# **Product Specifications**









# EWP17-19

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

### **Construction Materials**

Jacket Material PE

Conductor Material Corrugated copper

Jacket Color Black

#### **Dimensions**

Cable Volume	6596.0 L/km   71.0 ft³/kft
Cable Weight	4.06 kg/m   2.73 lb/ft
Diameter Over Jacket (E Plane)	5.65 mm   143.50 in
Diameter Over Jacket (H Plane)	2.99 mm   75.90 in

# **Electrical Specifications**

Operating Frequency Band	1.9 - 2.3 GHz
eTE11 Mode Cutoff	1.364 GHz

Group Delay 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)

# **General Specifications**

Brand HELIAX®

# **Mechanical Specifications**

Maximum Twist	0.75 °/m   0.25 °/ft
Minimum Bend Radius, Multiple Bends (E Plane)	710.00 mm   28.00 in
Minimum Bend Radius, Multiple Bends (H Plane)	2060.00 mm   81.00 in
Minimum Bend Radius, Single Bend (E Plane)	510.00 mm   20.00 in
Minimum Bend Radius, Single Bend (H Plane)	1450.00 mm   57.00 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

# Product Specifications



EWP17-19



# **Return Loss/VSWR**

Frequency Band	VSWR	Return Loss (dB)
1.9-2.3 GHz	1.17	22.10

<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> %
1.9	0.382	1.253	42.578	69.6
2	0.362	1.186	44.99	73.1
2.1	0.347	1.137	46.913	76
2.2	0.336	1.101	48.475	78.5
2.3	0.327	1.072	49.758	80.5

# **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