

HYBRIFLEX® RRH Optical Fiber Cable, 12 Pair, Ruggedized Bend-Insensitive Single-Mode Fiber, DLC Connectors

PRODUCT DESCRIPTION

RFS' HYBRIFLEX Remote Radio Head (RRH) hybrid feeder cabling solution combines any combination of optical fiber and/or DC power for RRHs in a single lightweight armored or unarmored cable, making it the world's most innovative solution for RRH deployments. Hybrid, Fiber Optic and DC riser trunk and jumper cables are available in a large variety of fiber counts, DC counts and cross sections. Both pre-connectorized and on-site options are available.

FEATURES / BENEFITS

- Ruggedized, bend-insensitive fiber design with outstanding bending characteristics
- 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 pair directly to the RRH Reduces CAPEX and wind load by eliminating need for interconnection
- Outdoor, black jacket Ensures long-lasting cable protection
- 100% Factory tested Online test results available

TECHNICAL FEATURES

STRUCTURE

STRUCTURE						
Cable Type		HYBRIFLEX®				
Fire Performance		Flame Retardant				
MECHANICAL SPECIFICATIONS						
Outer Diameter Nominal	er Diameter Nominal mm (in) 5.5 (0.217)					
Cable Weight	kg/m (lb/ft)	0.033 (0.022)				
Minimum Bending Radius, Single Bend	mm (in)	66 (2.6)				
Minimum Bending Radius, Multiple Bends	mm (in)	83 (3.3)				
Recommended / Maximum Clamp Spacing	m (ft)	1 / 1.2 (3.25 / 4)				
F/O CABLE SPECIFICATIONS						
Number of F/O Pairs 12						
F/O Cable Type G657-A2 Single Mode, Bend Tolerant						
Core/Clad	μm	9/125				
Secondary Protection Nominal	μm (in)	900 (0.035)				
F/O Standards (Meets or Exceeds) UL Listed Type O		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)	279 (11)				
FO Break-out Length (Bottom)	mm (in)	228 (9)				
Cable Sealing Method		Semi-rigid flame-retardant polyolefin, with hot melt adhesive				

FR-N-12SM-01-xxF Series

REV : C

REV DATE : 27 Apr 2021

www.rfstechnologies.com





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Fiber Termination End 1			DLC Connector
Fiber Termination End 2			DLC Connector
CABLE JACKET			
UV-Protection Individual and External Jacket			Yes
Jacket Material		Flame	Retardant, Indoor/Outdoor, PVC, Black
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			UL 1666
EXTERNAL DOCUMENT LINKS Installation Guidelines: <u>Download</u> QuickShip 2.0 Program Information: <u>I</u> On-line Factory Test Results: <u>View</u>	Download	NOTES	
	/10° min.	Distribution Fiber Indoor Fan-Ou	

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ADDITIONAL ASSEMBLIES - 1 PAIR SM FIBER		
Length, ft	Model Number	
6	FR-N-1SM-01-6F	
10	FR-N-1SM-01-10F	
15	FR-N-1SM-01-15F	
20	FR-N-1SM-01-20F	
30	FR-N-1SM-01-30F	
40	FR-N-1SM-01-40F	
50	FR-N-1SM-01-50F	
60	FR-N-1SM-01-60F	
79	FR-N-1SM-01-70F	
80	FR-N-1SM-01-80F	
90	FR-N-1SM-01-90F	
100	FR-N-1SM-01-100F	

ADDITIONAL ASSEMBLIES - 2 PAIR SM FIBER

Length, ft	Model Number
10	FR-N-2SM-01-10F
20	FR-N-2SM-01-20F
30	FR-N-2SM-01-30F
40	FR-N-2SM-01-40F
50	FR-N-2SM-01-50F
60	FR-N-2SM-01-60F
70	FR-N-2SM-01-70F
80	FR-N-2SM-01-80F
90	FR-N-2SM-01-90F
100	FR-N-2SM-01-100F



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Model Number
FR-N-3SM-01-3F
FR-N-3SM-01-4F
FR-N-3SM-01-6F
FR-N-3SM-01-8F
FR-N-3SM-01-10F
FR-N-3SM-01-15F
FR-N-3SM-01-20F
FR-N-3SM-01-30F
FR-N-3SM-01-50F

ADDITIONAL ASSEMBLIES - 6 PAIR SM FIBER

Length, ft	Model Number
3	FR-N-6SM-01-3F
4	FR-N-6SM-01-4F
6	FR-N-6SM-01-6F
8	FR-N-6SM-01-8F
10	FR-N-6SM-01-10F
15	FR-N-6SM-01-15F
20	FR-N-6SM-01-20F
30	FR-N-6SM-01-30F
40	FR-N-6SM-01-40F

ADDITIONAL ASSEMBLIES - 12 PAIR SM FIBER

Model Number
FR-N-12SM-01-3F
FR-N-12SM-01-4F
FR-N-12SM-01-6F
FR-N-12SM-01-8F
FR-N-12SM-01-10F
FR-N-12SM-01-15F
FR-N-12SM-01-20F
FR-N-12SM-01-30F

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Length, ft	Model Number
10	FR-N-1SSM-01-10F
20	FR-N-1SSM-01-20F
30	FR-N-1SSM-01-30F
40	FR-N-1SSM-01-40F
50	FR-N-1SSM-01-50F
60	FR-N-1SSM-01-60F
70	FR-N-1SSM-01-70F
80	FR-N-1SSM-01-80F
90	FR-N-1SSM-01-90F
100	FR-N-1SSM-01-100F

ADDITIONAL ASSEMBLIES - 2 STRAND SM FIBER

Length, ft	Model Number
10	FR-N-2SSM-01-10F
20	FR-N-2SSM-01-20F
30	FR-N-2SSM-01-30F
40	FR-N-2SSM-01-40F
50	FR-N-2SSM-01-50F
60	FR-N-2SSM-01-60F
70	FR-N-2SSM-01-70F
80	FR-N-2SSM-01-80F
90	FR-N-2SSM-01-90F
100	FR-N-2SSM-01-100F

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PRE-PACKED HYBRIFLEX KITS FOR EASY INTEGRATION INTO RAYCAP JUNCTION BOXES

RFS Technologies now offers Kitting options for most hybrid risers and jumpers that include both the cable assembly and the Raycap inserts. For reference, kits have a "K" as the third digit in the model number. HB158 does not require an additional gland/insert for proper installation and sealing into the Distribution Boxes.

Kit Model Prefix	Assembly Prefix	Assembly Qty	Raycap Insert Kit	Insert Kit Contents	Raycap Insert Kit Qty
HBK114	HB114	1	RFS Technologies- TRUNK-KIT	(2) 190 0620, Insert, M75, 1H, 40mm	
HBK058	HBF058		RFS Technologies- JUMP-KIT	(1) 190 0621, Insert, M75, 3H, 22mm, Split w/ plugs	1
HBK012	HBF012		RFS Technologies- JUMP-KIT-2	(1) 190 0903, Insert, M75, 2H, 15mm, Split w/ plugs	I
FRK-N	FR-N		RFS Technologies- FIBER-KIT	(1) 190 0657, Insert, M75, 6H, 6.1mm, Split w/ plugs	