

# EW43



EW43, HELIAX® Standard Elliptical Waveguide, 4.4–5.0 GHz, black PE jacket

## Product Classification

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

## General Specifications

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

## Dimensions

<b>Diameter Over Jacket (E Plane)</b>	71 mm   2.795 in
<b>Diameter Over Jacket (H Plane)</b>	41 mm   1.614 in
<b>Cable Volume</b>	1690 L/km   18.191 ft³/kft

## Electrical Specifications

<b>eTE11 Mode Cutoff</b>	2.78 GHz
<b>Group Delay at Frequency</b>	128 ns/100 ft @ 4.600 GHz   419 ns/100 m @ 4.600 GHz
<b>Operating Frequency Band</b>	4.4 – 5.0 GHz

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
4.4–5.0 GHz	1.15	23.13

## Attenuation

Frequency (GHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)	Group Velocity %
4.4	2.983	0.909	9.52	77.5
4.5	2.948	0.899	9.632	78.6
4.6	2.917	0.889	9.734	79.7
4.7	2.889	0.881	9.827	80.6

# EW43

<b>4.8</b>	2.864	0.873	9.912	81.5
<b>4.9</b>	2.842	0.866	9.99	82.3
<b>5.0</b>	2.822	0.86	10.061	83.1

## Material Specifications

**Conductor Material** Corrugated copper

**Jacket Material** PE

## Mechanical Specifications

**Minimum Bend Radius, Multiple Bends (E Plane)** 381 mm | 15 in

**Minimum Bend Radius, Multiple Bends (H Plane)** 1016 mm | 40 in

**Minimum Bend Radius, Single Bend (E Plane)** 280 mm | 11.024 in

**Minimum Bend Radius, Single Bend (H Plane)** 711 mm | 27.992 in

**Maximum Twist** 1.64 °/m | 0.5 °/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)

**Attenuation, Ambient Temperature** 75 °F | 23.889 °C

**Average Power, Ambient Temperature** 104 °F | 40 °C

**Average Power, Temperature Rise** 42 °C | 107.6 °F

## Packaging and Weights

**Cable weight** 1.2 kg/m | 0.806 lb/ft

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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
UK-ROHS	Compliant



