CNT-400-P CNT® Plenum Jumper with interface types BNC Male and BNC Male, variable length



#### **Product Classification**

**Product Type** Braided cable assembly

CNT® **Product Brand Product Series** CNT-400

### General Specifications

Attachment, Connector A Factory attached Attachment, Connector B Factory attached

**Body Style, Connector A** Straight **Body Style, Connector B** Straight CNT-400 **Cable Family BNC Male** Interface, Connector A **BNC Male** Interface, Connector B

**Specification Sheet Revision Level** 

Variable Length For custom lengths contact 828-324-2200 or 1-800-982-1708 (toll free), or your local

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CommScope representative

#### **Dimensions**

**Nominal Size** 0.400 in

## VSWR/Return Loss

Frequency Band **VSWR** Return Loss (dB) 700-2000 MHz 1.222 20.01 2000-3000 MHz 1.288

Jumper Assembly Sample Label

**COMMSCOPE®** 



#### Included Products

400PBM-CR – BNC Male for CNT-400 braided cable

CNT-400-P - CNT-400, CNT® 50 Ohm Plenum Rated Braided Coaxial Cable, white PVC

jacket



#### BNC Male for CNT-400 braided cable

#### **Product Classification**

 Product Type
 Braided cable connector

 Product Brand
 CNT® | ConQuest®

## General Specifications

Body Style Straight
Inner Contact Attachment Method Solder
Inner Contact Plating Gold
Interface BNC Male

 Outer Contact Attachment Method
 Crimp

 Outer Contact Plating
 Trimetal

 Pressurizable
 No

#### **Dimensions**

 Width
 14 mm | 0.551 in

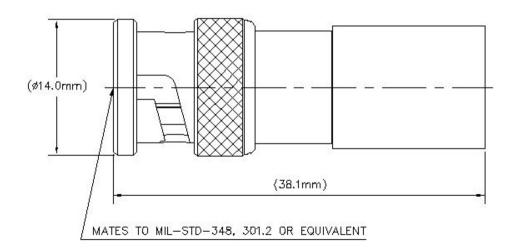
 Length
 37.76 mm | 1.487 in

 Diameter
 14 mm | 0.551 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 Impedance 50 ohm
Connector Impedance 50 ohm
dc Test Voltage 1500 V

Inner Contact Resistance, maximum2.5 m0hmInsulation Resistance, minimum5000 M0hmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum1 m0hm

Peak Power, maximum 5 kW

RF Operating Voltage, maximum (vrms) 500 V

## VSWR/Return Loss

 Frequency Band
 VSWR
 Return Loss (dB)

 0-3000 MHz
 1.105
 26.05

**3000–6000 MHz** 1.172 22.03

Mechanical Specifications

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

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

Coupling Nut Proof Torque 0.25 N-m | 2.213 in lb

**Coupling Nut Proof Torque Method** IEC 61169-8:9.3.6

**Coupling Nut Retention Force** 445 N | 100.04 lbf

**Coupling Nut Retention Force Method** IEC 61169-8:9.3.11

**Insertion Force** 15 N | 3.372 lbf

**Insertion Force Method** IEC 61169-8:9.3.5

Interface Durability 500 cycles

**Interface Durability Method** IEC 61169-8:9.5

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**  $-65 \,^{\circ}\text{C}$  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  $40 \, ^{\circ}\text{C} \, \mid \, 104 \, ^{\circ}\text{F}$ 

**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** 27 g | 0.06 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



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ROHS

Compliant



\* Footnotes

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



# CNT-400-P

# CNT-400, CNT® 50 Ohm Plenum Rated Braided Coaxial Cable, white PVC 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
 9.017 mm | 0.355 in

 Diameter Over Tape
 7.391 mm | 0.291 in

 Inner Conductor OD
 2.769 mm | 0.109 in

 Outer Conductor OD
 8.128 mm | 0.32 in

## **Electrical Specifications**

Cable Impedance 50 ohm

Capacitance 77 pF/m | 23.47 pF/ft

dc Resistance, Inner Conductor4.69 ohms/km | 1.43 ohms/kftdc Resistance, Outer Conductor5.608 ohms/km | 1.709 ohms/kft

 $\begin{tabular}{lll} dc Test Voltage & 2500 \ V \\ \begin{tabular}{lll} Jacket Spark Test Voltage (rms) & 4000 \ V \\ \begin{tabular}{lll} Maximum Frequency & 16.2 \ GHz \\ \end{tabular}$ 



# CNT-400-P

Operating Frequency Band 30 - 6000 MHz

Velocity 84 %

Material Specifications

Braid MaterialTinned copperDielectric MaterialFoam FEP

Jacket Material PVC

Inner Conductor Material Copper-clad aluminum wire

Shield Tape Material Aluminum

Mechanical Specifications

Minimum Bend Radius, single Bend25.4 mm | 1 inTensile Strength55 kg | 121.254 lbBending Moment0.7 N-m | 6.196 in lb

## **Environmental Specifications**

Installation temperature  $-40 \, ^{\circ}\text{C} \text{ to } +75 \, ^{\circ}\text{C} \, (-40 \, ^{\circ}\text{F to } +167 \, ^{\circ}\text{F})$ Operating Temperature  $-40 \, ^{\circ}\text{C} \text{ to } +75 \, ^{\circ}\text{C} \, (-40 \, ^{\circ}\text{F to } +167 \, ^{\circ}\text{F})$ Storage Temperature  $-40 \, ^{\circ}\text{C} \text{ to } +75 \, ^{\circ}\text{C} \, (-40 \, ^{\circ}\text{F to } +167 \, ^{\circ}\text{F})$ 

Fire Retardancy Test Method NFPA 262/CATVP/CMP

Packaging and Weights

**Cable weight** 0.01 kg/m | 0.007 lb/ft

Packaging Type Reel

### Regulatory Compliance/Certifications

Agency Classification

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



