

# EWP37-36



EWP37, HELIAX® Premium Elliptical Waveguide, 3.6–4.2 GHz, black PE jacket

## Product Classification

<b>Product Type</b>	Premium elliptical waveguide
<b>Product Brand</b>	HELIAX®
<b>Product Series</b>	Premium

## General Specifications

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

## Dimensions

<b>Diameter Over Jacket (E Plane)</b>	73.7 mm   2.902 in
<b>Diameter Over Jacket (H Plane)</b>	47.2 mm   1.858 in
<b>Cable Volume</b>	1960 L/km   21.097 ft³/kft

## Electrical Specifications

<b>eTE11 Mode Cutoff</b>	2.79 GHz
<b>Group Delay at Frequency</b>	142 ns/100 ft @ 4.000 GHz   465 ns/100 m @ 4.000 GHz
<b>Operating Frequency Band</b>	3.6 – 4.2 GHz

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
3.6–4.2 GHz	1.08	28.3

## Attenuation

Frequency (GHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)	Group Velocity %
3.6	3.177	0.968	9.308	63.2
3.7	3.027	0.923	9.769	65.7
3.8	2.908	0.886	10.17	67.9
3.9	2.81	0.857	10.522	69.9

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<b>4.0</b>	2.729	0.832	10.834	71.7
<b>4.1</b>	2.661	0.811	11.112	73.3
<b>4.2</b>	2.603	0.793	11.361	74.7

## Material Specifications

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

## Mechanical Specifications

<b>Minimum Bend Radius, Multiple Bends (E Plane)</b>	430 mm   16.929 in
<b>Minimum Bend Radius, Multiple Bends (H Plane)</b>	1040 mm   40.945 in
<b>Minimum Bend Radius, Single Bend (E Plane)</b>	300 mm   11.811 in
<b>Minimum Bend Radius, Single Bend (H Plane)</b>	760 mm   29.921 in
<b>Maximum Twist</b>	1.64 °/m   0.5 °/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>	1.25 kg/m   0.84 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