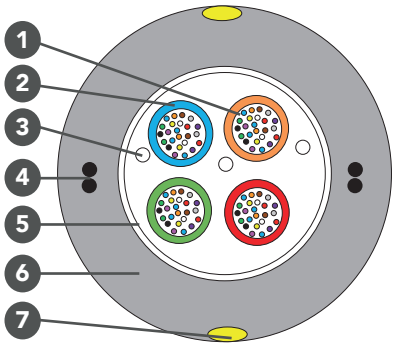
DATASHEET

ULTRA LIGHT WEIGHT OVERHEAD OPTICAL FIBRE CABLE 96F



LEGEND	
1	Fibre
2	Micromodule (gel filled)
3	Water Swellable Yarn
4	Steel Wires
5	Water Swellable Tape
6	Outer Sheath
7	Yellow Stripe

Super lightweight and robust, the Ultra-lightweight cable is designed for aerial deployment across access fibre networks. BT approved; this cable conforms to the standard 7mm diameter as well as having a breaking tensile force of less than 2000n for maximum security. The cable combines low-loss, bend-insensitive G.657. A1 fibres with longitudinal water swellable elements to eliminate water ingress.

FEATURES & BENEFITS

- Optical Fibre containing elements laid up freely
- Gel filled micromodules
- Water blocked core interstices
- Embedded Steel rod strength members
- HDPE sheath
- PIA Approved and Tested, and as clamp & cable package- PLP & Telenco Clamps

CABLE CONSTRUCTION

PARAMETER	STRUCTURE/LAYOUT/MATERIAL
Fibre count	96F
Number of fibres per Micromodule	24
Number of Fillers	4
Embedded Strength Member	Brass Coated Stranded Steel Wire
Moisture Barrier	Water swellable yarn & Water Swellable Tape
Strip Marking Width	1.25mm(Nominal)
Outer Sheath	1.3mm (Nominal)
Cable Diameter	7.0 ± 0.2mm
Cable Weight	35.0kg/km (Nominal)

CABLE MARKING

As per customer requirement

CABLE LENGTH

2.0km ± 5%

PACKAGING

Wooden drums or reels

Cable end sealed

Drum marking: Drum number, User name, Fibre count, Cable Length, Date of manufacture, Net weight, Gross weight

CABLE PERFORMANCE STANDARDS

IEC 60793, ANSI/ICEA S-87-640, Telcordia GR-20, ITU-T, RoHS, REACH.

COLOUR CODING

Fibre colour EIA/TIA - 598	Bl	Or	Gr	Br	Sl	Wh	Rd	Bk	Yl	Vi	Pk	Aq
	Bl*	Or*	Gr*	Br*	Sl*	Wh*	Rd*	Nt*	Yl*	Vi*	Pk*	Aq*

*Single ring marking on fibres from 13 to 24th fibre, natural ring marked fibre instead of black fibre

Tube colour EIA/TIA - 598	Bl	Or	Gr	Br

CABLE & FIBRE CHARACTERISTICS

Tensile Break Load	1900N		IEC-60794-1-21-E1
Tensile Strength	1250N		
Crush Resistance	2000N		IEC-60794-1-21-E3
Minimum Bend Radius	70mm		IEC-60794-1-21-E11
Water Penetration Test	1m water head, 3m sample, 24 hours		IEC-60794-1-22-F5
Maximum Environmental Load	950N @< 0.6% fibre strain		IEC-60794-1-21-E1
Environmental Performance	Installation	-10°C to +60°C	IEC-60794-1-22-F1
	Operation	-20°C to +85°C	
	Storage	-20°C to +85°C	
Voltage Test	11Kv	If installed along power line minimum vertical distance of 1.8M should be maintained	
Resistance to wind/ice	Cable shall withstand 97kph wind, no ice. 0kph wind + 5mm ice. 0kph wind, + 10mm ice. without appreciable sag		
Maximum Span	68M (85M in exceptional circumstances)		
Fibre Type	G.657A1 (200µm)		
Attenuation	1310nm	≤ 0.34dB/km	
	1550nm	≤ 0.20dB/km	
	1625nm	≤ 0.22dB/km	
Chromatic Dispersion	1285 – 1330nm	≤ 3.5ps/nm.km	
	1550nm	≤ 18ps/nm.km	
	1565 – 1625nm	≤ 22ps/nm.km	
Zero Dispersion Wavelength	1300 – 1324nm		
Zero Dispersion Slope	≤ 0.090ps/nm2 x km		
Polarization mode dispersion	Fibre	≤ 0.1 ps/km	
	Link Design Value	≤ 0.06ps/km	
Proof Stress Level	≥ (100kpsi)1.0% strain		
Cable cut off wavelength λcc	≤ 1250nm		
MFD	1310nm	9.1 ± 0.4µm	
	1550nm	10.2 ± 0.5µm	
Core-Cladding Concentricity Error	≤ 0.5µm		
Cladding Diameter	125 ± 0.7µm		
Cladding Non Circularity	≤ 0.7%		
Primary Coating Diameter	190 ± 10µm (uncoloured), 200 ± 10µm (coloured)		
Fibre Curl	Radius	≥ 4m	