

# C100-BNFMR

CNT-100 CNT® Jumper with interface types N Female Bulkhead and MCX Male Right Angle, variable length



## Product Classification

Product Type	Braided cable assembly
Product Brand	CNT®
Product Series	CNT-100

## General Specifications

Body Style, Connector A	Bulkhead
Body Style, Connector B	Right angle
Cable Family	CNT-100
Interface, Connector A	N Female
Interface, Connector B	MCX Male
Orientation	0°
Specification Sheet Revision Level	A
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	0.100 in

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
700–3000 MHz	1.433	14.99

## Jumper Assembly Sample Label

# C100-BNFMR



## Regulatory Compliance/Certifications

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



## Included Products

100PMR-CR	- MCX Male Right Angle for CNT-100 braided cable
CNT-100-FR	- CNT-100-FR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket

# 100PMR-CR

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MCX Male Right Angle for CNT-100 braided cable

## Product Classification

<b>Product Type</b>	Braided cable connector
<b>Product Brand</b>	CNT®

## General Specifications

<b>Body Style</b>	Right angle
<b>Inner Contact Attachment Method</b>	Solder
<b>Inner Contact Plating</b>	Gold
<b>Interface</b>	MCX Male
<b>Outer Contact Attachment Method</b>	Crimp
<b>Outer Contact Plating</b>	Gold
<b>Pressurizable</b>	No

## Dimensions

<b>Width</b>	9 mm   0.354 in
<b>Length</b>	10 mm   0.394 in
<b>Diameter</b>	5 mm   0.197 in
<b>Nominal Size</b>	0.110 in

## Electrical Specifications

<b>Insertion Loss, typical</b>	0.05 dB
<b>Average Power at Frequency</b>	50.0 W @ 900 MHz
<b>Cable Impedance</b>	50 ohm
<b>Connector Impedance</b>	50 ohm
<b>dc Test Voltage</b>	500 V
<b>Inner Contact Resistance, maximum</b>	5 mOhm
<b>Insulation Resistance, minimum</b>	1000 MOhm
<b>Operating Frequency Band</b>	0 – 6000 MHz
<b>Outer Contact Resistance, maximum</b>	2.5 mOhm
<b>Peak Power, maximum</b>	0.6 kW
<b>RF Operating Voltage, maximum (vrms)</b>	173 V

# 100PMR-CR

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## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–3000 MHz	1.065	30.05
3000–6000 MHz	1.25	19.09

## Mechanical Specifications

Connector Retention Tensile Force	98 N   22.031 lbf
Interface Durability	500 cycles
Mechanical Shock Test Method	IEC 60068-2-27

## Environmental Specifications

Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °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
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	20 g   0.044 lb
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## 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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant

# 100PMR-CR

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## \* Footnotes

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

# CNT-100-FR



CNT-100-FR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket

## Product Classification

Product Type	Braided coaxial cable
Product Brand	CNT®
Product Series	CNT-100

## General Specifications

Braid Coverage	93 %
Cable Type	CNT-100
Jacket Color	Black

## Dimensions

Diameter Over Dielectric	1.55 mm   0.061 in
Diameter Over Jacket	2.79 mm   0.11 in
Inner Conductor OD	0.46 mm   0.018 in
Outer Conductor OD	2.06 mm   0.081 in
Nominal Size	0.100 in

## Electrical Specifications

Cable Impedance	50 ohm
Capacitance	102 pF/m   31.09 pF/ft
dc Resistance, Inner Conductor	105 ohms/km   32.004 ohms/kft
dc Resistance, Outer Conductor	28.2 ohms/km   8.595 ohms/kft
dc Test Voltage	500 V
Jacket Spark Test Voltage (rms)	1500 V
Maximum Frequency	61 GHz

# CNT-100-FR

Operating Frequency Band	30 – 6000 MHz
Peak Power	0.6 kW
Shielding Effectiveness	90 dB
Velocity	66 %

## Material Specifications

Braid Material	Tinned copper
Dielectric Material	Foam PE
Jacket Material	Non-halogenated, fire retardant polyolefin
Inner Conductor Material	Copper
Shield Tape Material	Aluminum

## Mechanical Specifications

Minimum Bend Radius, single Bend	6.35 mm   0.25 in
Tensile Strength	7 kg   15.432 lb
Bending Moment	0.1 N-m   0.885 in lb
Flat Plate Crush Strength	0.2 kg/mm   11.199 lb/in

## Environmental Specifications

Installation temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)

## Packaging and Weights

Cable weight	0.02 kg/m   0.013 lb/ft
Packaging Type	Reel

## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant

