C240-NMNR

Base Product



Product Classification

Product Type Braided cable assembly

Product Brand CNT®
Product Series CNT-240

General Specifications

Body Style, Connector A

Body Style, Connector B

Cable Family

Interface, Connector A

Interface, Connector B

Specification Sheet Revision Level

Straight

Right angle

CNT-240

N Male

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** 0.240 in

VSWR/Return Loss

Frequency Band VSWR Return Loss (dB)

700–3000 MHz 1.288 18

Jumper Assembly Sample Label





Regulatory Compliance/Certifications

Agency Classification

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

Included Products

240BPNM-C-CR – Type N Male for CNT-240 braided cable

CNT-240 - CNT-240, CNT® 50 Ohm Braided Coaxial Cable, black PE

jacket



Type N Male for CNT-240 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 N Male

Outer Contact Attachment Method Crimp

Outer Contact Plating Trimetal

Dimensions

Width 22.35 mm | 0.88 in

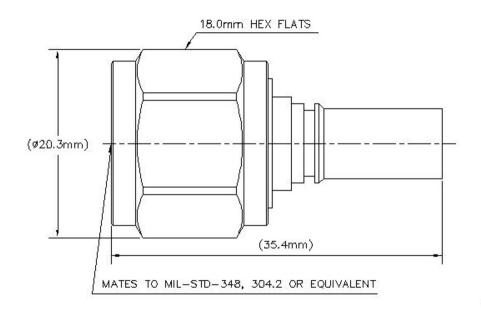
Length 44.81 mm | 1.764 in

Diameter 22.35 mm | 0.88 in

Nominal Size 0.240 in

Outline Drawing





Electrical Specifications

Insertion Loss, typical 0.05 dB

Average Power at Frequency 260.0 W @ 900 MHz

Cable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage1500 V

 Inner Contact Resistance, maximum
 1 mOhm

 Insulation Resistance, minimum
 5000 MOhm

Operating Frequency Band 0 - 6000 MHz
Outer Contact Resistance, maximum 0.25 mOhm

Peak Power, maximum 5.6 kW

RF Operating Voltage, maximum (vrms) 529 V

VSWR/Return Loss

 Frequency Band
 VSWR
 Return Loss (dB)

 0-3000 MHz
 1.083
 27.99

3000–6000 MHz 1.222 20.01

Mechanical Specifications

Connector Retention Tensile Force 134 N | 30.124 lbf

COMMSCOPE®

Coupling Nut Retention Force Method

Connector Retention Torque0.23 N-m | 2.036 in lbCoupling Nut Proof Torque1.7 N-m | 15.046 in lbCoupling Nut Proof Torque MethodIEC 61169-16:9.3.6Coupling Nut Retention Force450 N | 101.164 lbf

Interface Durability 500 cycles

Interface Durability Method IEC 61169-16:9.5

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 $+257 \,^{\circ}\text{F}$)

IEC 61169-16:9.3.11

Attenuation, Ambient Temperature20 °C | 68 °FAverage Power, Ambient Temperature40 °C | 104 °FAverage Power, Inner Conductor Temperature100 °C | 212 °FClimatic Sequence Test MethodIEC 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 39.12 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
UK-ROHS	Compliant





* Footnotes

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





Product Classification

Product Type Braided coaxial cable

Product Brand CNT®

Product Series CNT-240

General Specifications

Braid Coverage 90 %

Cable Type CNT-240

Jacket Color Black

Dimensions

 Diameter Over Dielectric
 3.81 mm | 0.15 in

 Diameter Over Jacket
 6.1 mm | 0.24 in

 Diameter Over Tape
 3.987 mm | 0.157 in

 Inner Conductor OD
 1.42 mm | 0.056 in

 Outer Conductor OD
 4.52 mm | 0.178 in

 Nominal Size
 0.240 in

Electrical Specifications

Cable Impedance 50 ohm

Capacitance 79.8 pF/m | 24.323 pF/ft

dc Resistance, Inner Conductor11.1 ohms/km | 3.383 ohms/kftdc Resistance, Outer Conductor12.76 ohms/km | 3.889 ohms/kft



CNT-240

Maximum Frequency 31 GHz

Operating Frequency Band 30 – 6000 MHz

Peak Power5.6 kWShielding Effectiveness90 dBVelocity83 %

Material Specifications

Braid Material Tinned copper

Dielectric Material Foam PE

Jacket Material Non-halogenated PE

Inner Conductor MaterialCopperShield Tape MaterialAluminum

Mechanical Specifications

Minimum Bend Radius, single Bend19.05 mm | 0.75 inTensile Strength36 kg | 79.366 lbBending Moment0.3 N-m | 2.655 in lbFlat Plate Crush Strength0.4 kg/mm | 22.399 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 0.05 kg/m | 0.034 lb/ft

Packaging Type Reel

Regulatory Compliance/Certifications

Agency Classification

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

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