# C400-DRQM-20

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

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

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-DRQM-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

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 Method** Solder **Inner Contact Plating** Silver

Interface 7-16 DIN Male

**Outer Contact Attachment Method** Crimp **Outer Contact Plating** Trimetal No

Pressurizable

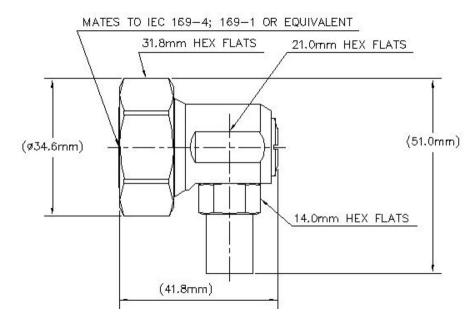
#### **Dimensions**

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 V

Inner Contact Resistance, maximum0.4 mOhmInsulation Resistance, minimum10000 MOhmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum1.5 mOhm

Peak Power, maximum 16 kW

RF Operating Voltage, maximum (vrms)

# VSWR/Return Loss

Frequency Band	VSWR	Return Loss (db
0-3000 MHz	1.08	28.3
3000-6000 MHz	1.17	22.13

894 V

Mechanical Specifications

**Connector Retention Tensile Force** 330 N | 74.187 lbf

COMMSCOPE®

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

Attenuation, Ambient Temperature  $20~^{\circ}\text{C} + 68~^{\circ}\text{F}$ 

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

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<sup>-</sup>freq (GHz) (not applicable for elliptical waveguide)







#### **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

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 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

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

## 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



# 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 °C to +60 °C (-40 °F to +140 °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** B2ca

EN50575 CPR Cable EuroClass Smoke Rating s1a

EN50575 CPR Cable EuroClass Droplets Rating d0

EN50575 CPR Cable EuroClass Acidity Rating a1

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**

**Nominal Size** 

 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

### 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

0.400 in

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



# 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 Bend25.4 mm | 1 inTensile Strength73 kg | 160.937 lbBending Moment0.7 N-m | 6.196 in lb

Flat Plate Crush Strength 0.7 kg/mm | 39.198 lb/in

### **Environmental Specifications**

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

