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.

This low-inductance version of HYBRIFLEX allows mobile operators deploying an RRH architecture to deploy >400ft sites without the danger of power-cycling their RRHs due to voltage swings, which could occur in some specific instances. It combines bend-insensitive single-mode fiber (12 pairs of DLC connectors), 6 pairs of low-inductance DC wires and 9 pairs of 18AWG wires used to carry alarm signals. The package also includes a special RFS-designed DC insulating boot, used to properly protect and insulate the DC wires after stripping the jacket, avoiding possible short-circuits while wiring it to the distribution boxes. Standard RFS CELLFLEX® accessories can be used with HYBRIFLEX cable.

Technical Specifications

<table>
<thead>
<tr>
<th>Structure</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Outer Conductor Armor</td>
<td>Corrugated Aluminum</td>
<td>36.0 (1.42)</td>
</tr>
<tr>
<td>Jacket</td>
<td>Flame Retardant</td>
<td>39.0 (1.54)</td>
</tr>
<tr>
<td>UV-Protection</td>
<td>Individual and External Jacket</td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mechanical Properties</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight, Approximate</td>
<td>[kg/m (lb/ft)]</td>
<td>2.52 (1.70)</td>
</tr>
<tr>
<td>Minimum Bending Radius, Single Bending</td>
<td>[mm (in)]</td>
<td>152 (6)</td>
</tr>
<tr>
<td>Minimum Bending Radius, Repeated Bending</td>
<td>[mm (in)]</td>
<td>254 (10)</td>
</tr>
<tr>
<td>Recommended/Maximum Clamp Spacing</td>
<td>[m (ft)]</td>
<td>1.0 / 1.2 (3.25 / 4.0)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electrical Properties</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DC-Resistance Outer Conductor Armor</td>
<td>[μΩ/km (μΩ/1000ft)]</td>
<td>0.9 (0.27)</td>
</tr>
<tr>
<td>DC-Resistance Power Cable, 13.3mm² (6AWG)</td>
<td>[μΩ/km (μΩ/1000ft)]</td>
<td>1.4 (0.42)</td>
</tr>
<tr>
<td>Inductance @ 100-1000Hz</td>
<td>[μH/m (μH/ft)]</td>
<td>&lt; 0.19 (0.06)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fiber Optic Properties</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Version</td>
<td>Single-mode</td>
<td></td>
</tr>
<tr>
<td>Quantity, Fiber Count</td>
<td>24 (12 pairs)</td>
<td></td>
</tr>
<tr>
<td>Core/Clad</td>
<td>9/125</td>
<td></td>
</tr>
<tr>
<td>Primary Coating (Acrylate)</td>
<td>[μm]</td>
<td>245</td>
</tr>
<tr>
<td>Secondary Coating Diameter, Nominal</td>
<td>[μm]</td>
<td>900</td>
</tr>
<tr>
<td>Minimum Bending Radius</td>
<td>[mm (in)]</td>
<td>137.5 (5.4)</td>
</tr>
<tr>
<td>Optical Loss @ wavelength 1310nm</td>
<td>dB/km</td>
<td>0.5</td>
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<tr>
<td>Optical Loss @ wavelength 1550nm</td>
<td>dB/km</td>
<td>0.5</td>
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<table>
<thead>
<tr>
<th>DC Power Cable Properties</th>
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</thead>
<tbody>
<tr>
<td>Size (Power)</td>
<td>[mm² (AWG)]</td>
<td>13.3 (6)</td>
</tr>
<tr>
<td>Quantity, Wire Count (Power)</td>
<td>[mm² (AWG)]</td>
<td>12 (6 concentric wires)</td>
</tr>
<tr>
<td>Size (Alarm)</td>
<td>[mm² (AWG)]</td>
<td>0.8 (18)</td>
</tr>
<tr>
<td>Quantity, Wire Count (Alarm)</td>
<td>[mm² (AWG)]</td>
<td>18 (9 stranded pairs)</td>
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<tr>
<td>Type</td>
<td>PVC/Nylon</td>
<td></td>
</tr>
<tr>
<td>Primary Jacket Diameter, Nominal</td>
<td>[mm (in)]</td>
<td>9.3 (0.365)</td>
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<table>
<thead>
<tr>
<th>Environment</th>
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<tbody>
<tr>
<td>Installation Temperature</td>
<td>[°C (°F)]</td>
<td>-20 to +65 (-4 to +149)</td>
</tr>
<tr>
<td>Operation Temperature</td>
<td>[°C (°F)]</td>
<td>-40 to +65 (-40 to +149)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>[°C (°F)]</td>
<td>-40 to +70 (-40 to +158)</td>
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<table>
<thead>
<tr>
<th>Standards (meets or exceeds)</th>
<th></th>
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<tbody>
<tr>
<td>Jacket</td>
<td>UL2882 Type RHC, UL Listed</td>
<td></td>
</tr>
<tr>
<td>Fiber Optic</td>
<td>UL Listed Type OFNR (UL1666), RoHS Compliant</td>
<td></td>
</tr>
<tr>
<td>Alarm Wires</td>
<td>UL Standard 1063, 1581 VW-1, MTW Oil and Gasoline RES1 SUNRES (Cable meets UL requirements), RoHS/REACH Compliant</td>
<td></td>
</tr>
<tr>
<td>Power Wires</td>
<td>For use in Type RHC per UL 2882, PVC/Nylon, RoHS/REACH Compliant</td>
<td></td>
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</tbody>
</table>

