HA-FODC-LLBB-21-XX

HYBRIFLEX® Hybrid Jumper Cable, Single-Mode Fiber, 6 mm² Power Cable, Box to NSN RRU

RFS' HYBRIFLEX™cabling solution for Remote Radio Head (RRU) combines optical fiber and DC power for RRUs in a single lightweight aluminum corrugated cable, making it the world's most innovative solution for RRH deployments. It was developed to reduce installation complexity and cost at Cellular sites.

HYBRIFLEX™cabling solutions allows mobile operators deploying RRH architecture to standardize RRH installation process and eliminates the need for and the cost of cable grounding.

The **HYBRIFLEX™** Jumper is part of the cabling solution for RRU's. It consists of an armored part of length XX, a breakout part to the RRU and a breakout part to the Distribution Box. The breakout part to the RRU is outdoor ready and sealed according to IP68.

The Jumper cables can be ordered in 1m - 20 m armored length in 1 m incremental.

FEATURES / BENEFITS

· **Aluminum corrugated armor with outstanding bending characteristics**
Minimizes installation time and enables mechanical protection and shielding

· **Build in Animal Protection**
Improves the reliability of the installation

· **Outer conductor grounding**
Eliminates typical grounding requirement and saves on installation costs

· **Lightweight solution and compact design**
Decreases tower loads

· **Optical Fiber and power cables housed in single corrugated cable**
Saves CAPEX by standardizing RRH cable installation and reducing installation equipments

· **Outdoor polyethylene jacket**
Ensure long-lasting cable protection

Technical features

STRUCTURE

Cable Type		Hybrid Jumper

MECHANICAL SPECIFICATIONS

Outer Diameter Nominal	mm (in)	15.8 (0.622)
Cable Weight	kg/m (lb/ft)	0.235 (0.158)
Minimum Bending Radius, (Operating)	mm (in)	70 (2.7)
Minimum Bending Radius, (Installation)	mm (in)	125 (5)
Tensile Strength	N (lb)	150 (33.7)

DC POWER CABLE SPECIFICATIONS

Number of DC Pairs		1
Maximum DC-Resistance Power Cable	Ω/km (Ω/kft)	3.3 (1.51)
Cross Section of Power Cable	mm² (AWG)	6 (10)
Shielding		provided by Al armor
DC Wire Jacket Material		Polyethylene Grey / Blue
DC Wire Jacket Thickness	mm (in)	0.5 (0.02)
DC Cable Jacket		UV stable black PE
DC Standards (Meets or Exceeds)		IEC 60228
Power Termination End 1		only Barewire without Ferrule
Power Termination End 2		with Ferrule for Box connection

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CABLE JACKET

UV-Protection Individual and External Jacket		Yes
Jacket Material		UV stable black PE

ARMOR SPECIFICATIONS

Armor Type		Corrugated Aluminum
Maximum DC-Resistance of Armor	Ω/km (Ω/kft)	2.42 (0.74)
Copper Equivalent Cross Section of Armor	mm² (AWG)	8.45 (8)
Diameter Corrugated Armor	mm (in)	13.8 (0.543)

F/O CABLE SPECIFICATIONS

F/O Cable Type		Tight Buffer, Single Mode
Number of F/O Pairs		2
Core/Clad	µm	9 /125
Secondary Protection Nominal	µm (in)	900 (0.036)
Optical Loss	dB/Km	0.4 @ 1310 nm 0.25 @ 1550 nm
Fiber Termination End 1		LC Connector
Fiber Termination End 2		LC Connector

TESTING AND ENVIRONMENTAL

Storage Temperature	°C (°F)	-40 to 85 (-40 to 185)
Operation Temperature	°C (°F)	-40 to 85 (-40 to 185)
Installation Temperature	°C (°F)	-20 to 50 (-4 to 122)

ADDITIONAL ASSEMBLIES

Length	Model Name
1 m	HA-FODC-LLBB-21-01
2 m	HA-FODC-LLBB-21-02
3 m	HA-FODC-LLBB-21-03
4 m	HA-FODC-LLBB-21-04
5 m	HA-FODC-LLBB-21-05
6 m	HA-FODC-LLBB-21-06
7 m	HA-FODC-LLBB-21-07
8 m	HA-FODC-LLBB-21-08
9 m	HA-FODC-LLBB-21-09
10 m	HA-FODC-LLBB-21-10
11 m	HA-FODC-LLBB-21-11
12 m	HA-FODC-LLBB-21-12
13 m	HA-FODC-LLBB-21-13
14 m	HA-FODC-LLBB-21-14
15 m	HA-FODC-LLBB-21-15
16 m	HA-FODC-LLBB-21-16
17 m	HA-FODC-LLBB-21-17

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18 m	HA-FODC-LLBB-21-18
19 m	HA-FODC-LLBB-21-19
20 m	HA-FODC-LLBB-21-20

External Document Links	Notes