# C600F-NMNR

CNT-600-FR CNT® Jumper with interface types N Male and N Male Right Angle, variable length



#### **OBSOLETE**

This product was discontinued on: August 14, 2022

#### **Product Classification**

**Product Type** Braided cable assembly

Product Brand CNT®
Product Series CNT-600

#### General Specifications

Attachment, Connector A Field attachment

Attachment, Connector B Field attachment

Body Style, Connector A

Body Style, Connector B

Cable Family

CNT-600

Interface, Connector A

Interface, Connector B

Specification Sheet Revision Level

Straight

Right angle

N Male

Variable Length For custom lengths contact 828-324-2200 or 1-800-982-1708 (toll free), or your local

CommScope representative

#### Dimensions

 Length
 0 m | 0 ft

 Nominal Size
 0.600 in

#### VSWR/Return Loss



## C600F-NMNR

Frequency Band VSWR Return Loss (dB)

**700–3000 MHz** 1.433 14.99

#### Jumper Assembly Sample Label



#### Regulatory Compliance/Certifications

Agency Classification

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



#### Included Products

600BPNM-C - Type N Male for CNT-600 braided cable

600BPNR-C - Type N Male Right Angle for CNT-600 braided cable
600PNR-H - Type N Male Right Angle for CNT-600 braided cable

CNT-600-FR - CNT-600-FR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant

polyolefin jacket, Dca s2 d2 Compliant





#### Type N Male for CNT-600 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 Silver

**Interface** N Male

Outer Contact Attachment Method Clamp

Outer Contact Plating Trimetal

**Dimensions** 

**Width** 24 mm | 0.945 in

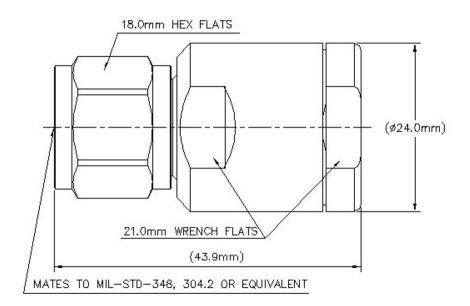
**Length** 43.85 mm | 1.726 in

**Diameter** 24 mm | 0.945 in

Nominal Size 0.590 in

Outline Drawing





#### **Electrical Specifications**

Insertion Loss, typical 0.05 dB **Cable Impedance** 50 ohm **Connector Impedance** 50 ohm 2500 V dc Test Voltage Inner Contact Resistance, maximum 1 m0hm Insulation Resistance, minimum 5000 MOhm 0 - 6000 MHz **Operating Frequency Band 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	1.052	31.92
3000-6000 MHz	1.119	25.01

### Mechanical Specifications

Connector Retention Tensile Force450 N | 101.164 lbfConnector Retention Torque1.7 N-m | 15.046 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**  $-65 \,^{\circ}\text{C}$  to  $+125 \,^{\circ}\text{C}$  (-85  $^{\circ}\text{F}$  to  $+257 \,^{\circ}\text{F}$ )

**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** 74.43 g | 0.164 lb

### Regulatory Compliance/Certifications

# AgencyClassificationCHINA-ROHSBelow 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





### \* Footnotes

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

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





#### Type N Male Right Angle for CNT-600 braided cable

#### **Product Classification**

Product Type Braided cable connector

Product Brand CNT®

General Specifications

Body StyleRight angleInner Contact Attachment MethodCaptivatedInner Contact PlatingSilver

InterfaceN MaleOuter Contact Attachment MethodClamp

Outer Contact Plating Trimetal

**Dimensions** 

 Height
 39.3 mm | 1.547 in

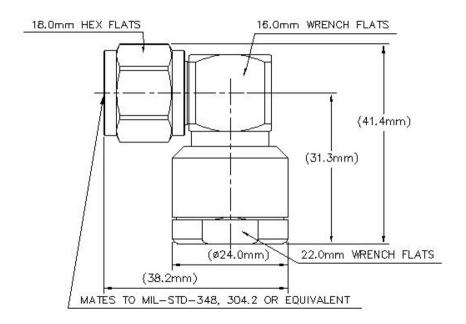
 Width
 20.25 mm | 0.797 in

 Length
 38.19 mm | 1.504 in

Nominal Size 0.590 in

Outline Drawing





### **Electrical Specifications**

Insertion Loss, typical 0.05 dB **Cable Impedance** 50 ohm **Connector Impedance** 50 ohm 2500 V dc Test Voltage **Inner Contact Resistance, maximum** 1 m0hm Insulation Resistance, minimum 5000 MOhm 0 - 6000 MHz **Operating Frequency Band 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** 1.083 27.99

