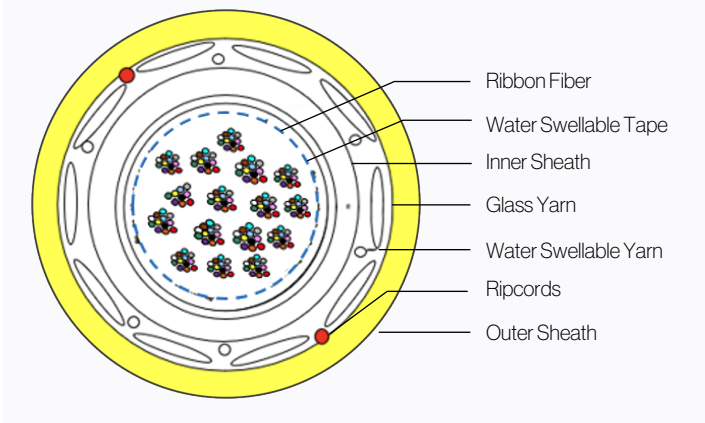


## 192F Single-mode, LL LC/UPC Uniboot to Unconnectorized IBR Fanout Cable, OFNR, 12 Fiber IBR with 2.0mm subunits



### 192F Construction Shown



### Product Details

- Indoor cables are designed to be compact and can be used internally.
- IBR are surrounded by WS Tape and placed inside LSZH tube.
- IGFR as peripheral strength member.
- LSZH sheath as outer protection.

### Cable Construction

Parameter	Dimensions
Number of Fibers	192F
No of Fiber per IBR	12
No of IBR	16
No of IBR Bundle	1
No of IBR/Bundle	16
Inner Sheath	LSZH - White
Moisture Barrier	Water Swellable Tape, Water Swellable yarn over inner tube & along Glass yarns
Peripheral Strength Member	Glass Yarn
Outer Sheath	LSZH Polyolefin -Yellow
Overall Cable Dimensions	11.2 ± 0.5 mm
Cable Weight(Nominal)	135.0 kg/km

## Colour Coding-Fiber

Fiber Colour  
EIA/TIA - 598

	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Pink	Aqua

RNO	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Stripe Ring Marking	■	■■■	■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■

RNO	15	16
Stripe Ring Marking	■■■■■	■■■■■

Outer Sheath Colour	Yellow
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Bundle Colour EIA/TIA - 598	Blue
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## Cable & Fibre Characteristics

Tensile Strength	Short term – 2700 N Long term – 810 N	FOTP-33 IEC 60794-1-21-E1
Crush Resistance	10N/mm	FOTP-41 IEC 60794-1-21- E3
Impact Test	2.94 N.m	FOTP-25 IEC 60794-1-21E4
Torsion	± 180° 10 cycles	FOTP-85 IEC 60794-21E7
Minimum Bend Radius	14XD With Load 9XD Without Load	FOTP-37 IEC-60794-1-21-E11
Environmental Performance	Installation	-20 °C to + 60 °C
	Operation	-40 °C to + 70 °C
	Storage	-40 °C to + 70 °C
		FOTP-3 IEC-60794-1-22-F1

## Fire Performance

Fiber Count	CPR Reaction to Fire	UL/ETL
192F	Cca – s1, d0, a1	OFNR OFN-LS/FT-4

Fiber Type	G.657.A2	
Attenuation	1310 nm	≤ 0.40 dB/km
	1550 nm	≤ 0.30 dB/km
Chromatic Dispersion	1285-1330 nm	≤ 3.5 dB/km
	1550 nm	≤ 18 dB/km
PMD (Fiber)	≤ 0.1 ps/√km	
Cable cut off wavelength λ <sub>cc</sub>	≤ 1260 nm	
MFD	1310 nm	8.6 ± 0.4 μm
Core-Cladding Concentricity Error	≤ 0.5 μm	
Cladding Diameter**	125 ± 0.7 μm	
Cladding Non Circularity	≤ 0.7 %	
Secondary Coating Diameter	250 ± 5 μm	

\*\*Available with tight cladding diameter fiber also (125±0.3 μm).

