# C400-NMNR-15

CNT-400 CNT® Jumper with interface types N Male and N Male Right Angle, 15 FT



#### **Product Classification**

**Product Type** Braided cable assembly

Product Brand CNT®
Product Series CNT-400

#### General Specifications

Attachment, Connector A Factory attached

Attachment, Connector B Factory attached

Body Style, Connector A Straight

Body Style, Connector B Right angle

Cable Family CNT-400

Interface, Connector A N Male

Interface, Connector B N Male

Specification Sheet Revision Level A

#### **Dimensions**

**Length** 4.572 m | 15 ft

Nominal Size 0.400 in

### VSWR/Return Loss

Frequency Band VSWR Return Loss (dB)

**700–3000 MHz** 1.433 14.99

Jumper Assembly Sample Label



# C400-NMNR-15



### 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



#### Included Products

400BPNR-C – Type N Male Right Angle for CNT-400 braided cable
400BPNR-C-G – Type N Male Right Angle 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





### Type N Male Right Angle for CNT-400 braided cable

#### **Product Classification**

 Product Type
 Braided cable connector

 Product Brand
 CNT® | ConQuest®

### General Specifications

Body StyleRight angleInner Contact Attachment MethodCaptivatedInner Contact PlatingSilverInterfaceN MaleOuter Contact Attachment MethodClamp

 Outer Contact Attachment Method
 Clamp

 Outer Contact Plating
 Trimetal

#### **Dimensions**

 Height
 35.69 mm | 1.405 in

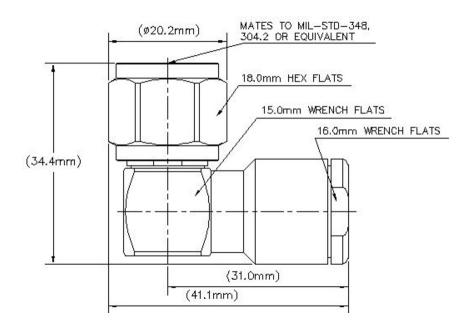
 Width
 22.33 mm | 0.879 in

 Length
 49.28 mm | 1.94 in

Nominal Size 0.405 in

### Outline Drawing





### **Electrical Specifications**

Insertion Loss, typical	0.05 dB
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	2500 V
Inner Contact Resistance, maximum	1 m0hm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	0.25 m0hm
Peak Power, maximum	10 kW
RF Operating Voltage, maximum (vrms)	707 V

#### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0-3000 MHz	1.064	30.18
3000-6000 MHz	1.171	22.08

### Mechanical Specifications

Connector Retention Tensile Force330 N | 74.187 lbfConnector Retention Torque0.56 N-m | 4.956 in lb

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

**Coupling Nut Proof Torque Method** IEC 61169-16:9.3.6

**Coupling Nut Retention Force** 450 N | 101.164 lbf

**Coupling Nut Retention Force Method** IEC 61169-16:9.3.11

Interface Durability 500 cycles

Interface Durability Method IEC 61169-16:9.5

Mechanical Shock Test Method IEC 60068-2-27

#### **Environmental Specifications**

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

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 IFC 60068-2-14

Vibration Test Method IEC 60068-2-6

Packaging and Weights

**Weight, net** 135 g | 0.298 lb

### Regulatory Compliance/Certifications

# Agency Classification CHINA-ROHS Below maximum concentration value ISO 9001:2015 Designed, manufactured and/or distrib

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

Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant





### \* Footnotes

**Insertion Loss, typical** 0.05v<sup>-</sup>freq (GHz) (not applicable for elliptical waveguide)

**Immersion Depth** Immersion at specified depth for 24 hours



# 400BPNR-C-G

#### Type N Male Right Angle for CNT-400 braided cable

#### **Product Classification**

 Product Type
 Braided cable connector

 Product Brand
 CNT® | ConQuest®

General Specifications

Body Style Right angle
Inner Contact Attachment Method Captivated

Inner Contact PlatingGoldInterfaceN MaleOuter Contact Attachment MethodClampOuter Contact PlatingTrimetal

**Dimensions** 

 Height
 35.69 mm | 1.405 in

 Width
 22.33 mm | 0.879 in

 Length
 49.28 mm | 1.94 in

Nominal Size 0.405 in

**Electrical Specifications** 

0.05 dB Insertion Loss, typical **Cable Impedance** 50 ohm **Connector Impedance** 50 ohm dc Test Voltage 2500 V Inner Contact Resistance, maximum 1 m0hm Insulation Resistance, minimum 5000 MOhm **Operating Frequency Band** 0 - 6000 MHz **Outer Contact Resistance, maximum** 0.25 m0hm Peak Power, maximum 10 kW RF Operating Voltage, maximum (vrms) 707 V

VSWR/Return Loss



# 400BPNR-C-G

Frequency Band VSWR Return Loss (dB)

**0–3000 MHz** 1.064 30.18 **3000–6000 MHz** 1.171 22.08

Mechanical Specifications

**Connector Retention Tensile Force** 330 N | 74.187 lbf

Connector Retention Torque0.56 N-m | 4.956 in lbCoupling Nut Proof Torque1.7 N-m | 15.046 in lb

Coupling Nut Proof Torque MethodIEC 61169-16:9.3.6Coupling Nut Retention Force450 N | 101.164 lbfCoupling Nut Retention Force MethodIEC 61169-16:9.3.11

Interface Durability 500 cycles

Interface Durability MethodIEC 61169-16:9.5Mechanical Shock Test MethodIEC 60068-2-27

#### **Environmental Specifications**

**Operating Temperature** -40 °C to +85 °C (-40 °F to +185 °F)

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

Attenuation, Ambient Temperature  $20 \, ^{\circ}\text{C} \mid 68 \, ^{\circ}\text{F}$ Average Power, Ambient Temperature  $40 \, ^{\circ}\text{C} \mid 104 \, ^{\circ}\text{F}$ Average Power, Inner Conductor Temperature  $100 \, ^{\circ}\text{C} \mid 212 \, ^{\circ}\text{F}$ 

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 MethodIEC 60068-2-14Vibration Test MethodIEC 60068-2-6

Packaging and Weights

**Weight, net** 135 g | 0.298 lb

Regulatory Compliance/Certifications



# 400BPNR-C-G

#### Agency

#### Classification

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system



#### \* Footnotes

**Insertion Loss, typical** 0.05v<sup>-</sup>freq (GHz) (not applicable for elliptical waveguide)

**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**

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

Nominal Size 0.400 in

#### **Electrical Specifications**

Cable Impedance50 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

**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



# CNT-400

#### 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 °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
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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

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 Coverage 90 %

Cable Type CNT-400

Jacket Color Black

**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





# 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

**COMMSCOPE®** 

# 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 Bend25.4 mm | 1 inTensile Strength73 kg | 160.937 lbBending Moment0.7 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  $-40 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+185 \,^{\circ}\text{F}$ )

Storage Temperature  $-70 \,^{\circ}\text{C}$  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

