

FTTx Internal drop cable

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

Product Overview

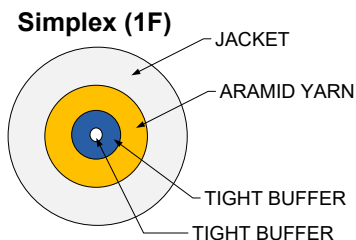
The Hexatronic FTTx internal drop cable meets the indoor fibre optic distribution requirements and is CPR rated to Cca. Crush resistant and suitable for installation with a bend radius down to 7.5mm.

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

Features

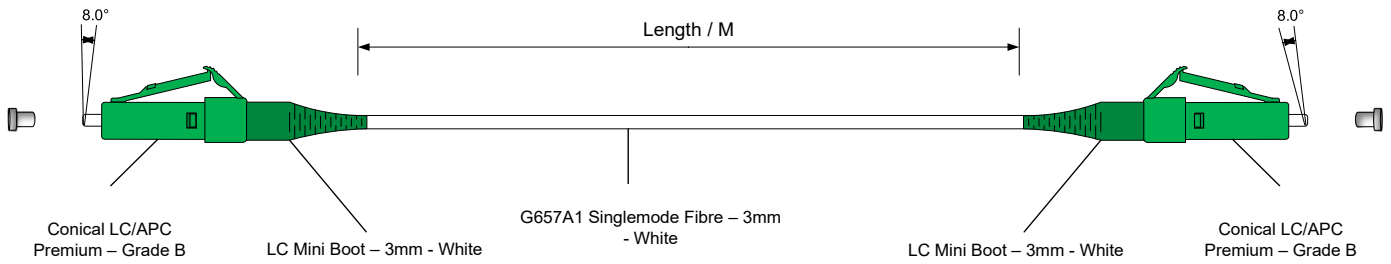
- ITU-T G.657a1 Bend insensitive
- Tight buffered
- White discrete colouring
- Small cable outer diameter
- Aramid yarn high tensile strength
- LSZH cables compliant to Cca -s1a,
- d0 -a1
- Compliant to directive 2002/95/EC (RoHS)

Construction



CHARACTERISTICS	CONDITIONS	VALUE MAX
Insertion Loss	Random Mated	0.25 dB max. for >97% of samples
Insertion Loss	Against Reference Cable	≤ 0.12 dB mean
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

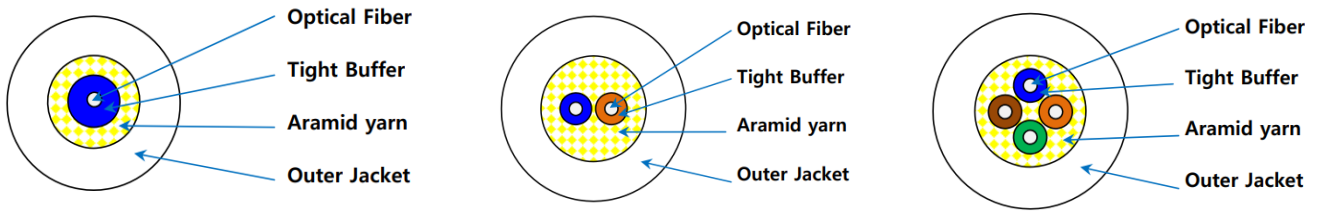
No of Fibers / Product code	Optical Fiber	Buffer	Strength Member	Jacket Outer	Designation Type
1F : TOL4063011/1C3)	SMF (G.657A2) or (G.657B3)	Tight buffer (LSZH PO)	Aramid Yarn	LSZH PO	Round Cord Cca-s1a,d0,a1
2F : TOL4063012/2C3)					
4F : TOL4063012/4C3)					

Cable data

Diameter, weight, bending radius, tensile load

No. of Fibers	Tight Buffer Diameter (µm)	Overall Diameter (mm)	Approx. Cable Weight	Cable Bending Radius	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: ≤ 0.2 dB	IEC 60794-1-21-E1
Crush	Load max=500N/10 cm, 5min., 3point	after: ≤ 0.2 dB	IEC 60794-1-21-E3
Impact	3J, 1impact, 3point	after: ≤ 0.2 dB	IEC 60794-1-21-E4
Repeated Bend	3bend, 3cycles, 15xD.	after: ≤ 0.2 dB	IEC 60794-1-21-E6
Torsion	$\pm 180^\circ$, 2m, 10 cycle	after: ≤ 0.2 dB	IEC 60794-1-21-E7
Bend	$\pm 180^\circ$, 20xD, 10 cycle	after: ≤ 0.2 dB	IEC 60794-1-21-E11
Temperature	- Temperature		
cycling test	: $+20^\circ \rightarrow -20^\circ \rightarrow +75^\circ$ $\rightarrow -20^\circ \rightarrow +75^\circ \rightarrow +20^\circ$ - Duration time: 12hr	after: ≤ 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	≤ 0.4 dB/km
		1550 nm	≤ 0.3 dB/km
		1625 nm	≤ 0.34 dB/km

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