C400-DMDM

Base Product



CNT-400 CNT® Jumper with interface types 7-16 DIN Male and 7-16 DIN Male, variable length

Product Classification

Product Type Braided cable assembly

Product Brand CNT®
Product Series CNT-400

General Specifications

Body Style, Connector AStraightBody Style, Connector BStraightCable FamilyCNT-400

Interface, Connector A7-16 DIN MaleInterface, Connector B7-16 DIN Male

Specification Sheet Revision Level A

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
 0.400 in

VSWR/Return Loss

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

400BPDM-C - 7-16 DIN Male for CNT-400 braided cable

400BPDM-CR - 7-16 DIN Male for CNT-400 and CNT-400-Flex braided cable

400PDM-C - 7-16 DIN 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





7-16 DIN 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 Silver

Interface 7-16 DIN Male

Outer Contact Attachment Method Clamp

Outer Contact Plating Trimetal

Dimensions

Width 35 mm | 1.378 in

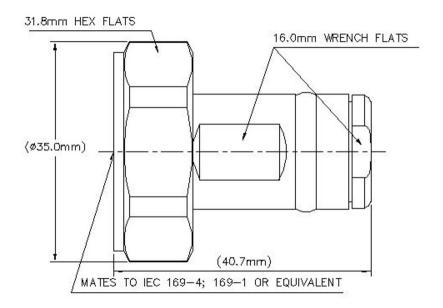
Length 40.73 mm | 1.604 in

Diameter 35 mm | 1.378 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 Voltage2500 VInner Contact Resistance, maximum1.5 mOhm

Insulation Resistance, minimum 10000 MOhm

Operating Frequency Band 0 - 6000 MHz

Outer Contact Resistance, maximum 0.4 mOhm

RF Operating Voltage, maximum (vrms) 894 V

VSWR/Return Loss

 Frequency Band
 VSWR
 Return Loss (dB)

 0-3000 MHz
 1.05
 32.26

 3000-6000 MHz
 1.119
 25.01

Mechanical Specifications

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

Page 4 of 22



Coupling Nut Proof Torque 35 N-m | 309.776 in lb

Coupling Nut Proof Torque Method IEC 61169-4:9.3.6

Coupling Nut Retention Force 1000 N | 224.809 lbf

Coupling Nut Retention Force Method IEC 61169-4:15.2.6

Interface Durability 500 cycles

Interface Durability Method IEC 61169-4:17

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 $-65 \,^{\circ}\text{C}$ 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 44.58 g | 0.098 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





* Footnotes

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

Immersion Depth Immersion at specified depth for 24 hours





7-16 DIN Male for CNT-400 and CNT-400-Flex braided cable

Product Classification

Product Type Braided cable connector

Product Brand CNT®

General Specifications

Body StyleStraightInner Contact Attachment MethodSolderInner Contact PlatingSilver

Interface 7-16 DIN Male

 Outer Contact Attachment Method
 Crimp

 Outer Contact Plating
 Trimetal

Dimensions

 Width
 35 mm | 1.378 in

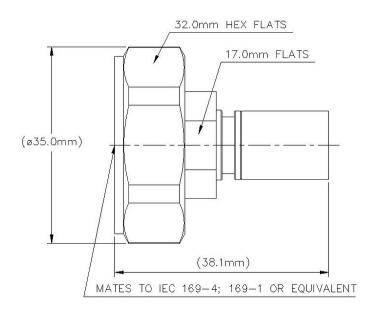
 Length
 38.12 mm | 1.501 in

 Diameter
 35 mm | 1.378 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 Voltage2500 VInner Contact Resistance, maximum1.5 mOhm

Insulation Resistance, minimum 10000 MOhm

Operating Frequency Band 0 - 6000 MHz

Outer Contact Resistance, maximum 0.4 mOhm

RF Operating Voltage, maximum (vrms) 894 V

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0-3000 MHz	1.08	28.3
3000-6000 MHz	1.2	20.83

COMMSCOPE®

Mechanical Specifications

Connector Retention Tensile Force 330 N | 74.187 lbf

Connector Retention Torque0.56 N-m4.956 in lbCoupling Nut Proof Torque35 N-m309.776 in lb

