C400-TMTM-30-X

CNT-400-FR CNT® Jumper with interface types TNC Male and TNC
Male, 9.14 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 AStraightBody Style, Connector BStraightCable FamilyCNT-400Interface, Connector ATNC MaleInterface, Connector BTNC Male

Specification Sheet Revision Level A

Dimensions

Length 9.14 m | 29.987 ft

Nominal Size 0.400 in

Electrical Specifications

DTF, Connector A -28 dB

DTF, Connector B -28 dB

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 cable400PTM-C-TNC 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



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

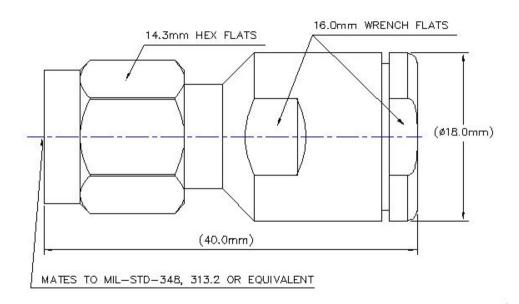
 Length
 41.24 mm | 1.624 in

 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 Method IEC 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	

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





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 Male

 Outer Contact Attachment Method
 Crimp

 Outer Contact Plating
 Trimetal

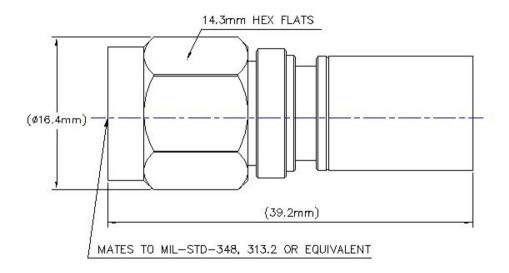
Dimensions

 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 Inner Contact Resistance, maximum 1.5 m0hm 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

COMMSC PE®

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 $40 \, ^{\circ}\text{C} \, \mid \, 104 \, ^{\circ}\text{F}$

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

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

COMMSCOPE®



* Footnotes

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



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

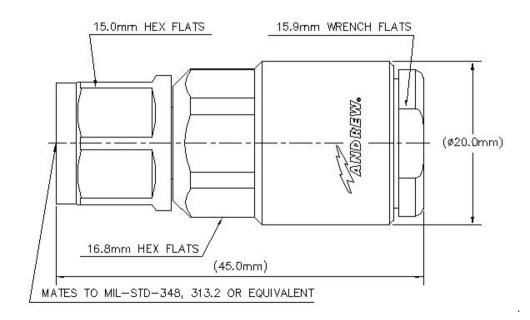
Length 44.95 mm | 1.77 in

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 MHzOuter Contact Resistance, maximum0.4 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

COMMSCOPE®

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 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 $-65 \,^{\circ}\text{C}$ 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)

COMMSC PE°

Immersion Depth

Immersion at specified depth for 24 hours



CNT-400-FR



CNT-400-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-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

COMMSCOPE®

CNT-400-FR

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



(15 (4 5 5 6)

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

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



