EW37

EW37, HELIAX® Standard Elliptical Waveguide, 3.6–4.2 GHz, black PE jacket

Product Classification

Product Type	Elliptical waveguide
Product Brand	HELIAX®

General Specifications

Jacket Color	Black
Performance Note	Values typical, unless otherwise stated

Dimensions

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

Electrical Specifications

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

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
3.6–4.2 GHz	1.15	23.13

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

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3.9	2.81	0.857	10.522	69.9
4.0	2.729	0.832	10.834	71.7
4.1	2.661	0.811	11.112	73.3
4.2	2.603	0.793	11.361	74.7

Material Specifications

Conductor Material	Corrugated copper
Jacket Material	PE

Mechanical Specifications

Minimum Bend Radius, Multiple Bends (E Plane)	430 mm | 16.929 in
Minimum Bend Radius, Multiple Bends (H Plane)	1040 mm | 40.945 in
Minimum Bend Radius, Single Bend (E Plane)	300 mm | 11.811 in
Minimum Bend Radius, Single Bend (H Plane)	760 mm | 29.921 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	1.25 kg/m | 0.84 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 www.commscope.com/ProductCompliance
ROHS	Compliant

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