

## FTTx Internal drop cable

G657a2 3.0MM LC/APC-LC/APC 01F 1.5M STANDARD WHT

### Product Overview

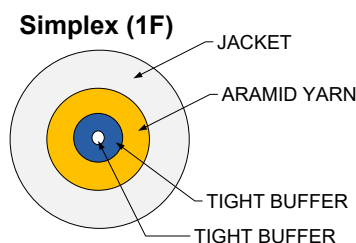
The Hexatronic FTTx internal drop cable meets the indoor fibre optic distribution requirements and is CPR rated to Cca. Crush resistant and suitable for installation with a bend radius down to 7.5mm.

- FTTH deployments
- Multi-dwelling fibre distribution
- FTTD
- Data centres

### Features

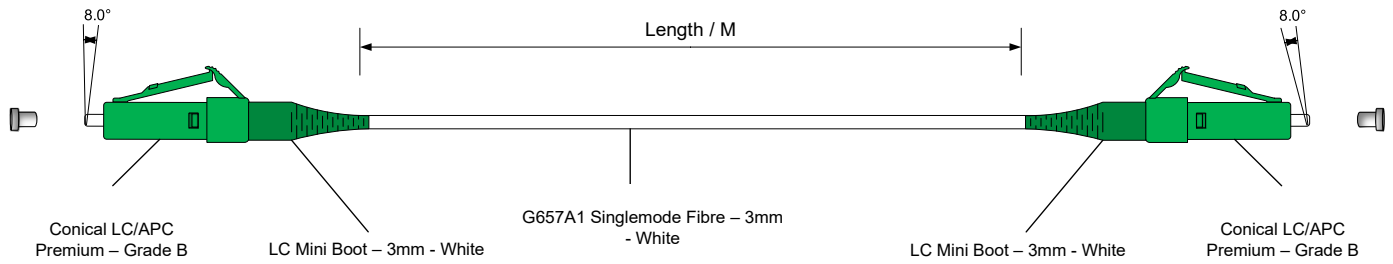
- ITU-T G657.A2 Bend insensitive
- Tight buffered
- White discrete colouring
- Small cable outer diameter
- Aramid yarn high tensile strength
- LSZH cables compliant to Cca -s1a,
- d0 -a1
- Compliant to directive 2002/95/EC (RoHS)

### Construction



CHARACTERISTICS	CONDITIONS	VALUE MAX
Insertion Loss	Random Mated	0.25 dB max. for >97% of
Insertion Loss	Against Refer-	≤ 0.12 dB
Return Loss	UPC	>55 dB
	APC	>65 dB

### Termination specification



### Classification of CPR

Fire behaviour	Smoke production	Flaming droplets	Acidity	AVCP system
Cca2)	s1a	d0	a1	1+

-CPR: Construction products regulation

-AVCP: Assessment and verification of constancy of performance

-Cca: Limited contribution to fire

### Cable type

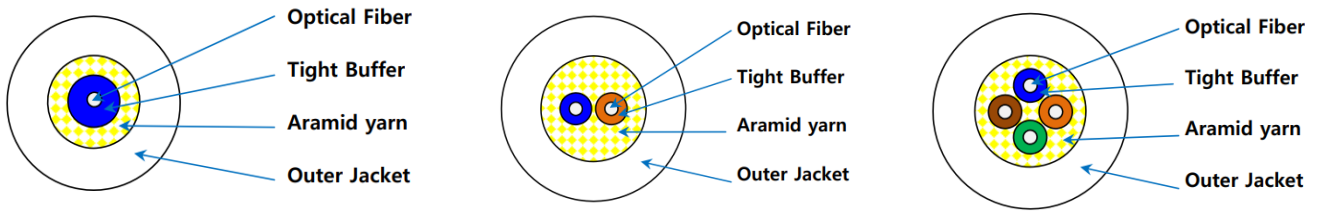
No of Fibers / Product code	Optical Fiber	Buffer	Strength Member	Jacket Outer	Designation Type
1F : TOL4063011/1C3)	SMF (G.657A2) or (G.657B3)	Tight buffer (LSZH PO)	Aramid Yarn	LSZH PO	Round Cord Cca-s1a,d0,a1
2F : TOL4063012/2C3)					
4F : TOL4063012/4C3)					

### Cable data

Diameter, weight, bending radius, tensile load

No. of Fibers	Tight Buffer Diameter (µm)	Overall Diameter (mm)	Approx. Cable Weight (kg/km)	Cable Bending Radius (mm)	Max. Tensile Load	
					Installation (N)	Operation (N)
1F	900±50	3.0±0.2	9	30	400	200
			9.5			
2F	600±50	3.5±0.2	12	35	400	200
			12.5			
4F	600±50	3.5±0.2	13	35	400	200
			13.5			

### Cross section drawing



### Construction and material

Cable Type: Round Cord 1, 2, 4C – No.1. CPR Cca-s1,d0,a1				
CONSTRUCTION	DESCRIPTION	PARTICULARS		
Cable Type		No. 1 -1.	No. 1 -2.	No. 1 -3.
Number of Fibers		1C (Simplex)	2C (Duplex)	4C (Quad)
Optical Fiber	Type	Bend insensitive Single mode fiber (refer table 3); i) SM G65A2 (OS2, B6.a) ii) SM G.657B3 (OS2, B6.b)		
	Specification	(ITU-T G.657, ISO/IEC 11801, IEC 60793-2-50)		
Tight Buffer	Material	LSZH PO		
	Diameter	0.9 ± 0.05 mm	0.6 ± 0.05 mm	0.6 ± 0.05 mm
	Color	BL	BL, OR	BL, OR, GN, BR
		(other color scheme may be applicable)		
Strength member	Material	Aramid yarn		
4.1.4. Outer Jacket	Material (material code)	LSZH PO (CPR)		
	Diameter	3.0 ± 0.2 mm	3.5 ± 0.2 mm	3.5 ± 0.2 mm
	Color	UV Stable White		
Cable Marking				
Methods		Marking legends		
- Method: Ink jet printing - Color: Black - Interval: 1meter (or feet)		- Length marking - Type of cable and optical fiber - Number of fiber - Jacket material - Manufacturer name or trade mark - Trace number - Year of manufacture		

## Cable performance

Test	Condition	Criteria	Specification
Tensile strength	Applicable tensile load are followed by table 2.	after: $\leq 0.2$ dB	IEC 60794-1-21-E1
Crush	Load max=500N/10 cm, 5min.,	after: $\leq 0.2$ dB	IEC 60794-1-21-E3
Impact	3J, 1impact, 3point	after: $\leq 0.2$ dB	IEC 60794-1-21-E4
Repeated Bend	3bend, 3cycles, 15xD.	after: $\leq 0.2$ dB	IEC 60794-1-21-E6
Torsion	$\pm 180^\circ$ , 2m, 10 cycle	after: $\leq 0.2$ dB	IEC 60794-1-21-E7
Bend	$\pm 180^\circ$ , 20xD, 10 cycle	after: $\leq 0.2$ dB	IEC 60794-1-21-E11
Temperature	- Temperature		
cycling test	: $+20^\circ \rightarrow -20^\circ \rightarrow +75^\circ$ $\rightarrow -20^\circ \rightarrow +75^\circ \rightarrow +20^\circ$	after: $\leq 0.2$ dB/km	IEC 60794-1-22-F1
Water Penetration	1m height, 3m length, 24hr	No leakage of water	IEC 60794-1-22-F5B
UV resistance test	300hrs, xenon-arc, 1cycle	$\geq 85\%$	UL 1581
Flame retardant	$\geq 85\%$	UL 1581	IEC 60332-1-2

## Optical attenuation; method C of IEC 60793-1-40

Properties	Mode	Wavelength	Value
Attenuation	SM	1310 nm	$\leq 0.4$ dB/km
		1550 nm	$\leq 0.3$ dB/km
		1625 nm	$\leq 0.34$ dB/km

Ordering Information	
Part number	Description
CFMDU-CCA230-ALCALC-M10W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 10m - White
CFMDU-CCA230-ALCALC-M20W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 20m - White
CFMDU-CCA230-ALCALC-M25W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 25m - White
CFMDU-CCA230-ALCALC-M30W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 30m - White
CFMDU-CCA230-ALCALC-M35W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 35m - White
CFMDU-CCA230-ALCALC-M40W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 40m - White
CFMDU-CCA230-ALCALC-M45W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 45m - White
CFMDU-CCA230-ALCALC-M50W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 50m - White
CFMDU-CCA230-ALCALC-M55W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 55m - White
CFMDU-CCA230-ALCALC-M60W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 60m - White
CFMDU-CCA230-ALCALC-M65W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 65m - White
CFMDU-CCA230-ALCALC-M70W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 70m - White
CFMDU-CCA230-ALCALC-M75W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 75m - White
CFMDU-CCA230-ALCALC-M80W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 80m - White
CFMDU-CCA230-ALCALC-M85W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 85m - White
CFMDU-CCA230-ALCALC-M90W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 90m - White
CFMDU-CCA230-ALCALC-M95W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 95m - White
CFMDU-CCA230-ALCALC-M100W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 100m - White
CFMDU-CCA230-ALCALC-M105W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 105m - White
CFMDU-CCA230-ALCALC-M110W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 110m - White
CFMDU-CCA230-ALCALC-M115W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 115m - White
CFMDU-CCA230-ALCALC-M120W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 120m - White
CFMDU-CCA230-ALCALC-M125W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 125m - White
CFMDU-CCA230-ALCALC-M130W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 130m - White
CFMDU-CCA230-ALCALC-M140W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 140m - White
CFMDU-CCA230-ALCALC-M150W	Int Drop Cable - 1f - A2 - 3mm(Cca) - ALC-ALC - 150m - White