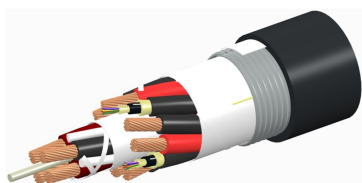


HELIAX® Hybrid Cable, UL Type TC-OF-ER



Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North America

Portfolio

CommScope®

Product Type

Hybrid cable, copper and fiber

Product Brand

HELIAX®

General Specifications

Application

Remote radio head

Alarm Wire, quantity

14

Cable Type

Wireless feeder

Conductors, quantity

8

Construction Type

Shielded

Fiber Short Description

RFF – 6AWG

Fiber Type, quantity

24

Fibers per Subunit, quantity

12

Inner Shield (Tape) Material

Corrugated aluminum

Jacket Color

Black

Outer Shield (Tape) Material

PVC

Strength Members

Glass reinforced plastic rod

Subunit, quantity

2

Total Fiber Count

24

Water Blocking Method

Water blocking tape(s) | Water blocking threads

Dimensions

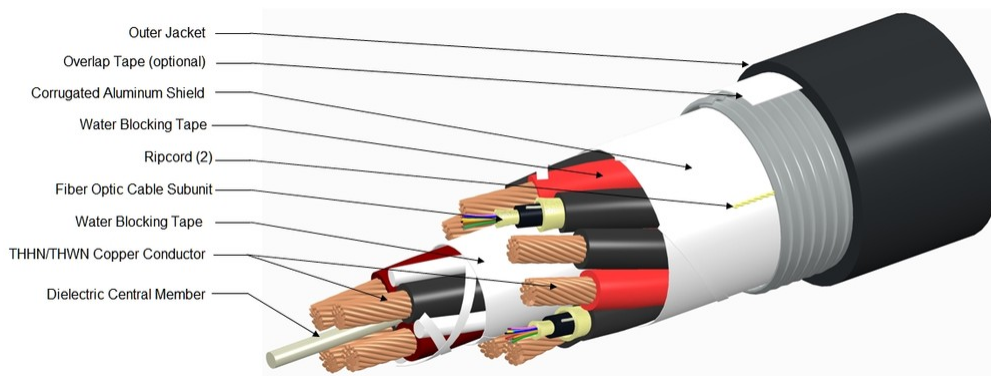
760194712 | HTC-24SM-806-1418-APV

| | |
|-------------------------------------|---------------------|
| Buffer Tube/Subunit Diameter | 6.096 mm 0.24 in |
| Diameter Over Jacket | 33.274 mm 1.31 in |
| Alarm Wire Gauge | 18 AWG |
| Conductor Gauge | 6 AWG |

Electrical Specifications

| | |
|-------------------------------|--|
| dc Resistance Note | Maximum value based on a standard condition of 20 °C (68 °F) |
| dc Resistance, maximum | 1.352 ohms/km 0.412 ohms/kft |

Representative Image



Material Specifications

| | |
|-------------------------|-----------------------------|
| Ripcord Material | Para-aramid synthetic fiber |
|-------------------------|-----------------------------|

Mechanical Specifications

| | |
|--|-------------------------|
| Minimum Bend Radius, multiple bends, loaded | 668.02 mm 26.3 in |
| Minimum Bend Radius, multiple bends, unloaded | 332.74 mm 13.1 in |
| Tensile Load, long term, maximum | 1,067.573 N 240 lbf |
| Tensile Load, short term, maximum | 3,558.576 N 800 lbf |
| Compression | 4.465 kg/mm 250 lb/in |
| Compression Test Method | FOTP-41 |
| Flex Test Method | FOTP-104 |
| Impact | 4.34 ft lb 5.884 N-m |
| Impact Test Method | FOTP-25 |
| Twist | 10 cycles |
| Twist Test Method | FOTP-85 |

760194712 | HTC-24SM-806-1418-APV

Optical Specifications

Fiber Type G.657.A2/B2 | G.657.A2/B2

Environmental Specifications

Installation temperature -30 °C to +70 °C (-22 °F to +158 °F)

Operating Temperature -40 °C to +80 °C (-40 °F to +176 °F)

Storage Temperature -40 °C to +80 °C (-40 °F to +176 °F)

