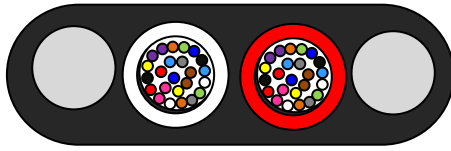


## Aerial Flat Drop Cable Specification

### Cable Design

*Drop Cable-GFRP Reinforcing-Dielectric-Dry Core-G.652D Fiber*



- **Loose Tube:** PBT plastic material, containing 24 fibers and filled with a suitable water tightness compound.
- **FRP:** additional strength member.
- **Longitudinal Water Tightness:** dry core with water swellable elements.
- **Outer Sheath:** Black HDPE.

### Cable Specification

<b>Cable Cores</b>		<b>48</b>
FRP		2×2.0mm
Loose Tube Diameter	mm	2.4
Min. Thickness of PE Sheath	mm	0.8
Nominal Cable Diameter	mm	10.2×4.2
Nominal Cable Weight	Kg/km	55

### Cable Application

Temperature Range		Minimum Bend Radius	
Transportation & Storage	-40~+70°C	Load	20×D
Operation	-40~+70°C	Unload	10×D

### Main Mechanical and Environmental Characteristics

Test	Test Standard	Specified Value	Acceptance Criteria
Tensile	IEC 60794-1-2-E1	1200N, 1min	$\Delta\alpha \leq 0.1\text{dB}$ , no damage
Crush	IEC 60794-1-2-E3	2000N/10cm, 1min, 3times	$\Delta\alpha$ reversible, no damage
Impact	IEC 60794-1-2-E4	3J, R=300mm, 3impacts	$\Delta\alpha$ reversible, no damage
Repeated Bending	IEC 60794-1-2-E6	R=20D, 20N, 20cycles	$\Delta\alpha$ reversible, no damage
Temperature Cycling	IEC 60794-1-2-F1	-40~+70°C, 2cycles, 8h	$\Delta\alpha$ reversible, no damage

### Fiber & Tube Color

#### Color Identification of Fiber

Number	1	2	3	4	5	6	7	8	9	10	11	12
Color	Red	Green	Blue	White	Violet	Orange	Grey	Yellow	Brown	Pink	Black	Aqua

Note: if needed, the 13~24# fiber will be colored with black ring printed

#### Color Identification of Tube

Number	1	2
Color	Nature	Red

## Cabled Fiber Performance (G.652D)

Characteristics		Acceptance Value
Attenuation	@ 1310nm	$\leq 0.35$ dB/km
	@ 1550nm	$\leq 0.21$ dB/km
Mode Field Diameter	@ 1310nm	$9.2 \pm 0.4$ $\mu$ m
	@ 1550nm	$10.4 \pm 0.5$ $\mu$ m
Dispersion	@ 1300 +30/-15nm	$\leq 3.5$ ps/(nm km)
	@ 1550nm	$\leq 18.0$ ps/(nm km)
	@ 1625nm	$\leq 22$ ps/(nm km)
Zero-Dispersion wavelength		1300nm~1324nm
Zero-Dispersion slope		$\leq 0.092$ ps/(nm <sup>2</sup> km)
Cable cutoff wavelength $\lambda_{cc}$ (nm)		$\leq 1260$ nm
Cladding diameter		$125 \pm 1.0$ $\mu$ m
Cladding non-circularity		$\leq 0.8\%$
Core/cladding concentricity error		$\leq 0.6$ $\mu$ m
Fiber diameter with coating (uncolored)		$245 \pm 10$ $\mu$ m
Cladding/coating concentricity error		$\leq 12.0$ $\mu$ m
Proof stress		$\geq 0.69$ GPa(100kpsi)
Dynamic stress corrosion susceptibility parameter (typical value)		$\geq 20$

## Sheath Marking

The outer sheath is marked in 1 meter intervals as follows:

**According to customer's requirement**

## Delivery Lengths

Standard delivery length will be 2km or 4km with -1%/+3% tolerance.