## Product Specifications









#### EWP37-35

EWP37, HELIAX® Premium Elliptical Waveguide, 3.54-4.2 GHz, black PE jacket

#### **Construction Materials**

Jacket Material	PF
Jacket Material	1 L

Conductor Material Corrugated copper

Jacket Color Black

#### **Dimensions**

Cable Volume	1960.0 L/km   21.1 ft <sup>3</sup> /kft
Cable Weight	1.25 kg/m   0.84 lb/ft
Diameter Over Jacket (E Plane)	73.70 mm   2.90 in
Diameter Over Jacket (H Plane)	47.20 mm   1.86 in

### **Electrical Specifications**

Operating Frequency Band	3.54 - 4.2 GHz
eTE11 Mode Cutoff	2.790 GHz

Group Delay 142 ns/100 ft @ 4.000 GHz 465 ns/100 m @ 4.000 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)

## **General Specifications**

Brand HELIAX®

## **Mechanical Specifications**

Maximum Twist	1.50 °/m   0.50 °/ft
Minimum Bend Radius, Multiple Bends (E Plane)	430.00 mm   17.00 in
Minimum Bend Radius, Multiple Bends (H Plane)	1040.00 mm   41.00 in
Minimum Bend Radius, Single Bend (E Plane)	300.00 mm   12.00 in
Minimum Bend Radius, Single Bend (H Plane)	760.00 mm   30.00 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

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#### **Return Loss/VSWR**

Frequency Band	VSWR	Return Loss (dB)
3.54-4.2 GHz	1.08	28.30

<sup>\*</sup> VSWR/Return Loss indicated is for lengths up to 300 ft (91.4 m)

#### **Attenuation**

Frequency (GHz)	Attenuation (dB/100 ft)	Attenuation (dB/100 m)	Average Power (kW)	<b>Group Velocity %</b>
3.5	1.002	3.286	8.997	61.6
3.6	0.949	3.112	9.5	64.2
3.7	0.907	2.976	9.936	66.6
3.8	0.874	2.866	10.316	68.7
3.9	0.846	2.776	10.651	70.6
4	0.823	2.701	10.949	72.3
4.1	0.804	2.637	11.215	73.9

## **Regulatory Compliance/Certifications**

Agency Classification

ISO 9001:2008 Designed, manufactured and/or distributed under this quality management system

<sup>\*</sup> VSWR/Return Loss is guaranteed for factory-fit and typical for field-fit assemblies

<sup>\*</sup> Custom length performance: Call +1-800-255-1479 (N. America), 1-779-435-6500 (Int'l.), or your local Andrew representative