

EW28, HELIAX® Standard Elliptical Waveguide, 2.9–3.4 GHz, black PE jacket

OBSOLETE

Product Type		Standard elliptical waveguide
Product Brand		HELIAX®
Product Series		Standard
General Specifications		
Jacket Color		Black
Performance Note		Values typical, unless otherwise stated
Dimensions		
Diameter Over Jacket (E Plane)		92.5 mm 3.642 in
Diameter Over Jacket (H Plane)		59.2 mm 2.331 in
Cable Volume		3345 L/km 36.005 ft ³ /kft
Electrical Specifications		
eTE11 Mode Cutoff		2.153 GHz
Group Delay at Frequency		137 ns/100 ft @ 3.200 GHz 451 ns/100 m @ 3.200 GHz
Operating Frequency Band		2.9 – 3.4 GHz
VSWR/Return Loss		
Frequency Band	VSWR	Return Loss (dB)

Attenuation

2.9-3.1 GHz

3.1-3.4 GHz

Frequency (GHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)	Group Velocity %
2.9	2.217	0.676	16.506	67
3.0	2.11	0.643	17.349	69.6

20.83

23.13

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1.2

1.15



EW28

3.1	2.026	0.617	18.067	71.9
3.2	1.959	0.597	18.684	74
3.3	1.904	0.58	19.219	75.8
3.4	1.859	0.567	19.687	77.4

Material Specifications

Conductor Material

Jacket Material

PE

Corrugated copper

Mechanical Specifications

Minimum Bend Radius, Multiple Bends (E Plane)	560 mm 22.047 in
Minimum Bend Radius, Multiple Bends (H Plane)	1320 mm 51.969 in
Minimum Bend Radius, Single Bend (E Plane)	560 mm 22.047 in
Minimum Bend Radius, Single Bend (H Plane)	1320 mm 51.969 in
Maximum Twist	0.82 °/m 0.25 °/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

2.04 kg/m | 1.371 lb/ft

Regulatory Compliance/Certifications

Agency	Classification
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
UK-ROHS	Compliant



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