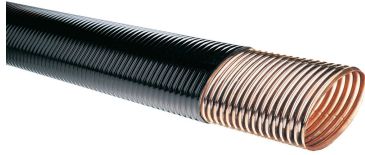


EW17



EW17, HELIAX® Standard Elliptical Waveguide, 1.7–2.3 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) | 143.5 mm 5.65 in |
| Diameter Over Jacket (H Plane) | 75 mm 2.953 in |
| Cable Volume | 6596 L/km 71.092 ft ³ /kft |

Electrical Specifications

| | |
|---|--|
| Attenuation, Ambient Temperature | 75 °F 23.889 °C |
| eTE11 Mode Cutoff | 1.364 GHz |
| Group Delay at Frequency | 139 ns/100 ft @ 2.000 GHz 456 ns/100 m @ 2.000 GHz |
| Operating Frequency Band | 1.7 – 2.3 GHz |

VSWR/Return Loss

| Frequency Band | VSWR | Return Loss (dB) |
|----------------|------|------------------|
| 1.7–2.3 GHz | 1.25 | 19.1 |

Attenuation

| Frequency (GHz) | Attenuation (dB/100 m) | Attenuation (dB/100 ft) | Average Power (kW) | Group Velocity % |
|-----------------|------------------------|-------------------------|--------------------|------------------|
| 1.7 | 1.509 | 0.46 | 35.354 | 59.7 |
| 1.8 | 1.352 | 0.412 | 39.479 | 65.3 |

EW17

| | | | | |
|-----|-------|-------|--------|------|
| 1.9 | 1.253 | 0.382 | 42.578 | 69.6 |
| 2.0 | 1.186 | 0.362 | 44.99 | 73.1 |
| 2.1 | 1.137 | 0.347 | 46.913 | 76 |
| 2.2 | 1.101 | 0.336 | 48.475 | 78.5 |
| 2.3 | 1.072 | 0.327 | 49.758 | 80.5 |

Material Specifications

| | |
|---------------------------|-------------------|
| Conductor Material | Corrugated copper |
| Jacket Material | PE |

Mechanical Specifications

| | |
|--|----------------------|
| Minimum Bend Radius, Multiple Bends (E Plane) | 710 mm 27.953 in |
| Minimum Bend Radius, Multiple Bends (H Plane) | 2060 mm 81.102 in |
| Minimum Bend Radius, Single Bend (E Plane) | 510 mm 20.079 in |
| Minimum Bend Radius, Single Bend (H Plane) | 1450 mm 57.087 in |
| Maximum Twist | 0.25 °/ft 0.82 °/m |

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 | 4.06 kg/m 29.366 lb/ft |
|---------------------|--------------------------|

Regulatory Compliance/Certifications

| | |
|---------------|--|
| Agency | Classification |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |