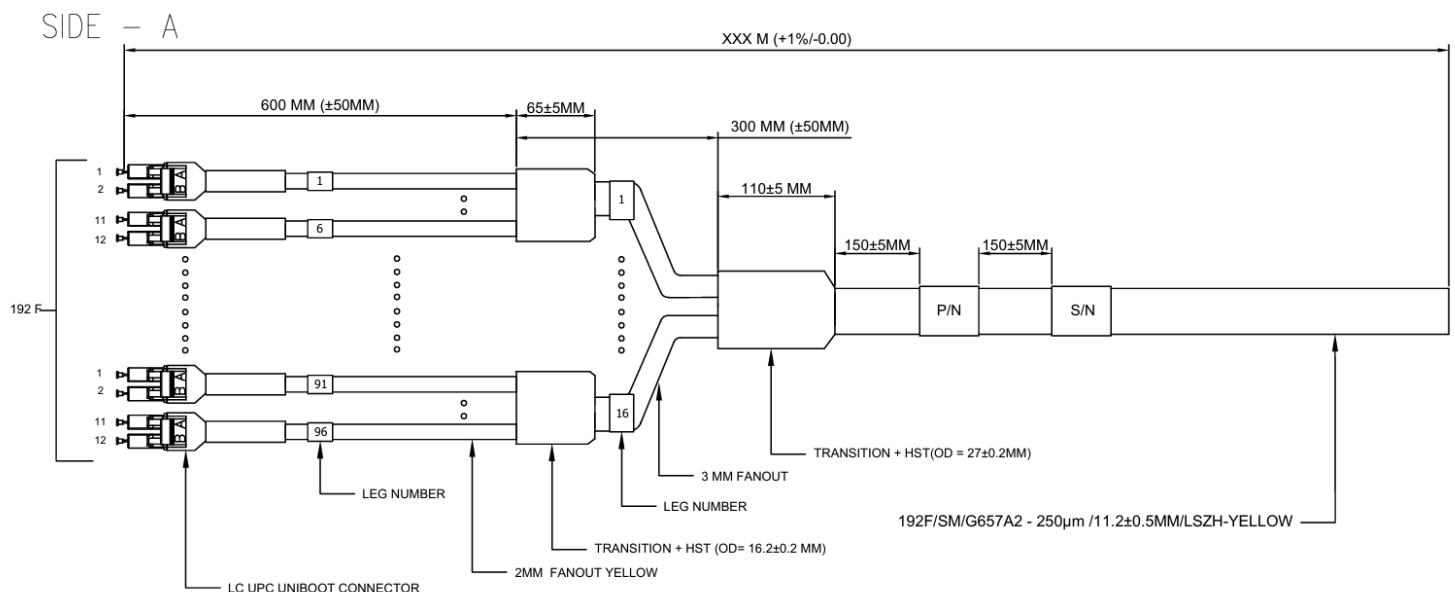
## Cable Marking

HFCL Ltd 192F SM G.657A2 250um IBR INDOOR Cable MM/YYYY Batch xxxM

## Cable Performance Standards

IEC 60793, Telcordia GR-409, ANSI/ICEA S-83-596, OFNR, ITU-T, RoHS, REACH.

## Cable Assembly



### Polarity - 192F GSCarrier LC UPC DPX Connector

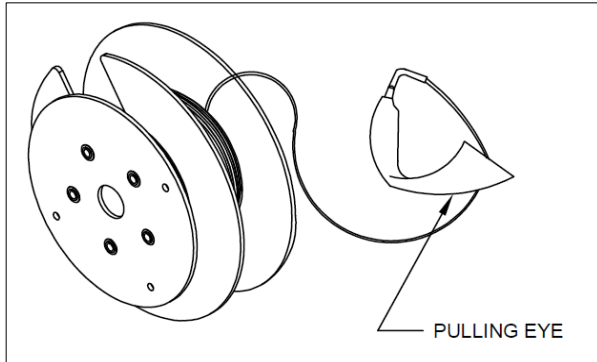
ULC	2c Tube Number	Secondary breakout Number	Ribbon Number	Fiber Number	Fiber Color
B	1	1	1	#2	Orange
A				#1	Blue
B	2			#4	Brown
A				#3	Green
B	3			#6	White
A				#5	Slate
B	4			#8	Black
A				#7	Red
B	5			#10	Violet
A				#9	Yellow
B	6			#12	Aqua
A				#11	Rose
B	1	#2	Orange		
A		#1	Blue		
B	2	#4	Brown		
A		#3	Green		
B	3	#6	White		
A		#5	Slate		
B	4	#8	Black		
A		#7	Red		
B	5	#10	Violet		
A		#9	Yellow		
B	6	#12	Aqua		
A		#11	Rose		

### Connector Performance

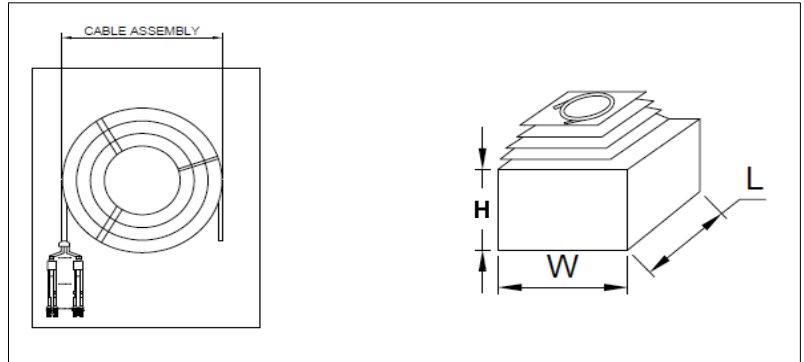
Connector Type	SM (LC UPC DPX Connector)
Insertion Loss (dB)	≤ 0.25
Return Loss (dB)	≥ 55
Type of Ferrule:	Zirconia Ceramic (Conical zirconia ceramic)

## Packaging information

Cable assembly on spool



Coiling of cable assembly



## Ordering Information

	Product Type	End A	End B	Fiber Count	Fiber Type	Jacket Color	Jacket Type	Polarity	Length in Meter	Part Code
HFCL CHENNAI-HC	FIBER PIGTAIL-FP	LCUPCDPX Connector-LCU	Blunt End-XXX	0192	G657.A2-25 0-A22	Yellow-Y	OFNR-R	Straight Polarity GSC Carrier-G	XXX-(010-300)	
HC	FP	LCU	XXX	0192	A22	Y	R	SPG	075	HCFPLCUXXX 0192A22YRSPG075
HC	FP	LCU	XXX	0192	A22	Y	R	SPG	125	HCFPLCUXXX 0192A22YRSPG125
HC	FP	LCU	XXX	0192	A22	Y	R	SPG	XXX	HCFPLCUXXX 0192A22YRSPGXXX