

- 3. Colored Fiber 1 or 2 or 4
- 4. Strength Member (Steel Wire)









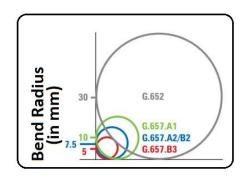
#### **Description**

*DME PROLINK*'s 1 or 2 or 4 Core Outdoor Flat Drop Fiber cable is designed and manufactured to the highest standards. Available as Single-mode (G.657A2 compliant), it provides the bend-insensitivity and robustness essential to a successful FTTx deployment

The Fiber used in *DME PROLINK*'s Fiber Optic cables, are made of pure silica and germanium doped silica. A UV curable acrylate material is applied over the Fiber Cladding as primary protective coating. DME PROLINK quality personals ensures product reliability through rigorous qualification testing to assure cable performance and durability in adverse field environments. Excellent quality control is achieved through intense in-house quality check and stringent audit acceptance by ISO 9001.

#### **Features & Benefits**

- G.657A2
- LSZH sheath
- Steel Messenger Wire
- Steel Strength Members
- Predictable lifetime of 30 years
- Color code scheme: According to EIA/TIA 598
- Compact Figure & Easy to Install
- Suitable for Outdoor Deployment
- Designed as per Etisalat standards for FTTH Deployments and applications





# The Fiber within FO Drop cable are designed, Manufactured and tested according to below standards:

- IEC 60793-1: Optical Fiber Part 1: Generic Specifications
- IEC 60793-2: Optical Fiber Part 2: Product Specifications
- IEC 60794-2: Optical Fiber Cables Part 2 Indoor cables- Sectional Specification
- ITU-T G650: Definition and test methods for the relevant parameters of single-mode fibers
- ITU-T G.657: Characteristics of a bending-loss insensitive single-mode optical fiber
- EIA/TIA 598: Color code of Fiber Optic cables

#### **Optical Fiber G.657A2 Specification**

Cotomomi	Description	Values	
Category		Before Cabling	After Cabling
	Attenuation @1310 nm	≤0.35 dB/km	≤0.40 dB/km
	Attenuation @1550 nm	≤0.21 dB/km	≤0.30 dB/km
	Zero Dispersion Wavelength	1300~13	24 nm
	Zero Dispersion Slope	≤0.092 ps/nm²·km	
Optical Specifications	Cable Cutoff Wavelength (λcc)	≤1260 nm	
	Macro bending Loss (10 turns; Φ30 mm) @1550 nm (10 turns; Φ30 mm) @1625 nm (1 turn; Φ20 mm) @1550 nm (1 turn; Φ20 mm) @1625 nm (1 turn; Φ15 mm) @1550 nm (1 turn; Φ15 mm) @1625 nm (1 turn; Φ15 mm) @1625 nm	≤ 0.03 dB ≤ 0.10 dB ≤ 0.10 dB ≤ 0.20 dB ≤ 0.50 dB ≤ 100 dB	
	Mode Field Diameter @1310 nm	8.6-9.2 ± 0.4μm	
Dimensional Specifications	Cladding Diameter	125 ±0.	7µm
	Cladding non circularity	≤1.0%	
	Core/clad concentricity error	≤0.5µm	
Mechanical Specifications	Proof stress	≥1.05	5%
Environmental Specification	Operation temperature range	-20°C to -	+ 60°C
	Installation temperature range	-10°C to -	+ 50°C
	Transport and storage temperature range	-20°C to -	+ 60°C



# **Physical / Mechanical Characteristics of Fiber Optic Cable**

Physical	Fiber count	1 G.657A2 or 4 G.657A2
	Cable OD (H x W)	2.0 ± 0.1mm x 5.2mm ± 0.2mm
	Cable weight	22 kg/km ± 15%
Mechanical	Max. tensile load	500N
	Crush resistance	500N/10cm
	Minimal Installation / Operation Bending Radius	20 x OD; 10 x OD

#### **Color Code Scheme:**

Fiber color: Blue, Orange, Green and Brown

# **Factory Test List for Fiber Optic Cable\***

# **Tension Loading Test**

Test Standard	IEC 60794-1-2 E1
Sample Length	No less than 50 meters
Load	Max. tension load
Duration time	1 minute
Test results	Additional attenuation ≤ 0.4dB after test
	No damage to outer jacket and inner elements

# **Crush / Compression Test**

Test Standard	IEC 60794-1-2 E3
Load	Crush load
Duration time	1 minute
Test number	3
Test results	Additional attenuation ≤ 0.4dB after test
	No damage to outer jacket and inner elements

# **Impact Resistance Test**

Test Standard	IEC 60794-1-2 E4
Impact energy	1J
Radius	12.5mm
Impact Points	3
Impact Number	1
Test results	No damage to outer jacket and inner elements

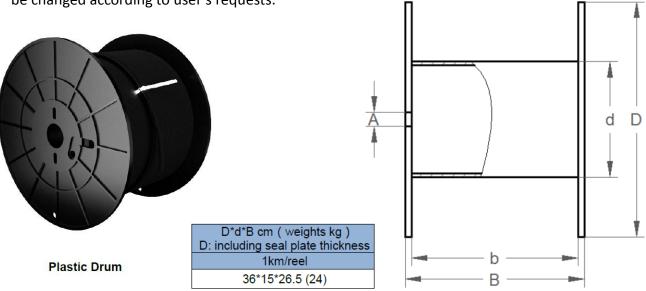


# **Routine Factory tests of single-mode fiber**

Parameters	Test Standards
Mode field diameter	IEC 60793-1-45.
Mode field Core/clad concentricity	IEC 60793-1-20
Cladding diameter	IEC 60793-1-20
Cladding non-circularity	IEC 60793-1-20
Attenuation coefficient	IEC 60793-1-40
Chromatic dispersion	IEC 60793-1-42
Cable cut-off wavelength	IEC 60793-1-44

### **Packing**

DME PROLINK cables are coiled on plastic drum. During transportation, right tools should be used to avoid damaging the package and to handle with ease. Cables should be protected from moisture; kept away from high temperature and fire sparks; protected from over bending and crushing; protected from mechanical stress and damage. The color of cable marking is white. (The printing shall be carried out at interval of 1 meter on the outer sheath of cable). Outer sheath marking legend can be changed according to user's requests.



# Part Number: D1149-ODnF77A2BK-SSM (Where "n" represents core – 1 or 2 or 4)

D1149-OD1F77A2BK-SSM	Fiber Optic Outdoor Drop Flat Cable, 1 Core, Single-mode OS2, LSZH, G.657A2, Black (Steel Wire Messenger & Strength Member)
D1149-OD2F77A2BK-SSM	Fiber Optic Outdoor Drop Flat Cable, 2 Core, Single-mode OS2, LSZH, G.657A2, Black (Steel Wire Messenger & Strength Member)
D1149-OD4F77A2BK-SSM	Fiber Optic Outdoor Drop Flat Cable, 4 Core, Single-mode OS2, LSZH, G.657A2, Black (Steel Wire Messenger & Strength Member)