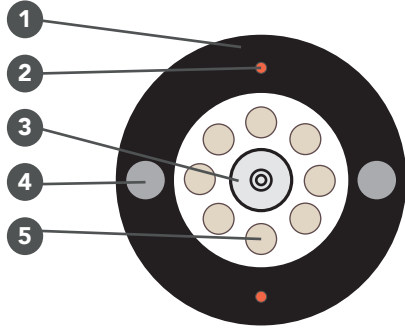


# DROPTIC® LX050HDPE 1FO G.657A2

## OUTDOOR AERIAL DROP CABLE



LEGEND	
1	HDPE sheath
2	Ripcords
3	Tight buffer
4	FRP reinforcement
5	Swelling cords + PE yarns

The DROPTIC® LX050HDPE drop cable is an outdoor drop cable enabling FTTH facade, duct or overhead deployments.

This all dielectric and UV resistant optical cable is suitable for the outside plant roll-outs for SDUs or MDUs access network configurations.

Built with longitudinal sealing and 2 parallel FRP rods, DROPTIC® LX050HDPE can be used for applications within a wide temperature range.

Its small dimension and light weight confer to this DROPTIC® LX050HDPE drop cable very good aerial performances. It can be exposed at least to permanent wind up to 95km/h on 70m spans.

The DROPTIC® LX050HDPE is fully compatible with the Telenco® GSDE0450 and is integrated in a comprehensive FTTH solution, including Telenco® aerial and facade hardware and ELINE® distribution and transition boxes.

### CABLE CONSTRUCTION

Optical fibre	SMF, Fully compliant with ITU G.657A2 Natural or White
Module	Tight buffer 1 fibre Material: LSZH Color: White Nom. Diameter: 0.9mm
Cable reinforcement	2 FRP rods
Watertightness	Presence of swelling cords
Outer sheath	Material: HDPE / Color: Black Diameter: 5.0 ± 0.1mm Thickness: 1.1mm including FRP rod reinforcement Presence of 2 reinforced ripcords included in the sheath
Weight	18kg/km approx.
Cable marking	DROPTIC - NN - XXXXXX - LX050HDPE - 1FO - G657A2 - XXXXXX m  NN : Extrusion line number XXXXXX : Drum number XXXXXXm : Incremental produced length of one type of cable Pitch : 1m 1% Ink colour : White

CODE	MODEL
1000319	Pigtail LX050HDPE 1FO G657A2 Pushlok cardboard reel 50m
1000320	Pigtail LX050HDPE 1FO G657A2 Pushlok cardboard reel 100m
1000321	Pigtail LX050HDPE 1FO G657A2 Pushlok cardboard reel 150m
1000322	Pigtail LX050HDPE 1FO G657A2 Pushlok cardboard reel 180m
1000323	Pigtail LX050HDPE 1FO G657A2 Pushlok cardboard reel 250m
1000324	Pigtail LX050HDPE 1FO G657A2 Pushlok cardboard reel 350m
93965	Drop cable DROPTIC® LX050HDPE 1FO G.657A2 / 1000m

## MECHANICAL AND ENVIRONMENTAL PERFORMANCES

ITEM	TEST METHOD	PERFORMANCES
Max. Allowable tension	IEC 60794-1-21 – E1 method	400N, cable strain <0.8%, fibre strain <0.66%
Cable breaking load	IEC 60794-1-21 – E1 method	1350N < F < 2000N, with Telenco® Spiral Dead-End GSDE0450, continuous load speed V=150mm/mn
Impact resistance	IEC 60794-1-21 – E4 method	7J, Head radius 12.5mm, $\Delta\alpha < 0.05\text{dB}$
Crush	IEC 60794-1-21 – E3 method	2000N/100mm, $\Delta\alpha < 0.05\text{dB}$
Kink performances	IEC 60794-1-21 – E11 method	R=20mm
Static Bending performances	IEC 60794-1-21 – E10 method	R=60mm
Temperature Cycling	IEC 60794-1-22 – E3 method	-20°C/+85°C (operation & storage) $\Delta\alpha < 0.1\text{dB/km}$ and reversible

## FIBRE CHARACTERISTICS

GEOMETRICAL PROPERTIES	
Cladd diameter	125 $\mu\text{m} \pm 0.7\mu\text{m}$
Cladding non circularity	$\leq 0.7\%$
Core Cladd concentricity	$\leq 0.5\mu\text{m}$
Coating diameter	242 $\mu\text{m} \pm 5\mu\text{m}$
Coating-Cladding concentricity	$\leq 12\mu\text{m}$
Tensile proof test	>100kpsi (0.69GPa)

MODE FIELD DIAMETER	
at 1310 nm	8.4-9.2 $\mu\text{m}$
at 1550 nm (typical)	9.4-10.4 $\mu\text{m}$

MACROBENDING ATTENUATION		
Deployment Condition Wavelength Induced Attenuation	1550nm	1625nm
1 turn on a 7.5mm radius mandrel	$\leq 0.5\text{dB}$	$\leq 1\text{dB}$
1 turn on a 10mm radius mandrel	$\leq 0.1\text{dB}$	$\leq 0.2\text{dB}$
10 turns on a 15mm radius mandrel	$\leq 0.03\text{dB}$	$\leq 0.1\text{dB}$

WAVELENGTH (nm)	CABLED MAX ATTENUATION (dB/km)
1310	$\leq 0.36$
1550	$\leq 0.23$
1625	$\leq 0.26$

ATTENUATION VS WAVELENGTH		
WAVELENGTH RANGE	WAVELENGTH REFERENCE	MAX A DIFFERENCE (dB/km)
1285-1330	1310nm	$\leq 0.03$
1525-1575	1550nm	$\leq 0.02$

CHROMATIC DISPERSION	
Zero Dispersion Wavelength ( $\lambda_0$ )	1302-1324nm
Zero Dispersion Slope (S0)	$\leq 0.092\text{ps/nm}^2.\text{km}$
Cut-off Wavelength ( $\lambda_{CC}$ )	$\leq 1260\text{nm}$

POLARIZATION MODE DISPERSION (PMD)*	
Fibre PMD Link Design Value	$< 0.06\text{ps}/\sqrt{\text{km}}$
Maximum Individual Fibre	$< 0.2\text{ps}/\sqrt{\text{km}}$

(\* according IEC 60794-3, method 1, m=20, Q=0.01%)

## PACKING (PRE-CONNECTORISED)

