



4102003/10 | 2045V WHRL RG59 90
1000

RG 59 Type 95% Braid Plenum Coaxial Cable, white jacket 1000 ft (305 m) reel

Construction Materials

Construction Type	Non-armored
Center Conductor Material	Copper-clad steel wire
Dielectric Material	Foam FEP
Jacket Material	PVC
Shield (Braid) Coverage	90 %
Shield (Braid) Gauge	34 AWG
Shield (Braid) Material	Aluminum
Shield (Tape) Material	Aluminum/Poly, bonded

Dimensions

Cable Length	305 m 1000 ft
Cable Weight	32.00 lb/kft
Diameter Over Center Conductor	0.8128 mm per 1 strand 0.0320 in per 1 strand
Diameter Over Dielectric	3.4290 mm 0.1350 in
Diameter Over Jacket	5.131 mm 0.202 in
Diameter Over Jacket Tolerance	±0.007 in
Diameter Over Shield (Braid)	4.318 mm 0.170 in
Jacket Thickness	0.406 mm 0.016 in
Jacket Thickness, minimum spot	0.305 mm 0.012 in

Electrical Specifications

Capacitance	52.5 pF/m 16.0 pF/ft
Characteristic Impedance	75 ohm
Characteristic Impedance Tolerance	±3 ohm
Conductor dc Resistance	48.20 ohms/kft
Dielectric Strength, conductor to shield	2500 Vdc
Jacket Spark Test Voltage	2500 Vac
Nominal Velocity of Propagation (NVP)	84 %
Shield dc Resistance	3.20 ohms/kft
Structural Return Loss	20 dB @ 10–300 MHz
Structural Return Loss Test Method	100% Swept Tested

Environmental Specifications

Environmental Space	Plenum
Flame Test Method	CMP
Operating Temperature	-40 °C to +75 °C (-40 °F to +167 °F)
Safety Standard	cETL ETL

Product Specifications

COMMSCOPE®

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UL Temperature Rating 60 °C | 140 °F

General Specifications

Cable Type	Series 59
Jacket Color	White
Product Number	2045V
Center Conductor Gauge	20 AWG
Center Conductor Type	Solid
Packaging Type	Reel

Mechanical Specifications

Minimum Bend Radius, loaded	20 times
Minimum Bend Radius, unloaded	10 times

Electrical Performance

Frequency	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
1 MHz	1.84	0.56
10 MHz	2.82	0.86
50 MHz	6.26	1.91
100 MHz	9.12	2.78
200 MHz	13.32	4.06
400 MHz	19.71	6.01
700 MHz	27.78	8.47
900 MHz	32.21	9.82
1000 MHz	34.34	10.47

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2002/95/EC	Compliant
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

