C400-DRQMR-20

CNT-400 CNT® Jumper with interface types 7-16 DIN Male Right Angle and QMA Male Right Angle, 6.1 m



Product Classification

Product Type Braided cable assembly

Product Brand CNT®
Product Series CNT-400

General Specifications

Body Style, Connector ARight angleBody Style, Connector BRight angleCable FamilyCNT-400

Interface, Connector A 7-16 DIN Male
Interface, Connector B QMA Male

Orientation 0° Specification Sheet Revision Level A

Dimensions

Length 6.1 m | 20.013 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-DRQMR-20



Regulatory Compliance/Certifications

Agency Classification

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



Included Products

400PDR-CR - 7-16 DIN Male Right Angle for CNT-400 braided cable
400PQMR-CR - QMA 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



400PDR-CR



7-16 DIN 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 MethodSolderInner Contact PlatingSilver

Interface 7-16 DIN Male

 Outer Contact Attachment Method
 Crimp

 Outer Contact Plating
 Trimetal

Pressurizable No

Dimensions

 Height
 50.3 mm | 1.98 in

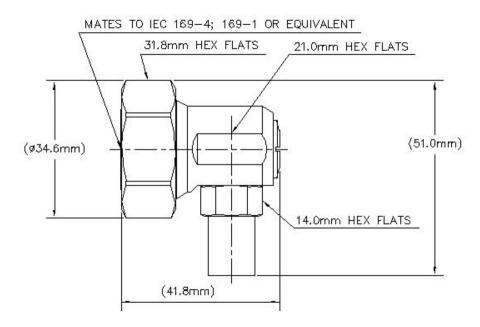
 Width
 31.75 mm | 1.25 in

 Length
 41.83 mm | 1.647 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, maximum0.4 mOhm

Insulation Resistance, minimum10000 MOhmOperating Frequency Band0 - 6000 MHzOuter 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	1.08	28.3
3000-6000 MHz	1.17	22.13

Mechanical Specifications

Connector Retention Tensile Force 330 N | 74.187 lbf

400PDR-CR

Connector Retention Torque 0.56 N-m | 4.956 in lb

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

Coupling Nut Proof Torque Method IEC 61169-4:9.3.6

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 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 $$20\ ^{\circ}\text{C} \mid 68\ ^{\circ}\text{F}$$

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

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 136.45 g | 0.301 lb

Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Above maximum concentration value

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

ROHS Compliant/Exempted







400PDR-CR

* Footnotes

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





QMA Male Right Angle for CNT-400 braided cable

Product Classification

Product Type Braided cable connector

Product Brand CNT®

General Specifications

Body Style Right angle

Inner Contact Attachment MethodSolderInner Contact PlatingGold

Interface QMA Male

 Outer Contact Attachment Method
 Crimp

 Outer Contact Plating
 Trimetal

 Pressurizable
 No

Dimensions

 Height
 33.5 mm | 1.319 in

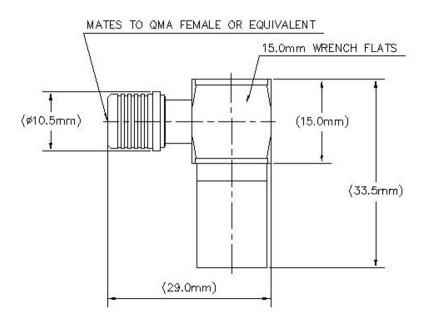
 Width
 15 mm | 0.591 in

 Length
 29.03 mm | 1.143 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 Voltage1000 VInner Contact Resistance, maximum3 mOhm

Insulation Resistance, minimum 5000 MOhm
Operating Frequency Band 0 - 6000 MHz

Outer Contact Resistance, maximum 2.5 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 1.065 30.05 **3000–6000 MHz** 1.082 28.1

Mechanical Specifications

Connector Retention Tensile Force 330 N | 74.187 lbf

Connector Retention Torque 0.56 N-m | 4.956 in lb | 0.75 N-m | 6.638 in lb

Insertion Force22 N | 4.946 lbfInsertion Force MethodIEC 61169-15:9.3.5

Interface Durability 100 cycles

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 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 MethodIEC 60068-2-3Thermal Shock Test MethodIEC 60068-2-14Vibration Test MethodIEC 60068-2-6

Water Jetting Test Mating Mated

Water Jetting Test Method IEC 60529:2001, IP65

Packaging and Weights

Weight, net 39.14 g | 0.086 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



* Footnotes

Insertion Loss, typical 0.05v⁻freg (GHz) (not applicable for elliptical waveguide)

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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 %

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 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

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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

Non-halogenated, fire retardant polyolefin

Material Specifications

Jacket Material

Braid Material Tinned copper
Dielectric Material Foam PE

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

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 V

Jacket Spark Test Voltage (rms) 4000 V

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

Storage Temperature $-70 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-94 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$

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