- **Patented DC Wire Insulator**
  Used at the DC wire connection in distribution boxes, prevents potential short circuits
- **Aluminum corrugated armor with outstanding bending characteristics**
  Minimizes installation time and enables mechanical protection and shielding
- **Same accessories as 1-1/4” coaxial cable**
- **Outer conductor grounding**
  Eliminates typical grounding requirements and saves on installation costs
- **Lightweight solution and compact design**
  Decreases tower loading
- **Robust cabling**
  Eliminates need for expensive cable trays and ducts
- **Optical fiber and power cables housed in single corrugated cable**
  Saves CAPEX by standardizing RRH cable installation and reducing installation requirements
- **Outdoor, flame-retardant jacket**
  Ensures long-lasting cable protection

800.949.7079 sales@talleycom.com Order online today at www.talleycom.com
Group Datasheet HB114-U6S12-xxx-LI Series

**HYBRIFLEX™ RRH Hybrid Cable Solution 6x12, 6AWG Low-Inductance, 1-1/4”, Single-Mode Fiber With DLC Connectors**

### Ordering Information

<table>
<thead>
<tr>
<th>Length, ft*</th>
<th>Model Number</th>
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<th>Model Number</th>
<th>Length, ft*</th>
<th>Model Number</th>
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<tr>
<td>80</td>
<td>HB114-U6S12-80-LI</td>
<td>300</td>
<td>HB114-U6S12-300-LI</td>
<td>520</td>
<td>HB114-U6S12-520-LI</td>
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<td>90**</td>
<td>HB114-U6S12-90-LI</td>
<td>310</td>
<td>HB114-U6S12-310-LI</td>
<td>530</td>
<td>HB114-U6S12-530-LI</td>
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<tr>
<td>100</td>
<td>HB114-U6S12-100-LI</td>
<td>320</td>
<td>HB114-U6S12-320-LI</td>
<td>540</td>
<td>HB114-U6S12-540-LI</td>
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<td>180**</td>
<td>HB114-U6S12-180-LI</td>
<td>400</td>
<td>HB114-U6S12-400-LI</td>
<td>700</td>
<td>HB114-U6S12-700-LI</td>
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<td>190</td>
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<td>410</td>
<td>HB114-U6S12-410-LI</td>
<td>800</td>
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* Length is "L" shown in product drawing, ** Quick Ship Model – Contact RFS for details

### Product Drawing

[Product drawing image]

**Related Information**

See how RFS' HYBRIFLEX installation tools can simplify and improve field work for you today

View factory test results on-line simply by entering the product serial number

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