550085302 | QR® 860 JCAT 3G AJ

75 Ohm QR® Trunk and Distribution Cable, black PE jacket black PE alternate jacket with three co-extruded green stripes

- *Product complies with the Build America, Buy America Act (BABAA) requirements of the Infrastructure Investment and Jobs Act of 2021 (Pub. L. 117- 58, §§ 70901-70953), or is the subject of a waiver approved by the Secretary of Commerce or designee. Compliance requirements and waiver applicability vary based on government funding program. Check the laws and regulations for your specific program.

Product Classification

Regional Availability	North America
Product Type	Coaxial hardline cable
Product Brand	QR®
Government Funding	Build America Buy America (BABA) compliant*

General Specifications

Cable Type	860 Series
Construction Type	Welded
Jacket Color	Black with three co-extruded green stripes
Short Description	QR 860 JCAT 3G AJ SM PR7709

Dimensions

Cable Length	899.16 m | 2950 ft
Diameter Over Center Conductor, nominal	5.156 mm | 0.203 in
Diameter Over Dielectric, nominal	21.031 mm | 0.828 in
Diameter Over Jacket, nominal	24.384 mm | 0.96 in
Diameter Over Outer Conductor, nominal	21.844 mm | 0.86 in
Jacket Thickness, nominal	1.27 mm | 0.05 in
Outer Conductor Thickness, nominal	0.406 mm | 0.016 in

Electrical Specifications

Capacitance	50.197 pF/m | 15.3 pF/ft
Capacitance Tolerance	±1.0 pF/ft
Characteristic Impedance	75 ohm

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Characteristic Impedance Tolerance	±2 ohm
dc Resistance Note	Nominal values based on a standard condition of 20 °C (68 °F)
dc Resistance, Inner Conductor, nominal	1.345 ohms/km | 0.41 ohms/kft
dc Resistance, Loop, nominal	2.395 ohms/km | 0.73 ohms/kft
dc Resistance, Outer Conductor, nominal	1.05 ohms/km | 0.32 ohms/kft
Jacket Spark Test Voltage	5000 Vac
Nominal Velocity of Propagation (NVP)	88 %
Operating Frequency Band	5–3000 MHz
Structural Return Loss	24 dB @ 1003–1218 MHz | 24 dB @ 1219–1794 MHz | 30 dB @ 5–1002 MHz
Structural Return Loss, Grade N	≥24 dB @ 1003–1218 MHz | ≥24 dB @ 1219–1794 MHz | ≥30 dB @ 5–1002 MHz

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
5.0	0.3	0.09
55.0	1.05	0.32
85.0	1.31	0.4
204.0	2.07	0.63
211.0	2.1	0.64
250.0	2.3	0.7
300.0	2.49	0.76
350.0	2.72	0.83
400.0	2.89	0.88
450.0	3.12	0.95
500.0	3.28	1
550.0	3.48	1.06
600.0	3.61	1.1
750.0	4.07	1.24
865.0	4.36	1.33
1000.0	4.72	1.44
1002.0	4.75	1.45
1218.0	5.28	1.61
1500.0	6.12	1.87
1794.0	6.86	2.09

1800.0	6.87	2.1
2000.0	7.36	2.24
2200.0	7.83	2.39
2500.0	8.51	2.59
2700.0	8.96	2.73
3000.0	9.61	2.93

Material Specifications

Center Conductor Material	Copper-clad aluminum
Dielectric Material	Foam PE
Jacket Material	Alternative jacket PE
Outer Conductor Material	Aluminum

Mechanical Specifications

Minimum Bend Radius, bonded	177.8 mm | 7 in
Pulling Tension, maximum	204.117 kg | 450 lb

Environmental Specifications

Environmental Space	Aerial

Packaging and Weights

Packaging Type	Reel
Weight, gross	431.568 kg/km | 290 lb/kft

Regulatory Compliance/Certifications

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