	Attenuation coefficient, dB/km (Average/Maximum)			PMD, Ps/√km	PMD LDV, Ps/√km	Cut-of Wavelength (λ _{CC}),nm 1310nm
	1310nm	1550nm	1625nm			
G652D fiber	≤ 0,35 / 0,36	≤ 0,22 / ≤ 0,23	≤ 0,24 / ≤ 0,26	≤ 0,20	≤ 0,10	≤ 1260
G657A1 fiber	≤ 0,35 / 0,36	≤ 0,22 / ≤ 0,23	≤ 0,24 / ≤ 0,26	≤ 0,20	≤ 0,10	≤ 1260

** This fiber is also available as bend insensitive

Fiber Standard Color Code (“As per EIA/TIA 598”)



Packing and Lengths

Packing: Wooden drums

Lengths (tolerance ±5%): 2km, 4km

Note - Customized drum lengths available on request.