

EW43



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

Product Classification

| | |
|-----------------------|-------------------------------|
| 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) | 71 mm 2.795 in |
| Diameter Over Jacket (H Plane) | 41 mm 1.614 in |
| Cable Volume | 1690 L/km 18.191 ft³/kft |

Electrical Specifications

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|---------------------------------|--|
| eTE11 Mode Cutoff | 2.78 GHz |
| Group Delay at Frequency | 128 ns/100 ft @ 4.600 GHz 419 ns/100 m @ 4.600 GHz |
| Operating Frequency Band | 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 |

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|------------|-------|-------|--------|------|
| 4.8 | 2.864 | 0.873 | 9.912 | 81.5 |
| 4.9 | 2.842 | 0.866 | 9.99 | 82.3 |
| 5.0 | 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

| 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.andrew.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |



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