## HYBRIFLEX® Hybrid Trunk Cable, Single-Mode Fiber, 4 mm<sup>2</sup> Power Cable

**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 breakout part to the Distribution Box is suitable to be installed to the RFS Distribution Box DB-T1-4Z-8B-0Z. This Jumper cable is suitable for Ericsson RRUs. The Jumper cables can be ordered in 1m, 2m, 3m, 4m and 5m armored length.

## armored length X Distribution Box side

## 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

 $\cdot$  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

External Document Links	Notes			
Technical features				
STRUCTURE				
Cable Type	Hybrid Jumper			
DC POWER CABLE SPECIFICATIONS	5			
Number of DC Pairs		1		
Maximum DC-Resistance Power Cable	Ω/km (Ω/kft)	4.95 (1.51)		
Cross Section of Power Cable	mm² (AWG)	4 (12)		
Shielding		provided by Al armor		
DC Wire Jacket Material		Polyethylene Black/ 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		
MECHANICAL SPECIFICATIONS				
Minimum Bending Radius, (Operating)	mm (in)	70 (3)		
Minimum Bending Radius, (Installation)	mm (in)	125 (5)		
Tensile Strength	N (lb)	150 (33.7)		

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UV-Protection Individual and External Jacket		Yes	
acket Material		UV stable black PE	
Outer Diameter Nominal	mm (in)	15.8 (0.62)	
ARMOR SPECIFICATIONS			
Armor Type		Corrugated Aluminum	
Maximum DC-Resistance of Armor	Ω/km (Ω/kft)	2.78 (0)	
Copper Equivalent Cross Section of Armor	mm² (AWG)	8.4 (8)	
Diameter Corrugated Armor	mm (in)	13.8 (0.54)	
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)	
F/O Standards (Meets or Exceeds)		ITU-T G.657.A	
Optical Loss	dB/Km	1 @ 1310 nm 1 @ 1550 nm	
Fiber Termination End 1		FULLAXS for Ericsson RRUs	
Fiber Termination End 2		LC Connector	
TESTING AND ENVIRONMENTAL			
Storage Temperature	°C (°F)	-40 to 70 (-40 to 158)	
Operation Temperature	°C (°F)	-40 to 65 (-40 to 149 )	
Installation Temperature	°C (°F)	-20 to 65 (-4 to 149 )	
ADDITIONAL ASSEMBLIES			
Length	Model Name		
1 m	HA-FODC-ALBB-04-01		
2 m	HA-FODC-ALBB-04-02		
3 m	HA-FODC-ALBB-04-03		
4 m	HA-FODC-ALBB-04-04		
T 111	HA-FODC-ALBB-04-05		

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