



## PRODUCT DATASHEET

### HBF058-13U1SS4-20A

HYBRIFLEX® RRH Hybrid Jumper, 5/8", 1 pair 6AWG, 4 Single Strand, Single-Mode Fiber with Simplex LC to Simplex LC with Pull-tab, 20ft Lengths

#### PRODUCT DESCRIPTION

RFS Technologies' HYBRIFLEX Remote Radio Head (RRH) hybrid feeder cabling solution combines optical fiber and DC power for RRHs in a single lightweight cable, making it the world's most innovative solution for RRH deployments. It was developed to reduce installation complexity and costs at Cellular sites. HYBRIFLEX allows mobile operators deploying an RRH architecture to standardize the RRH installation process. HYBRIFLEX combines optical fiber (multi-mode or single-mode) and power in a single cable. It may eliminate the need for junction boxes and can connect multiple RRHs with a single feeder. Standard CELLFLEX® accessories can be used with HYBRIFLEX cable.



#### FEATURES / BENEFITS

- TC type cable with outstanding bending characteristics - Minimizes installation time and enables mechanical protection and shielding
- Lightweight solution and compact design - Decreases tower loading
- Robust cabling - Eliminates need for expensive cable trays and ducts
- Installation of tight bundled fiber optic cable directly to the RRH - Reduces CAPEX and wind load by eliminating need for interconnection
- Optical fiber and power cables housed in single cable - Saves CAPEX by standardizing RRH cable installation and reducing installation requirements
- UL-Listed, flame-retardant jacket, UV protected assemblies - Allows both indoor and outdoor applications
- 100% Factory tested - Online test results available**

#### TECHNICAL FEATURES

##### STRUCTURE

Cable Type		HYBRIFLEX®, Type TC
Fire Performance		Flame Retardant
Size		5/8"
Length	m (ft)	6.1 (20)

##### MECHANICAL SPECIFICATIONS

Outer Diameter Nominal	mm (in)	17 (0.669)
Cable Weight	kg/m (lb/ft)	0.469 (0.316)
Minimum Bending Radius, Single Bend	mm (in)	102 (4)
Minimum Bending Radius, Multiple Bends	mm (in)	254 (10)
Recommended / Maximum Clamp Spacing	m (ft)	1 / 1.2 (3.25 / 4)

##### CABLE JACKET

UV-Protection Individual and External Jacket		Yes
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**DC POWER CABLE SPECIFICATIONS**

<b>Number of DC Pairs</b>		1
<b>Maximum DC-Resistance Power Cable</b>	Ω/km (Ω/kft)	1.4 (0.42)
<b>Cross Section of Power Cable</b>	mm <sup>2</sup> (AWG)	13.3 (6)
<b>DC Wire Jacket Material</b>		PVC/Nylon
<b>DC Cable Single Bending Radius</b>	mm (in)	83 (3.3)
<b>DC Cable Diameter</b>	mm (in)	6.45 (0.25)
<b>DC Standards (Meets or Exceeds)</b>		For use in Type TC per UL 1277, PVC Nylon, RoHS/REACH Compliant
<b>Break-out length (Top)</b>	mm (in)	650.2 (25.6)
<b>Break-out length (Bottom)</b>	mm (in)	N/A (Terminated to Senko IP25)
<b>DC cable sealing method</b>		Semi-rigid, flame-retardant polyolefin, with hot melt adhesive

**F/O CABLE SPECIFICATIONS**

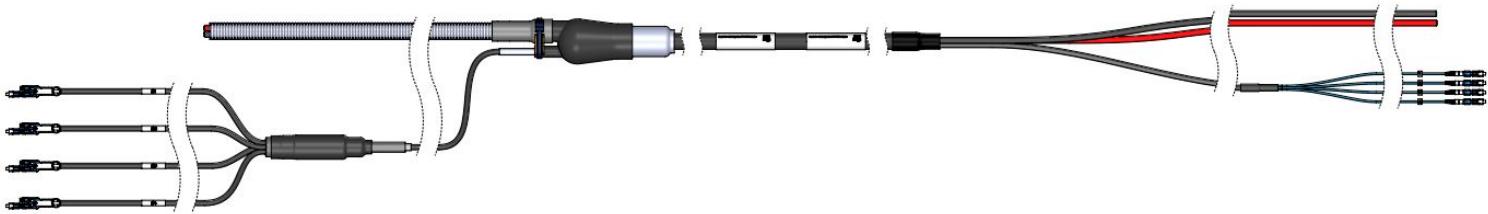
<b>Number of Fiber Strands</b>		4
<b>F/O Cable Type</b>		G657-A2 Single Mode, Bend Tolerant
<b>Core/Clad</b>	μm	9/125
<b>Single Bending Radius</b>	mm (in)	55 (2.2)
<b>F/O Standards (Meets or Exceeds)</b>		UL Listed Type OFNR (UL1666), RoHS Compliant
<b>Optical Loss</b>	dB/Km	0.5 @ 1310 nm 0.5 @ 1550 nm
<b>FO Break-out Length (Top)</b>	mm (in)	914.4 (36)
<b>FO Break-out Length (Bottom)</b>	mm (in)	N/A (Terminated to Senko IP25)
<b>Cable Sealing Method</b>		Semi-rigid flame-retardant polyolefin, with hot melt adhesive
<b>Fiber Termination End 1</b>		LC with Elongated Clip
<b>Fiber Termination End 2</b>		Senko IP25

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**TESTING AND ENVIRONMENTAL**

<b>Storage Temperature</b>	°C (°F)	-40 to 70 (-40 to 158)
<b>Operation Temperature</b>	°C (°F)	-40 to 65 (-40 to 149)
<b>Installation Temperature</b>	°C (°F)	-20 to 65 (-4 to 149)
<b>Jacket Specifications</b>	UL1277 Type TC, UL Listed	

**PRODUCT DRAWING**

Product Drawing

**ASSEMBLY LENGTH**

Model Number	Length
HBF058-13U1SS4-10A	10 feet
HBF058-13U1SS4-20A	20 feet
HBF058-13U1SS4-30A	30 feet
HBF058-13U1SS4-40A	40 feet
HBF058-13U1SS4-50A	50 feet
HBF058-13U1SS4-60A	60 feet

Custom length available upon request.