PRODUCT DATASHEET

HB012-05U1S1-160F

HYBRIFLEX® Hybrid Feeder Cabling Solution, 1x1, 1/2", 1 pair 10AWG, 1 pair Single-Mode Fiber with DLC-DLC Connectors, 160 ft

PRODUCT DESCRIPTION

RFS' HYBRIFLEX Remote Radio Head (RRH) hybrid feeder cabling solution combines optical fiber and DC power for RRHs 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 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 corrugated cable. It may eliminate the need for junction boxes and can connect multiple RRHs with a single feeder. Standard RFS CELLFLEX® accessories can be used with HYBRIFLEX cable.

UL LISTED

FEATURES / BENEFITS

- Aluminum corrugated armor with outstanding bending characteristics - Minimizes installation time and enables mechanical protection and shielding
- Outer conductor grounding - Saves on installation costs
- 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 pairs directly to the RRH - Reduces CAPEX and wind load by eliminating need for interconnection
- Optical fiber and power cables housed in single corrugated cable - Saves CAPEX by standardizing RRH cable installation and reducing installation requirements
- UL-Listed, flame-retardant jacket, UV protected assembles - Allows both indoor and outdoor applications
- **100% Factory tested - Online test results available**

TECHNICAL FEATURES

STRUCTURE

Cable Type		HYBRIFLEX®
Fire Performance		Flame Retardant
Size		1/2
Length	m (ft)	48.7 (160)

MECHANICAL SPECIFICATIONS

Outer Diameter Nominal	mm (in)	15.8 (0.62)
Cable Weight	kg/m (lb/ft)	0.36 (0.24)
Minimum Bending Radius, Single Bend	mm (in)	76.2 (3)
Minimum Bending Radius, Multiple Bends	mm (in)	127 (5)
Recommended / Maximum Clamp Spacing	m (ft)	1 / 1.2 (3.25 / 4)

CABLE JACKET

UV-Protection Individual and External Jacket		Yes

ARMOR SPECIFICATIONS

Armor Type		Corrugated Aluminum
Maximum DC-resistance of Armor		2.4 (0.73)
Diameter Corrugated Armor		13.8 (0.55)

All values nominal unless tolerances provided; information contained in the present datasheet is subject to confirmation at time of ordering

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DC POWER CABLE SPECIFICATIONS		
Number of DC Pairs		1
Maximum DC-Resistance Power Cable	Ω/km (Ω/kft)	3.41 (1.04)
Cross Section of Power Cable	mm^2 (AWG)	5.3 (10)
DC Wire Jacket Material		PVC/Nylon
DC Cable Single Bending Radius	mm (in)	83 (3.3)
DC Cable Diameter	mm (in)	4.2 (0.165)
DC Standards (Meets or Exceeds)		For use in Type MC per UL 1569, PVC Nylon, RoHS/REACH Compliant
Break-out length (Top)	mm (in)	559 (22)
Break-out length (Bottom)	mm (in)	914 (36)
F/O CABLE SPECIFICATIONS		
Number of F/O Pairs		1
F/O Cable Type		G657-A2 Single Mode, Bend Tolerant
Core/Clad	µm	9/125
Single Bending Radius	mm (in)	83 (3.3)
F/O Standards (Meets or Exceeds)		UL Listed Type OFNR (UL1666), RoHS Compliant
Optical Loss	dB/Km	0.5 @ 1310 nm 0.5 @ 1550 nm
FO Break-out Length (Top)	mm (in)	584 (23)
FO Break-out Length (Bottom)	mm (in)	965 (38)
Fiber Termination End 1		DLC Connector
Fiber Termination End 2		DLC 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)
Jacket Specifications		UL1569 Type MC, UL Listed

EXTERNAL DOCUMENT LINKS

On-line Factory Test Results: View

NOTES

Nominal length equals length of armored trunk plus top breakout, does not include bottom breakout; bottom breakout length adds additionally to the total assembly length tip to tip

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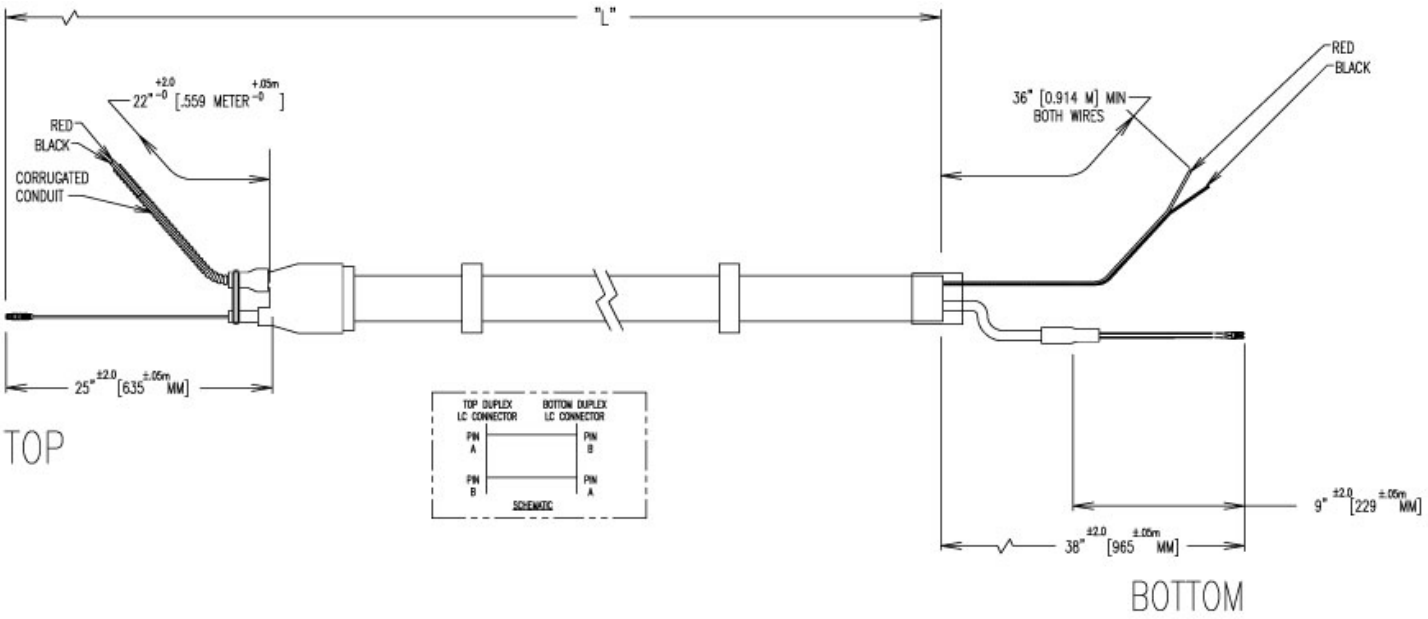

ADDITIONAL ASSEMBLIES - 1 PAIR SM FIBER

Length, ft	Model Number
100	HB012-05U1S1-100F
120	HB012-05U1S1-120F
130	HB012-05U1S1-130F
140	HB012-05U1S1-140F
150	HB012-05U1S1-150F
160	HB012-05U1S1-160F
170	HB012-05U1S1-170F
180	HB012-05U1S1-180F
190	HB012-05U1S1-190F
200	HB012-05U1S1-200F

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