### C400F-NMNM-3

CNT-400-FR CNT® Jumper with interface types N Male and N Male, 💻 0.9 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 Male                 |
| Interface, Connector B             | N Male                 |
| Specification Sheet Revision Level | А                      |
| Dimensions                         |                        |
| Length                             | 0.9 m   2.953 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

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### C400F-NMNM-3



#### Regulatory Compliance/Certifications

#### Agency

#### Classification

ISO 9001:2015

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

#### Included Products

| 400APNM-C  | - | Type N Male for CNT-400 braided cable  |
|------------|---|--|
| 400BPNM-C  | - | Type N Male for CNT-400 braided cable  |
| CNT-400-FR | - | CNT-400-FR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant |
|            |   | polyolefin jacket, Dca s2 d2 Compliant   |



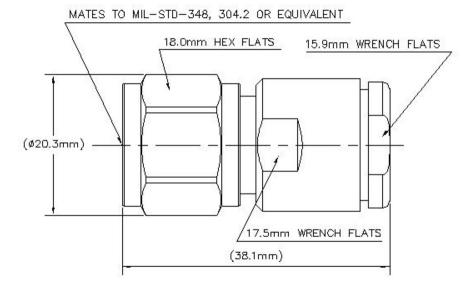
#### Type N Male for CNT-400 braided cable

#### 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                       | N Male                  |  |
| Outer Contact Attachment Method | Clamp                   |  |
| Outer Contact Plating           | Trimetal                |  |
| Dimensions                      |                         |  |
| Width                           | 20.25 mm   0.797 in     |  |
| Length                          | 38.22 mm   1.505 in     |  |
| Diameter                        | 20.25 mm   0.797 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                        | 1.046 |          | 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      |

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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 °C to +85 °C (-40 °F to +185 °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

47.08 g | 0.104 lb

#### Regulatory Compliance/Certifications

| Agency        | Classification   |
|---------------|--|
| 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  |

#### \* Footnotes

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Immersion Depth Immersion at specified depth for 24 hours

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Product Classification

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

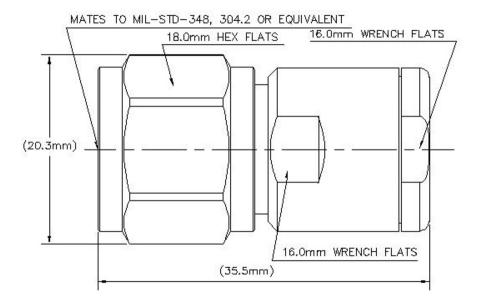
| Product Type                    | Braided cable connector |  |
|---------------------------------|-------------------------|--|
| Product Brand                   | CNT®   ConQuest®        |  |
| General Specifications          |                         |  |
| Body Style                      | Straight                |  |
| Inner Contact Attachment Method | Captivated              |  |
| Inner Contact Plating           | Silver                  |  |
| Interface                       | N Male                  |  |
| Outer Contact Attachment Method | Clamp                   |  |
| Outer Contact Plating           | Trimetal                |  |
| Dimensions                      |                         |  |
| Width                           | 20.25 mm   0.797 in     |  |
| Length                          | 35.48 mm   1.397 in     |  |
| Diameter                        | 20.25 mm   0.797 in     |  |
| Nominal Size                    | 0.405 in                |  |
|                                 |                         |  |

### Outline Drawing

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### 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                        | 1.046 | 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 |  |

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**COMMSCOPE**°

| 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 °C to +85 °C (-40 °F to +185 °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

37.55 g | 0.083 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  |

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### \* Footnotes

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

**Immersion Depth** 

Immersion at specified depth for 24 hours

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### CNT-400-FR



CNT-400-FR, CNT® 50 Ohm Braided Coaxial Cable, black nonhalogenated, fire retardant polyolefin jacket, Dca s2 d2 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 |

| Capacitance                     | 78 pF/m   23.774 pF/ft        |
|---------------------------------|-------------------------------|
| dc Resistance, Inner Conductor  | 4.49 ohms/km   1.369 ohms/kft |
| dc Resistance, Outer Conductor  | 5.61 ohms/km   1.71 ohms/kft  |
| dc Test Voltage                 | 2500 V                        |
| Jacket Spark Test Voltage (rms) | 4000 V                        |

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## CNT-400-FR

| Maximum Frequency        | 16.2 GHz      |
|--------------------------|---------------|
| Operating Frequency Band | 30 – 6000 MHz |
| Peak Power               | 16 kW         |
| Shielding Effectiveness  | 90 dB         |
| Velocity                 | 85 %          |

#### 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                                   |

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## CNT-400-FR

### 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 +60 °C (-40 °F to +140 °F) |
|--|--------------------------------------|
| Operating Temperature                        | -40 °C to +60 °C (-40 °F to +140 °F) |
| Storage Temperature                          | -40 °C to +60 °C (-40 °F to +140 °F) |
| EN50575 CPR Cable EuroClass Fire Performance | Dca                                  |
| EN50575 CPR Cable EuroClass Smoke Rating     | s2                                   |
| EN50575 CPR Cable EuroClass Droplets Rating  | d2                                   |
| Fire Retardancy Test Method                  | UL VW1/CATVX                         |
| Smoke Index Test Method                      | IEC 61034                            |
| Toxicity Index Test Method                   | IEC 60754-2                          |
| Dackaging and Moights                        |                                      |

#### Packaging and Weights

| Cable weight   | 0.07 kg/m   0.047 lb/ft |
|----------------|-------------------------|
| Packaging Type | Reel                    |

#### Regulatory Compliance/Certifications

| Agency        | Classification   |
|---------------|--|
| 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  |
| UK-ROHS       | Compliant  |
|               |  |

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