

# EWP52-58

EWP52, HELIAX® Premium Elliptical Waveguide, 5.725–6.425 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>	57.2 mm   2.252 in
<b>Diameter Over Jacket (H Plane)</b>	33.3 mm   1.311 in
<b>Cable Volume</b>	1045 L/km   11.248 ft <sup>3</sup> /kft

## Electrical Specifications

<b>eTE11 Mode Cutoff</b>	3.65 GHz
<b>Group Delay at Frequency</b>	126 ns/100 ft @ 6.200 GHz   413 ns/100 m @ 6.200 GHz
<b>Operating Frequency Band</b>	5.725 – 6.425 GHz

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
5.725–6.425 GHz	1.06	30.72

## Attenuation

Frequency (GHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)	Group Velocity %
5.725	4.058	1.237	5.782	77
5.93	3.963	1.208	5.921	78.8
6.13	3.887	1.185	6.037	80.3

# EWP52-58

6.33 3.822 1.165 6.138 81.7

## Material Specifications

**Conductor Material** Corrugated copper  
**Jacket Material** PE

## Mechanical Specifications

**Minimum Bend Radius, Multiple Bends (E Plane)** 305 mm | 12.008 in  
**Minimum Bend Radius, Multiple Bends (H Plane)** 810 mm | 31.89 in  
**Minimum Bend Radius, Single Bend (E Plane)** 200 mm | 7.874 in  
**Minimum Bend Radius, Single Bend (H Plane)** 560 mm | 22.047 in  
**Maximum Twist** 3.281 °/m | 1 °/ft

## 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)  
**Average Power, Ambient Temperature** 104 °F | 40 °C  
**Average Power, Temperature Rise** 42 °C | 107.6 °F

## Packaging and Weights

**Cable weight** 0.88 kg/m | 0.591 lb/ft

## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant

