C400-NFTM-3M

CNT-400 CNT® Jumper with interface types N Female and TNC Male, 3



m

Product Classification

Product Type Braided cable assembly

Product Brand CNT®
Product Series CNT-400

General Specifications

Attachment, Connector A Field attachment

Attachment, Connector B Field attachment

Body Style, Connector A Straight
Body Style, Connector B Straight
Cable Family CNT-400
Interface, Connector A N Female
Interface, Connector B TNC Male

Specification Sheet Revision Level A

Dimensions

Length 3 m | 9.843 ft

Nominal Size 0.400 in

VSWR/Return Loss

Frequency Band VSWR Return Loss (dB)

700–3000 MHz 1.288 18

Jumper Assembly Sample Label





Regulatory Compliance/Certifications

Agency Classification

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

Included Products

400BPTM-C–TNC Male for CNT-400 braided cable400BPTM-C-CR–TNC Male for CNT-400 braided cable400PNF-C–Type N Female for CNT-400 braided cable400PTM-C–TNC Male for CNT-400 braided cable

CNT-400 - CNT-400, CNT® 50 Ohm Braided Coaxial Cable, variable, black PE jacket

CNT-400-SFR - CNT-400-SFR, C CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant

polyolefin jacket, B2ca S1a d0 a1 Compliant

CNT-400-W - CNT-400-W, CNT® 50 Ohm Braided Coaxial Cable, variable, white PE jacket





TNC Male for CNT-400 braided cable

Product Classification

 Product Type
 Braided cable connector

 Product Brand
 CNT® | ConQuest®

General Specifications

Body StyleStraightInner Contact Attachment MethodCaptivatedInner Contact PlatingGold

InterfaceTNC MaleOuter Contact Attachment MethodClampOuter Contact PlatingTrimetal

Dimensions

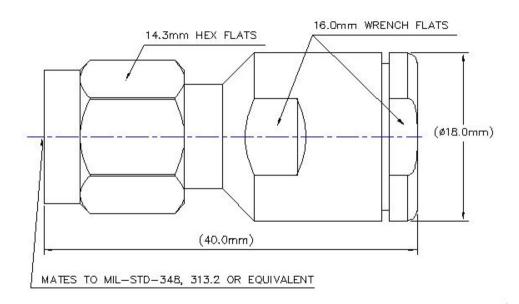
 Length
 41.24 mm | 1.624 in

 Diameter
 18 mm | 0.709 in

Nominal Size 0.405 in



Outline Drawing



Electrical Specifications

0.05 dB Insertion Loss, typical **Cable Impedance** 50 ohm **Connector Impedance** 50 ohm dc Test Voltage 1500 V 1.5 m0hm Inner Contact Resistance, maximum Insulation Resistance, minimum 5000 MOhm 0 - 6000 MHz **Operating Frequency Band** 0.4 m0hm **Outer Contact Resistance, maximum** Peak Power, maximum 5 kW RF Operating Voltage, maximum (vrms) 500 V

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0-3000 MHz	1.046	32.96
3000-6000 MHz	1.18	22

Mechanical Specifications



Connector Retention Tensile Force 330 N | 74.187 lbf

Connector Retention Torque 0.56 N-m | 4.956 in lb

Coupling Nut Proof Torque 1.7 N-m | 15.046 in lb

Coupling Nut Proof Torque Method IEC 61169-17:9.3.6

Coupling Nut Retention Force 445 N | 100.04 lbf

Coupling Nut Retention Force MethodIEC 61169-17:9.3.11

Interface Durability 500 cycles

Interface Durability Method IEC 61169-17:9.5

Mechanical Shock Test Method IEC 60068-2-27

Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ $(-40 \,^{\circ}\text{F}$ to $+185 \,^{\circ}\text{F})$

Storage Temperature -65 °C to +125 °C (-85 °F to +257 °F)

Attenuation, Ambient Temperature 20 °C | 68 °F

Average Power, Ambient Temperature 40 °C | 104 °F

Average Power, Inner Conductor Temperature 100 °C | 212 °F

Climatic Sequence Test Method IEC 60068-1

Corrosion Test Method IEC 60068-2-11

Damp Heat Steady State Test Method IEC 60068-2-3

Immersion Depth 1 m

Immersion Test Mating Mated

Immersion Test Method IEC 60529:2001, IP68

Thermal Shock Test Method IEC 60068-2-14

Vibration Test Method IEC 60068-2-6

Packaging and Weights

Weight, net 41.85 g | 0.092 lb

Regulatory Compliance/Certifications

Agency	Classification
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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.commscope.com/ProductCompliance

COMMSCOPE®

ROHS Compliant UK-ROHS Compliant



* Footnotes

Insertion Loss, typical 0.05√ freq (GHz) (not applicable for elliptical waveguide)

Immersion Depth Immersion at specified depth for 24 hours





TNC Male for CNT-400 braided cable

Product Classification

 Product Type
 Braided cable connector

 Product Brand
 CNT® | ConQuest®

General Specifications

Body StyleStraightInner Contact Attachment MethodCaptivatedInner Contact PlatingSilverInterfaceTNC MaleOuter Contact Attachment MethodCrimp

Outer Contact Plating Trimetal

Dimensions

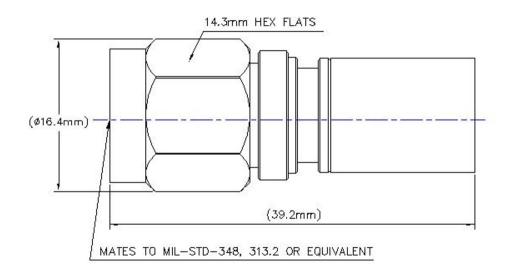
 Length
 40.74 mm | 1.604 in

 Diameter
 16 mm | 0.63 in

Nominal Size 0.405 in



Outline Drawing



Electrical Specifications

0.05 dB Insertion Loss, typical **Cable Impedance** 50 ohm **Connector Impedance** 50 ohm dc Test Voltage 1500 V 1.5 m0hm Inner Contact Resistance, maximum Insulation Resistance, minimum 5000 MOhm 0 - 6000 MHz **Operating Frequency Band** 0.4 m0hm **Outer Contact Resistance, maximum** Peak Power, maximum 5 kW RF Operating Voltage, maximum (vrms) 500 V

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0-3000 MHz	1.046	32.96
3000-6000 MHz	1.18	22

Mechanical Specifications

COMMSCOPE®

Connector Retention Tensile Force 330 N | 74.187 lbf

Connector Retention Torque 0.56 N-m | 4.956 in lb

Coupling Nut Proof Torque 1.7 N-m | 15.046 in lb

Coupling Nut Proof Torque Method IEC 61169-17:9.3.6

Coupling Nut Retention Force 445 N | 100.04 lbf

Coupling Nut Retention Force Method IEC 61169-17:9.3.11

Interface Durability 500 cycles

Interface Durability Method IEC 61169-17:17

Mechanical Shock Test Method IEC 60068-2-27

Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ $(-40 \,^{\circ}\text{F}$ to $+185 \,^{\circ}\text{F})$

Storage Temperature -65 °C to +125 °C (-85 °F to +257 °F)

Attenuation, Ambient Temperature 20 °C | 68 °F

Average Power, Ambient Temperature 40 °C | 104 °F

Average Power, Inner Conductor Temperature 100 °C | 212 °F

Climatic Sequence Test Method IEC 60068-1

Corrosion Test Method IEC 60068-2-11

Damp Heat Steady State Test Method IEC 60068-2-3

Thermal Shock Test Method IEC 60068-2-14

Vibration Test Method IEC 60068-2-6

Water Jetting Test Mating Mated

Water Jetting Test Method IEC 60529:2001, IP65

Packaging and Weights

Weight, net 21.52 g | 0.047 lb

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.commscope.com/ProductCompliance

ROHS Compliant

UK-ROHS Compliant/Exempted

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* Footnotes

Insertion Loss, typical 0.05√ freq (GHz) (not applicable for elliptical waveguide)



400PNF-C



Type N Female for CNT-400 braided cable

Product Classification

 Product Type
 Braided cable connector

 Product Brand
 CNT® | ConQuest®

General Specifications

Body StyleStraightInner Contact Attachment MethodCaptivatedInner Contact PlatingGold

InterfaceN FemaleOuter Contact Attachment MethodClampOuter Contact PlatingTrimetalPressurizableNo

Dimensions

 Width
 19 mm | 0.748 in

 Length
 40.84 mm | 1.608 in

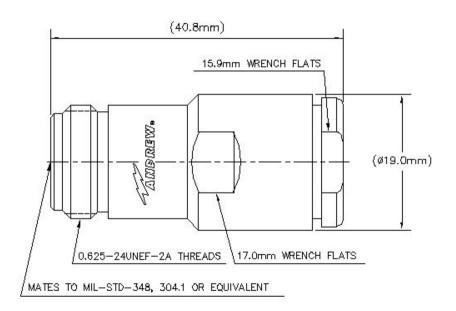
 Diameter
 19 mm | 0.748 in

 Nominal Size
 0.405 in

Outline Drawing



400PNF-C



Electrical Specifications

Insertion Loss, typical 0.05 dB

Average Power at Frequency 580.0 W @ 900 MHz

Cable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage2500 VInner Contact Resistance, maximum1 mOhm

Insulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum0.25 mOhm

Peak Power, maximum 10 kW RF Operating Voltage, maximum (vrms) 707 V

VSWR/Return Loss

 Frequency Band
 VSWR
 Return Loss (dB)

 0-3000 MHz
 1.045
 33.15

 3000-6000 MHz
 1.172
 22.03

Mechanical Specifications

Connector Retention Tensile Force 330 N | 74.187 lbf

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400PNF-C

Connector Retention Torque 0.56 N-m | 4.956 in lb | 0.75 N-m | 6.638 in lb

Insertion Force 28 N | 6.295 lbf
Insertion Force Method IEC 61169-16:9.3.5

Interface Durability 500 cycles

Interface Durability Method IEC 61169-16:9.5

Mechanical Shock Test Method IEC 60068-2-27

Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ (-40 $^{\circ}\text{F}$ to $+185 \,^{\circ}\text{F}$)

Storage Temperature $-65 \,^{\circ}\text{C}$ to $+125 \,^{\circ}\text{C}$ (-85 $^{\circ}\text{F}$ to $+257 \,^{\circ}\text{F}$)

Attenuation, Ambient Temperature20 °C | 68 °FAverage Power, Ambient Temperature40 °C | 104 °FAverage Power, Inner Conductor Temperature100 °C | 212 °F

Climatic Sequence Test MethodIEC 60068-1Corrosion Test MethodIEC 60068-2-11Damp Heat Steady State Test MethodIEC 60068-2-3

Immersion Depth1 mImmersion Test MatingMated

Immersion Test Method IEC 60529:2001, IP68

Thermal Shock Test Method IEC 60068-2-14

Vibration Test Method IEC 60068-2-6

Packaging and Weights

Weight, net 53.19 g | 0.117 lb

Regulatory Compliance/Certifications

Agency Classification

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

* Footnotes

Insertion Loss, typical 0.05√-freq (GHz) (not applicable for elliptical waveguide)

Immersion Depth Immersion at specified depth for 24 hours

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TNC Male for CNT-400 braided cable

