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 RequirementsBuild America Buy America (BABA) compliant*

General Specifications

Cable Type860 SeriesConstruction TypeWelded

Jacket ColorBlack with three co-extruded green stripes

Location of ManufacturingCatawba, North Carolina

Short Description QR 860 JCAT 3G AJ SM PR7709

Dimensions

Cable Length899.16 m | 2950 ftDiameter Over Center Conductor, nominal5.156 mm | 0.203 inDiameter Over Dielectric, nominal21.031 mm | 0.828 inDiameter Over Jacket, nominal24.384 mm | 0.96 inDiameter Over Outer Conductor, nominal21.844 mm | 0.86 inJacket Thickness, nominal1.27 mm | 0.05 inOuter Conductor Thickness, nominal0.406 mm | 0.016 in

Electrical Specifications

Capacitance 50.197 pF/m | 15.3 pF/ft

Capacitance Tolerance $\pm 1.0 \text{ pF/ft}$

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Characteristic Impedance75 ohmCharacteristic Impedance Tolerance±2 ohm

dc Resistance Note

Nominal values based on a standard condition of 20 °C (68 °F)

dc Resistance, Inner Conductor, nominal1.345 ohms/km | 0.41 ohms/kftdc Resistance, Loop, nominal2.395 ohms/km | 0.73 ohms/kftdc Resistance, Outer Conductor, nominal1.05 ohms/km | 0.32 ohms/kft

Jacket Spark Test Voltage5000 VacNominal 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





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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, bonded177.8 mm7 inPulling Tension, maximum204.117 kg450 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