Mechanical Specifications

Connector Retention Tensile Force450 N | 101.164 lbfConnector Retention Torque1.7 N-m | 15.046 in lbCoupling Nut Proof Torque1.7 N-m | 15.046 in lb

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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  $-40 \,^{\circ}\text{C}$  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** 86.06 g | 0.19 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)

COMMSCOPE®

**Immersion Depth** 

Immersion at specified depth for 24 hours



# 600PNR-H



### Type N Male Right Angle for CNT-600 braided cable

#### **Product Classification**

Product Type Braided cable connector

Product Brand CNT®

General Specifications

Body Style Right angle

Inner Contact Attachment MethodSolderInner Contact PlatingGoldInterfaceN MaleOuter Contact Attachment MethodClamp

**Outer Contact Plating** Trimetal

**Pressurizable** No

**Dimensions** 

 Height
 47.86 mm | 1.884 in

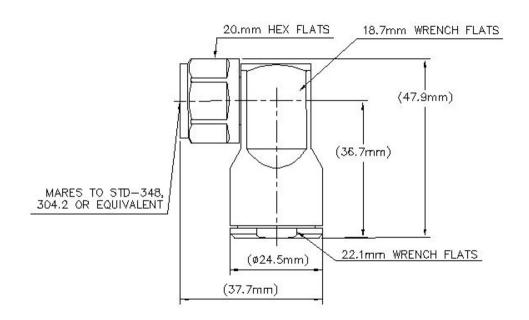
 Width
 24.5 mm | 0.965 in

 Length
 37.65 mm | 1.482 in

Nominal Size 0.590 in

Outline Drawing





### **Electrical Specifications**

**Insertion Loss, typical** 0.05 dB

Average Power at Frequency 930.0 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	1.15	23.13
3000-6000 MHz	1.4	15.6

Mechanical Specifications

**Connector Retention Tensile Force** 450 N | 101.164 lbf

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### 600PNR-H

Connector Retention Torque1.7 N-m | 15.046 in lbCoupling Nut Proof Torque1.7 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

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

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

Attenuation, Ambient 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 °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** 126.61 g | 0.279 lb

### Regulatory Compliance/Certifications

Agency Classification

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



# 600PNR-H



### \* Footnotes

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

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



# CNT-600-FR



CNT-600-FR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket, Dca s2 d2 Compliant

#### **Product Classification**

Product Type Braided coaxial cable

Product Brand CNT®

**Product Series** CNT-600

General Specifications

Braid Coverage90 %Cable TypeCNT-600Jacket ColorBlack

**Dimensions** 

 Diameter Over Dielectric
 11.56 mm | 0.455 in

 Diameter Over Jacket
 14.99 mm | 0.59 in

 Inner Conductor OD
 4.47 mm | 0.176 in

 Outer Conductor OD
 12.5 mm | 0.492 in

Nominal Size 0.600 in

**Electrical Specifications** 

Cable Impedance 50 ohm

**Capacitance** 76 pF/m | 23.165 pF/ft

dc Resistance, Inner Conductor1.74 ohms/km0.53 ohms/kftdc Resistance, Outer Conductor3.94 ohms/km1.201 ohms/kft

dc Test Voltage 4600 V

Jacket Spark Test Voltage (rms) 8000 V

Maximum Frequency 10.2 GHz

COMMSCOPE®

# CNT-600-FR

Operating Frequency Band 30 – 6000 MHz

Peak Power40 kWShielding Effectiveness90 dBVelocity87 %

Material Specifications

Braid MaterialTinned copperDielectric MaterialFoam PE

**Jacket Material** Non-halogenated, fire retardant polyolefin

Inner Conductor Material Copper-clad aluminum wire

Shield Tape Material Aluminum

Mechanical Specifications

Minimum Bend Radius, single Bend38.1 mm | 1.5 inTensile Strength159 kg | 350.535 lbBending Moment3.7 N-m | 32.748 in lbFlat Plate Crush Strength1.1 kg/mm | 61.597 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  $-40 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  ( $-40 \,^{\circ}\text{F}$  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 PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings2EN50575 CPR Cable EuroClass Droplets Ratingd2

Fire Retardancy Test Method UL VW1/CATVX

Smoke Index Test Method IEC 61034

Toxicity Index Test Method IEC 60754-2

Packaging and Weights

 $\textbf{Cable weight} \hspace{1.5cm} 0.13 \text{ kg/m} \hspace{0.2cm} \mid \hspace{0.2cm} 0.087 \text{ lb/ft}$ 

Packaging Type Reel

Regulatory Compliance/Certifications



# CNT-600-FR

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

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



