



EWP17, HELIAX® Premium Elliptical Waveguide, 1.9–2.3 GHz, black PE jacket

## Product Classification

<b>Product Type</b>	Elliptical waveguide
<b>Product Brand</b>	HELIAX®

## General Specifications

<b>Jacket Color</b>	Black
<b>Performance Note</b>	Values typical, unless otherwise stated

## Dimensions

<b>Diameter Over Jacket (E Plane)</b>	143.5 mm   5.65 in
<b>Diameter Over Jacket (H Plane)</b>	75.9 mm   2.988 in
<b>Cable Volume</b>	6596 L/km   70.999 ft <sup>3</sup> /kft

## Electrical Specifications

<b>eTE11 Mode Cutoff</b>	1.364 GHz
<b>Group Delay at Frequency</b>	139 ns/100 ft @ 2.000 GHz   456 ns/100 m @ 2.000 GHz
<b>Operating Frequency Band</b>	1.9 – 2.3 GHz

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
1.9–2.3 GHz	1.17	22.13

## Attenuation

Frequency (GHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)	Group Velocity %
1.9	1.253	0.382	42.578	69.6
2.0	1.186	0.362	44.99	73.1

2.1	1.137	0.347	46.913	76
2.2	1.101	0.336	48.475	78.5
2.3	1.072	0.327	49.758	80.5

## Material Specifications

<b>Conductor Material</b>	Corrugated copper
<b>Jacket Material</b>	PE

## Mechanical Specifications

<b>Minimum Bend Radius, Multiple Bends (E Plane)</b>	710 mm   27.953 in
<b>Minimum Bend Radius, Multiple Bends (H Plane)</b>	2060 mm   81.102 in
<b>Minimum Bend Radius, Single Bend (E Plane)</b>	510 mm   20.079 in
<b>Minimum Bend Radius, Single Bend (H Plane)</b>	1450 mm   57.087 in
<b>Maximum Twist</b>	0.82 °/m   0.25 °/ft

## Environmental Specifications

<b>Installation temperature</b>	-40 °C to +60 °C (-40 °F to +140 °F)
<b>Operating Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Storage Temperature</b>	-70 °C to +85 °C (-94 °F to +185 °F)
<b>Attenuation, Ambient Temperature</b>	75 °F   23.889 °C
<b>Average Power, Ambient Temperature</b>	104 °F   40 °C
<b>Average Power, Temperature Rise</b>	42 °C   107.6 °F

## Packaging and Weights

<b>Cable weight</b>	4.06 kg/m   2.728 lb/ft
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## Regulatory Compliance/Certifications

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