Product Classification

Product Type Braided cable connector

Product Brand CNT®

General Specifications

Body Style Straight

Inner Contact Attachment Method Captivated

Inner Contact Plating Gold

Interface TNC Male

Outer Contact Attachment Method Clamp

Outer Contact Plating Trimetal

Dimensions

Width 20 mm | 0.787 in

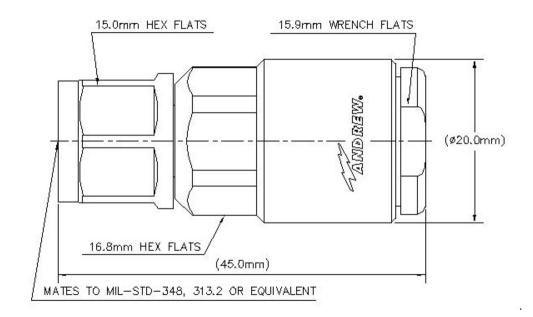
Length 44.95 mm | 1.77 in

Diameter 20 mm | 0.787 in

Nominal Size 0.405 in

Outline Drawing





Electrical Specifications

Insertion Loss, typical 0.05 dB

Average Power at Frequency 580.0 W @ 900 MHz

Cable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage1500 V

Inner Contact Resistance, maximum1.5 mOhmInsulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 6000 MHz

 Outer Contact Resistance, maximum
 0.4 mOhm

 Peak Power, maximum
 5 kW

RF Operating Voltage, maximum (vrms) 500 V

VSWR/Return Loss

 Frequency Band
 VSWR
 Return Loss (dB)

 0-3000 MHz
 1.046
 32.96

 3000-6000 MHz
 1.18
 22

Mechanical Specifications

Connector Retention Tensile Force 330 N | 74.187 lbf

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Connector Retention Torque0.56 N-m | 4.956 in lbCoupling Nut Proof Torque1.7 N-m | 15.046 in lbCoupling Nut Proof Torque MethodIEC 61169-17:9.3.6

Coupling Nut Retention Force 445 N | 100.04 lbf

Coupling Nut Retention Force Method IEC 61169-17:9.3.11

Interface Durability 500 cycles

Interface Durability MethodIEC 61169-17:17Mechanical Shock Test MethodIEC 60068-2-27

Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$

Storage Temperature $-65 \,^{\circ}\text{C}$ to $+125 \,^{\circ}\text{C}$ (-85 $^{\circ}\text{F}$ to $+257 \,^{\circ}\text{F}$)

Attenuation, Ambient Temperature20 °C | 68 °FAverage Power, Ambient Temperature40 °C | 104 °FAverage Power, Inner Conductor Temperature100 °C | 212 °F

Climatic Sequence Test Method IEC 60068-1

Corrosion Test Method IEC 60068-2-11

Damp Heat Steady State Test Method IEC 60068-2-3

Immersion Depth1 mImmersion Test MatingMated

Immersion Test Method IEC 60529:2001, IP68

Thermal Shock Test Method IEC 60068-2-14

Vibration Test Method IEC 60068-2-6

Packaging and Weights

Weight, net 44.22 g | 0.097 lb

Regulatory Compliance/Certifications

Agency Classification

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

* Footnotes

Insertion Loss, typical 0.05√-freq (GHz) (not applicable for elliptical waveguide)

COMMSCSPE®

Immersion Depth

Immersion at specified depth for 24 hours



CNT-400, CNT® 50 Ohm Braided Coaxial Cable, variable, black PE jacket



Product Classification

Product Type Braided coaxial cable

Product Brand CNT®

Product Series CNT-400

General Specifications

Braid Coverage 90 %

Cable Type CNT-400

Jacket Color Black

Dimensions

Nominal Size

Diameter Over Dielectric7.24 mm | 0.285 inDiameter Over Jacket10.29 mm | 0.405 inDiameter Over Tape7.391 mm | 0.291 inInner Conductor OD2.74 mm | 0.108 inOuter Conductor OD8.08 mm | 0.318 in

Electrical Specifications

Cable Impedance 50 ohm

Capacitance 78 pF/m | 23.774 pF/ft

dc Resistance, Inner Conductor4.69 ohms/km | 1.43 ohms/kftdc Resistance, Outer Conductor5.61 ohms/km | 1.71 ohms/kft

0.400 in

dc Test Voltage $2500 \ \lor$ Jacket Spark Test Voltage (rms) $4000 \ \lor$

COMMSCOPE®

CNT-400

Maximum Frequency 16.2 GHz

Operating Frequency Band 30 - 6000 MHz

Peak Power16 kWShielding Effectiveness90 dBVelocity85 %

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
30.0	2.49	0.76
50.0	3.18	0.97
150.0	4.92	1.5
220.0	6.23	1.9
450.0	8.86	2.7
900.0	12.8	3.9
1500.0	16.7	5.1
1800.0	18.4	5.6
2000.0	19.4	5.9
2400.0	21.65	6.6
2500.0	22	6.7
3000.0	24.6	7.5
4000.0	28.87	8.8
4500.0	30.84	9.4
5000.0	32.81	10
5200.0	33.46	10.2
5500.0	34.78	10.6
5800.0	35.76	10.9
6000.0	36.42	11.1

Material Specifications

Braid Material Tinned copper
Dielectric Material Foam PE

Jacket Material Non-halogenated PE

Inner Conductor Material Copper-clad aluminum wire

Shield Tape Material Aluminum

COMMSCOPE®

CNT-400

Mechanical Specifications

Minimum Bend Radius, single Bend25.4 mm | 1 inTensile Strength73 kg | 160.937 lbBending Moment0.7 N-m | 6.196 in lbFlat Plate Crush Strength0.7 kg/mm | 39.198 lb/in

Environmental Specifications

Installation temperature-40 °C to +85 °C (-40 °F to +185 °F)Operating Temperature-40 °C to +85 °C (-40 °F to +185 °F)Storage Temperature-70 °C to +85 °C (-94 °F to +185 °F)

Packaging and Weights

Cable weight 0.1 kg/m | 0.067 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.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant



CNT-400-SFR



CNT-400-SFR, C CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket, B2ca S1a d0 a1 Compliant

Product Classification

Product Type Braided coaxial cable

Product Brand CNT®

Product Series CNT-400

General Specifications

Braid Coverage90 %Cable TypeCNT-400Jacket ColorBlack

Dimensions

 Diameter Over Dielectric
 7.24 mm | 0.285 in

 Diameter Over Jacket
 10.29 mm | 0.405 in

 Diameter Over Tape
 7.391 mm | 0.291 in

 Inner Conductor OD
 2.74 mm | 0.108 in

 Outer Conductor OD
 8.08 mm | 0.318 in

Nominal Size 0.400 in

Electrical Specifications

Cable Impedance 50 ohm

Capacitance 78 pF/m | 23.774 pF/ft

dc Resistance, Inner Conductor4.49 ohms/km | 1.369 ohms/kftdc Resistance, Outer Conductor5.61 ohms/km | 1.71 ohms/kft

dc Test Voltage 2500 V

Jacket Spark Test Voltage (rms) 4000 V

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CNT-400-SFR

Maximum Frequency 16.2 GHz

Operating Frequency Band 30 - 6000 MHz

Peak Power16 kWShielding Effectiveness90 dBVelocity85 %

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
30.0	2.49	0.76
50.0	3.18	0.97
150.0	4.92	1.5
220.0	6.23	1.9
450.0	8.86	2.7
900.0	12.8	3.9
1500.0	16.7	5.1
1800.0	18.4	5.6
2000.0	19.4	5.9
2400.0	21.65	6.6
2500.0	22	6.7
3000.0	24.6	7.5
4000.0	28.87	8.8
4500.0	30.84	9.4
5000.0	32.81	10
5200.0	33.46	10.2
5500.0	34.78	10.6
5800.0	35.76	10.9
6000.0	36.42	11.1

Material Specifications

Braid Material Tinned copper

Dielectric Material Foam PE

Jacket Material Non-halogenated, fire retardant polyolefin

Inner Conductor Material Copper-clad aluminum wire

Shield Tape Material Aluminum



CNT-400-SFR

Mechanical Specifications

Minimum Bend Radius, single Bend 25.4 mm | 1 in

Tensile Strength 73 kg | 160.937 lb

Bending Moment 0.7 N-m | 6.196 in lb

Flat Plate Crush Strength 0.7 kg/mm | 39.198 lb/in

Environmental Specifications

Installation temperature $-40 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ (-40 $^{\circ}\text{F}$ to $+140 \,^{\circ}\text{F}$)

Operating Temperature $-40 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \text{ (-40 }^{\circ}\text{F to } +140 \,^{\circ}\text{F)}$

Storage Temperature $-40 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ (-40 $^{\circ}\text{F}$ to $+140 \,^{\circ}\text{F}$)

EN50575 CPR Cable EuroClass Fire Performance B2ca

EN50575 CPR Cable EuroClass Smoke Rating s1a

EN50575 CPR Cable EuroClass Droplets Rating d0

EN50575 CPR Cable EuroClass Acidity Rating a1

Smoke Index Test Method IEC 61034

Toxicity Index Test Method IEC 60754-2

Packaging and Weights

Cable weight 0.1 kg/m | 0.067 lb/ft

Regulatory Compliance/Certifications

Agency Classification

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

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

CENELEC

CNT-400-W

CNT-400-W, CNT® 50 Ohm Braided Coaxial Cable, variable, white PE jacket



Product Classification

Product Type Braided coaxial cable

Product Brand CNT®
Product Series CNT-400

General Specifications

Braid Coverage 90 %

Cable Type CNT-400

Jacket Color White

Dimensions

 Diameter Over Dielectric
 7.24 mm | 0.285 in

 Diameter Over Jacket
 10.29 mm | 0.405 in

 Diameter Over Tape
 7.391 mm | 0.291 in

 Inner Conductor OD
 2.74 mm | 0.108 in

 Outer Conductor OD
 8.08 mm | 0.318 in

Nominal Size 0.400 in

Electrical Specifications

Cable Impedance 50 ohm

Capacitance 78 pF/m | 23.774 pF/ft

dc Resistance, Inner Conductor4.69 ohms/km | 1.43 ohms/kftdc Resistance, Outer Conductor5.61 ohms/km | 1.71 ohms/kft

dc Test Voltage 2500 VJacket Spark Test Voltage (rms) 4000 V

COMMSC PE®

CNT-400-W

Maximum Frequency 16.2 GHz

Operating Frequency Band 30 - 6000 MHz

Peak Power16 kWShielding Effectiveness90 dBVelocity85 %

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
30.0	2.49	0.76
50.0	3.18	0.97
150.0	4.92	1.5
220.0	6.23	1.9
450.0	8.86	2.7
900.0	12.8	3.9
1500.0	16.7	5.1
1800.0	18.4	5.6
2000.0	19.4	5.9
2400.0	21.65	6.6
2500.0	22	6.7
3000.0	24.6	7.5
4000.0	28.87	8.8
4500.0	30.84	9.4
5000.0	32.81	10
5200.0	33.46	10.2
5500.0	34.78	10.6
5800.0	35.76	10.9
6000.0	36.42	11.1

Material Specifications

Braid Material Tinned copper

Dielectric Material Foam PE

Jacket Material Non-halogenated PE

Inner Conductor Material Copper-clad aluminum wire

Shield Tape Material Aluminum



CNT-400-W

Mechanical Specifications

Minimum Bend Radius, single Bend 25.4 mm | 1 in

Tensile Strength 73 kg | 160.937 lb

Bending Moment 0.7 N-m | 6.196 in lb

Flat Plate Crush Strength 0.7 kg/mm | 39.198 lb/in

Environmental Specifications

Installation temperature $-40 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ (-40 $^{\circ}\text{F}$ to $+185 \,^{\circ}\text{F}$)

Operating Temperature $-40 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$

Storage Temperature $-70 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-94 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$

Packaging and Weights

Cable weight 0.1 kg/m | 0.067 lb/ft

Regulatory Compliance/Certifications

Agency Classification

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