Cable Qualification Standards ANSI/ICEA S-104-696 | ANSI/ICEA S-87-640 | Telcordia GR-20 | Telcordia GR-409 | UL 1277

Environmental Space Wireless installation

Packaging and Weights

Cable weight 1,846.811 kg/km | 1241 lb/kft

Regulatory Compliance/Certifications

| Agency | Classification |
|------------|--|
| CHINA-ROHS | Below maximum concentration value |
| REACH-SVHC | Compliant as per SVHC revision on www.commscope.com/ProductCompliance |
| ROHS | Compliant |



Included Products

| | | |
|----------|---|--|
| CS-8G-MP | - | Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G.657.A2, B2) |
|----------|---|--|

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-8G-MP

Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G.657.A2, B2)

Product Classification

| | |
|---------------------|---------------|
| Portfolio | CommScope® |
| Product Type | Optical fiber |

General Specifications

| | |
|--|--|
| Cladding Diameter | 125 µm |
| Cladding Diameter Tolerance | ±0.7 µm |
| Cladding Non-Circularity, maximum | 0.7 % |
| Coating Diameter (Colored) | 249 µm |
| Coating Diameter (Uncolored) | 242 µm |
| Coating Diameter Tolerance (Colored) | ±13 µm |
| Coating Diameter Tolerance (Uncolored) | ±5 µm |
| Coating/Cladding Concentricity Error, maximum | 12 µm |
| Core/Clad Offset, maximum | 0.5 µm |
| Proof Test | 689.476 N/mm ² 100000 psi |

Dimensions

| | |
|----------------------------|-----------------|
| Fiber Curl, minimum | 4 m 13.123 ft |
|----------------------------|-----------------|

Mechanical Specifications

| | |
|--|---|
| Macrobending, 15 mm mandrel, 1 turn | 0.50 dB @ 1,550 nm 1.00 dB @ 1,625 nm |
| Macrobending, 20 mm mandrel, 1 turn | 0.10 dB @ 1,550 nm 0.20 dB @ 1,625 nm |
| Macrobending, 30 mm mandrel, 10 turns | 0.03 dB @ 1,550 nm 0.10 dB @ 1,625 nm |
| Coating Strip Force, maximum | 8.9 N 2.001 lbf |
| Coating Strip Force, minimum | 1.3 N 0.292 lbf |
| Dynamic Fatigue Parameter, minimum | 20 |

Optical Specifications

| | |
|--|---------|
| Cabled Cutoff Wavelength, maximum | 1260 nm |
| Point Defects, maximum | 0.1 dB |

CS-8G-MP

| | |
|--|---------------------|
| Zero Dispersion Slope, maximum | 0.092 ps/[km-nm-nm] |
| Zero Dispersion Wavelength, maximum | 1324 nm |
| Zero Dispersion Wavelength, minimum | 1302 nm |

Optical Specifications, Wavelength Specific

| | |
|--|---|
| Attenuation, maximum | 0.40 dB/km @ 1,310 nm 0.40 dB/km @ 1,385 nm 0.40 dB/km @ 1,550 nm 0.50 dB/km @ 1,625 nm |
| Dispersion, maximum | 18 ps(nm-km) at 1550 nm 3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm |
| Index of Refraction | 1.467 @ 1,310 nm 1.467 @ 1,385 nm 1.468 @ 1,550 nm |
| Mode Field Diameter | 8.6 μm @ 1,310 nm 9.8 μm @ 1,550 nm |
| Mode Field Diameter Tolerance | $\pm 0.4 \mu\text{m}$ @ 1310 nm $\pm 0.5 \mu\text{m}$ @ 1550 nm |
| Polarization Mode Dispersion Link Design Value, maximum | 0.06 ps/sqrt(km) |
| Standards Compliance | ITU-T G.657.A2 ITU-T G.657.B2 |

Environmental Specifications

| | |
|--|--------------------|
| Heat Aging, maximum | 0.05 dB/km @ 85 °C |
| Temperature Dependence, maximum | 0.05 dB/km |
| Temperature Humidity Cycling, maximum | 0.05 dB/km |
| Water Immersion, maximum | 0.05 dB/km @ 23 °C |

Regulatory Compliance/Certifications

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



* Footnotes

| | |
|--|---|
| Temperature Dependence, maximum | Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F) |
| Temperature Humidity Cycling, maximum | Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity |