



## 75 Ohm QR® Trunk and Distribution Cable, black PE jacket

- \*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

|                              |   |
|------------------------------|---|
| <b>Regional Availability</b> | North America                               |
| <b>Product Type</b>          | Coaxial hardline cable                      |
| <b>Product Brand</b>         | QR®   |
| <b>Government Funding</b>    | Build America Buy America (BABA) compliant* |

## General Specifications

|                                  |                         |
|----------------------------------|-------------------------|
| <b>Cable Type</b>                | 715 Series              |
| <b>Construction Type</b>         | Welded                  |
| <b>Jacket Color</b>              | Black                   |
| <b>Location of Manufacturing</b> | Catawba, North Carolina |
| <b>Short Description</b>         | QR 715 JCA SM PR2171    |

## Dimensions

|  |                      |
|--|----------------------|
| <b>Cable Length</b>                            | 914.4 m   3000 ft    |
| <b>Diameter Over Center Conductor, nominal</b> | 4.216 mm   0.166 in  |
| <b>Diameter Over Dielectric, nominal</b>       | 17.424 mm   0.686 in |
| <b>Diameter Over Jacket, nominal</b>           | 19.939 mm   0.785 in |
| <b>Diameter Over Outer Conductor, nominal</b>  | 18.161 mm   0.715 in |
| <b>Jacket Thickness, nominal</b>               | 0.889 mm   0.035 in  |
| <b>Outer Conductor Thickness, nominal</b>      | 0.368 mm   0.014 in  |

## Electrical Specifications

|                                 |                          |
|---------------------------------|--------------------------|
| <b>Capacitance</b>              | 50.197 pF/m   15.3 pF/ft |
| <b>Capacitance Tolerance</b>    | ±1.0 pF/ft               |
| <b>Characteristic Impedance</b> | 75 ohm                   |

|  |   |
|--|---|
| <b>Characteristic Impedance Tolerance</b>      | ±2 ohm  |
| <b>dc Resistance Note</b>                      | Nominal values based on a standard condition of 20 °C (68 °F)         |
| <b>dc Resistance, Inner Conductor, nominal</b> | 1.903 ohms/km   0.58 ohms/kft   |
| <b>dc Resistance, Loop, nominal</b>            | 3.281 ohms/km   1 ohms/kft  |
| <b>dc Resistance, Outer Conductor, nominal</b> | 1.378 ohms/km   0.42 ohms/kft   |
| <b>Jacket Spark Test Voltage</b>               | 5000 Vac  |
| <b>Nominal Velocity of Propagation (NVP)</b>   | 88 %  |
| <b>Operating Frequency Band</b>                | 5–3000 MHz  |
| <b>Structural Return Loss</b>                  | 24 dB @ 1003–1218 MHz   24 dB @ 1219–1794 MHz   30 dB @ 5–1002 MHz    |
| <b>Structural Return Loss, Grade N</b>         | ≥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             | 0.36                   | 0.11                    |
| 55.0            | 1.21                   | 0.37                    |
| 85.0            | 1.51                   | 0.46                    |
| 204.0           | 2.4                    | 0.73                    |
| 211.0           | 2.43                   | 0.74                    |
| 250.0           | 2.66                   | 0.81                    |
| 300.0           | 2.92                   | 0.89                    |
| 350.0           | 3.18                   | 0.97                    |
| 400.0           | 3.44                   | 1.05                    |
| 450.0           | 3.67                   | 1.12                    |
| 500.0           | 3.9                    | 1.19                    |
| 550.0           | 4.1                    | 1.25                    |
| 600.0           | 4.3                    | 1.31                    |
| 750.0           | 4.89                   | 1.49                    |
| 865.0           | 5.31                   | 1.62                    |
| 1002.0          | 5.76                   | 1.75                    |
| 1218.0          | 6.43                   | 1.96                    |
| 1500.0          | 7.44                   | 2.27                    |
| 1794.0          | 8.3                    | 2.53                    |
| 1800.0          | 8.32                   | 2.54                    |

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|               |       |      |
|---------------|-------|------|
| <b>2000.0</b> | 8.88  | 2.71 |
| <b>2200.0</b> | 9.42  | 2.87 |
| <b>2500.0</b> | 10.21 | 3.11 |
| <b>2700.0</b> | 10.72 | 3.27 |
| <b>3000.0</b> | 11.46 | 3.49 |

## Material Specifications

|                                  |                      |
|----------------------------------|----------------------|
| <b>Center Conductor Material</b> | Copper-clad aluminum |
| <b>Dielectric Material</b>       | Foam PE              |
| <b>Jacket Material</b>           | PE                   |
| <b>Outer Conductor Material</b>  | Aluminum             |

## Mechanical Specifications

|                                    |                     |
|------------------------------------|---------------------|
| <b>Minimum Bend Radius, bonded</b> | 127 mm   5 in       |
| <b>Pulling Tension, maximum</b>    | 154.221 kg   340 lb |

## Environmental Specifications

|                            |        |
|----------------------------|--------|
| <b>Environmental Space</b> | Aerial |
|----------------------------|--------|

## Packaging and Weights

|                       |                            |
|-----------------------|----------------------------|
| <b>Packaging Type</b> | Reel                       |
| <b>Weight, gross</b>  | 305.074 kg/km   205 lb/kft |

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |