## **Broadband Systems** Connectix Singlemode G657.A2 PIA Drop Cable 1, 2 and 4 Fibre

The range of ultralightweight Connectix overhead drop cables are deployed within 'last mile' FTTX applications, suitable as aerial drop cables from the consumer end point to pole mounted or underground nodes. The cables are manufactured to meet requirements for cable insulation (power line separation) and resistance to wind/ice (sag due to temperature variation) with a cable OD of 3.0mm. Manufactured with a UV stabilised LSZH tight buffered sheath, with 250um fibres supported with an aramid yarn strength member.

Connectix manufacturers pre-terminated drop cables with SC/APC or LC/APC options, using certified singlemode fibre to ITU-T G.657.A2 (other singlemode types available on request). Pre-terminated solutions can also be made single-ended for splice options if required, with terminations and cables supplied on made-to-length deployable cardboard and wooden drums.



## **Features and Benefits**

- Compact cable
- All dielectric design
- UV resistant outersheath
- Waterproof structure
- Compliant with PIA requirements in UK (breaking strength @ 2000N max)
- Compatible with fitting accessories
- Tight buffer fibres
- Aramid yarns reinforcements for aerial applications
- UV resistant outersheath

Construction Characteristics			
Fibre Type	SM (G657.A2)		
Construction Type	Tight Buffered Fibre		
Armour Type	Aramid Yarns		
Outer Sheath	Low smoke, zero halogen thermoplastic compound		
Colour	Black		
Metal Free	Yes		

Dimensional Characteristics					
	1 Fibre	2 Fibre	4 Fibre		
Nominal Outer Diameter	3.0mm	3.5mm	3.8mm		
Approximate weight	9kg/km	11kg/km	12kg/km		
Number of Optical Tubes	1	2	4		
Number of Tubes	1	2	4		

## Standards

International IEC 60794

Mechanical Characteristics			
Maximum tensile load during service (TI)	20.0 daN		
Crush resistance (IEC 60794-1-E3)	100 N/cm		
Maximum admissible traction load (Tm)	50 daN		

Approved

Usage Characteristics	
Installation type	Aerial - self-supporting
Installation temperature, range	0 - 40 °C
Operating temperature, range	-40 - 60 °C
Storage temperature, range	-40 - 70 °C
Bending factor when laying	20 (xD)



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Optical Characteristics		
Wavelength (nm)	1310	1550
Attenuation (dB/km)	< 0.31	< 0.10
Max	≤ 0.34	≤ 0.19 ≤ 0.21
Zero Dispersion Wavelength (nm)	1300 - 1324	
Zero Dispersion Slope (ps/nm².km)	≤ 0.092	
Polarization Mode Dispersion (ps/√km)	≤ 0.2	
Concatenated Polarization Mode Dispersion (ps/√km)	≤ 0.08	
Mode Field Diameter (1310 nm) (µm)	8.6 ± 0.4	
Cable cut-off Wavelength (nm)	≤ 1260	
Chromatic Dispersion (1550 nm) (ps/nm.km)	≤18	
Bending diameter (mm) induced attenuation	15mm x 1 turn: ≤ 0.5/1.0	
(@ 1550/1625 nm) (dB)	30mm x 10 turns: ≤ 0.03/0.1	

Dimensions	
Cladding Diameter (µm)	125 ± 0.5
Core/Cladding concentricity error (µm)	≤ 0.4
Coating diameter (Colored) (µm)	245 ± 10
Cladding Non Circularity (%)	≤ 0.5
Proof Stress Level (%)	< 1.5

Ordering Information	
Product Description	Part Number
Connectix Singlemode G.657.A2 PIA Drop Cable 1 Fibre	002-777-000-01
Connectix Singlemode G.657.A2 PIA Drop Cable 2 Fibre	002-777-000-02
Connectix Singlemode G.657.A2 PIA Drop Cable 4 Fibre	002-777-000-04

