35409-19
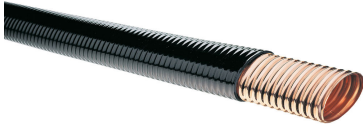
EW63, HELIAX® Standard Elliptical Waveguide, 5.925–7.125 GHz, black non-halogenated, fire retardant polyolefin jacket

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)	51.1 mm | 2.012 in
Diameter Over Jacket (H Plane)	29.5 mm | 1.161 in
Cable Volume	855 L/km | 9.203 ft³/kft

Electrical Specifications

eTE11 Mode Cutoff	4.001 GHz
Group Delay at Frequency	126 ns/100 ft @ 6.775 GHz | 413 ns/100 m @ 6.775 GHz
Operating Frequency Band	5.925 – 7.125 GHz

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
5.925–7.125 GHz	1.15	23.13

Attenuation

Frequency (GHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)	Group Velocity %
5.925	4.878	1.487	4.45	73.8
6.13	4.738	1.444	4.581	75.8

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6.33	4.626	1.41	4.692	77.5
6.53	4.533	1.382	4.788	79
6.73	4.454	1.358	4.873	80.4
6.93	4.387	1.337	4.948	81.7

Material Specifications

Conductor Material	Corrugated copper
Jacket Material	Non-halogenated, fire retardant polyolefin

Mechanical Specifications

Minimum Bend Radius, Multiple Bends (E Plane)	260 mm | 10.236 in
Minimum Bend Radius, Multiple Bends (H Plane)	740 mm | 29.134 in
Minimum Bend Radius, Single Bend (E Plane)	180 mm | 7.087 in
Minimum Bend Radius, Single Bend (H Plane)	510 mm | 20.079 in
Maximum Twist	3.281 °/m | 1 °/ft

Environmental Specifications

Installation temperature	-25 °C to +60 °C (-13 °F to +140 °F)
Operating Temperature	-30 °C to +80 °C (-22 °F to +176 °F)
Storage Temperature	-30 °C to +80 °C (-22 °F to +176 °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
Fire Retardancy Test Method	UL 1666/CATVR/CMR
Toxicity Index Test Method	IEC 60754-2

Packaging and Weights

Cable weight	0.76 kg/m | 0.511 lb/ft

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
UL/ETL Certification	CATVR/CMR

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