Coupling Nut Proof Torque Method IEC 61169-4:9.3.6

Coupling Nut Retention Force 1000 N | 224.809 lbf

Coupling Nut Retention Force Method IEC 61169-4:15.2.6

Interface Durability 500 cycles

Interface Durability MethodIEC 61169-4:17Mechanical 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 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 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 57.2 g | 0.126 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)



7-16 DIN 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 PlatingSilver

Interface 7-16 DIN Male

 Outer Contact Attachment Method
 Clamp

 Outer Contact Plating
 Trimetal

 Pressurizable
 No

Dimensions

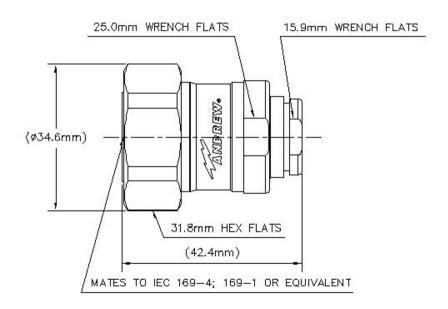
 Width
 34.6 mm | 1.362 in

 Length
 42.41 mm | 1.67 in

 Diameter
 34.6 mm | 1.362 in

Nominal Size 0.405 in

Outline Drawing



Electrical Specifications

Inner Contact Resistance, maximum

Insertion Loss, typical 0.05 dB

Average Power at Frequency 580.0 W @ 900 MHz

Cable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage2500 V

Insulation Resistance, minimum10000 MOhmOperating Frequency Band0 - 6000 MHz

Outer Contact Resistance, maximum1.5 mOhmPeak Power, maximum16 kW

RF Operating Voltage, maximum (vrms) 894 V

VSWR/Return Loss

 Frequency Band
 VSWR
 Return Loss (dB)

 0-3000 MHz
 1.058
 31

 3000-6000 MHz
 1.119
 25.01

Mechanical Specifications

Connector Retention Tensile Force 330 N | 74.187 lbf

Page 12 of 22



0.4 mOhm

Coupling Nut Proof Torque Method

0.56 N-m | 4.956 in lb **Connector Retention Torque**

Coupling Nut Proof Torque 50 N-m | 442.537 in lb

IEC 61169-4:9.3.6

IEC 60068-2-27

Coupling Nut Retention Force 800 N | 179.847 lbf

Coupling Nut Retention Force Method IEC 61169-4:15.2.6

Interface Durability 500 cycles

Interface Durability Method IEC 61169-4:17 **Mechanical Shock Test Method**

Environmental Specifications

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

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 125.06 g | 0.276 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



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



CNT-400

Maximum Frequency 16.2 GHz

Operating Frequency Band 30 - 6000 MHz

Peak Power16 kWShielding Effectiveness90 dBVelocity85 %

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

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 $-40 \,^{\circ}\text{C}$ 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

Agency

Cable weight 0.1 kg/m | 0.067 lb/ft

Classification

Regulatory Compliance/Certifications

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



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

Page 18 of 22



CNT-400-SFR

Maximum Frequency 16.2 GHz

Operating Frequency Band 30 – 6000 MHz

Peak Power16 kWShielding Effectiveness90 dBVelocity85 %

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

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 $-40 \,^{\circ}\text{C}$ 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 PerformanceB2caEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd0EN50575 CPR Cable EuroClass Acidity Ratinga1

Smoke Index Test Method IEC 61034

Toxicity Index Test Method IEC 60754-2

Packaging and Weights

 $\textbf{Cable weight} \hspace{1.5cm} \textbf{0.1 kg/m } \hspace{0.2cm} \textbf{0.067 lb/ft}$

Regulatory Compliance/Certifications

COMMSCOPE®

CNT-400-SFR

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 ∨
Jacket Spark Test Voltage (rms) 4000 ∨



CNT-400-W

Maximum Frequency 16.2 GHz

Operating Frequency Band 30 - 6000 MHz

Peak Power16 kWShielding Effectiveness90 dBVelocity85 %

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

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 $-40 \,^{\circ}\text{C}$ 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

