EW17, HELIAX® Standard Elliptical Waveguide, 1.7–2.3 GHz, black PE jacket

Product Classification
Brand: HELIAX®
Product Type: Elliptical waveguide

Construction Materials
Jacket Material: PE
Conductor Material: Corrugated copper
Jacket Color: Black

Dimensions
Cable Volume: 6596.0 L/km
Cable Weight: 4.06 kg/m
Diameter Over Jacket (E Plane): 143.50 mm | 5.65 in
Diameter Over Jacket (H Plane): 75.00 mm | 2.95 in

Electrical Specifications
Operating Frequency Band: 1.7 – 2.3 GHz
eTE11 Mode Cutoff: 1.364 GHz
Group Delay at Frequency: 139 ns/100 ft @ 2.000 GHz | 456 ns/100 m @ 2.000 GHz

Environmental Specifications
Installation Temperature: -40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature: -55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature: -70 °C to +85 °C (-94 °F to +185 °F)

Mechanical Specifications
Maximum Twist: 0.25 °/ft
Minimum Bend Radius, Multiple Bends (E Plane): 710.00 mm | 27.95 in
Minimum Bend Radius, Multiple Bends (H Plane): 2060.00 mm | 81.10 in
Minimum Bend Radius, Single Bend (E Plane): 510.00 mm | 20.08 in
Minimum Bend Radius, Single Bend (H Plane): 1450.00 mm | 57.09 in

Note
Performance Note
Values typical, unless otherwise stated

Standard Conditions

Attenuation, Ambient Temperature
24 °C | 75 °F

Average Power, Ambient Temperature
40 °C | 104 °F

Average Power, Temperature Rise
42 °C | 76 °F

Return Loss/VSWR

<table>
<thead>
<tr>
<th>Frequency Band</th>
<th>VSWR</th>
<th>Return Loss (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.7–2.3 GHz</td>
<td>1.25</td>
<td>19.10</td>
</tr>
</tbody>
</table>

* VSWR/Return Loss indicated is for lengths up to 300 ft (91.4 m)
* VSWR/Return Loss is guaranteed for factory-fit and typical for field-fit assemblies
* Custom length performance: Call 828-324-2200 or 1-800-982-1708 (toll free), or your local CommScope representative

Attenuation

<table>
<thead>
<tr>
<th>Frequency (GHz)</th>
<th>Attenuation (dB/100 ft)</th>
<th>Attenuation (dB/100 m)</th>
<th>Average Power (kW)</th>
<th>Group Velocity %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.7</td>
<td>0.46</td>
<td>1.509</td>
<td>35.354</td>
<td>59.7</td>
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<td>1.8</td>
<td>0.412</td>
<td>1.352</td>
<td>39.479</td>
<td>65.3</td>
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<tr>
<td>1.9</td>
<td>0.382</td>
<td>1.253</td>
<td>42.578</td>
<td>69.6</td>
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<td>2</td>
<td>0.362</td>
<td>1.186</td>
<td>44.99</td>
<td>73.1</td>
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<td>2.1</td>
<td>0.347</td>
<td>1.137</td>
<td>46.913</td>
<td>76</td>
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<td>2.2</td>
<td>0.336</td>
<td>1.101</td>
<td>48.475</td>
<td>78.5</td>
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<td>2.3</td>
<td>0.327</td>
<td>1.072</td>
<td>49.758</td>
<td>80.5</td>
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</tbody>
</table>

Regulatory Compliance/Certifications

Agency | Classification
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ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system

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