



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

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

General Specifications

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|----------------------------------|-------------------------|
| Cable Type | 860 Series |
| Construction Type | Welded |
| Jacket Color | Black |
| Location of Manufacturing | Catawba, North Carolina |
| Short Description | QR 860 JCA SM PR2171 |

Dimensions

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|--|----------------------|
| 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

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|---------------------------------|--------------------------|
| 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 |

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| 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

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

Mechanical Specifications

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

Environmental Specifications

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|----------------------------|--------|
| Environmental Space | Aerial |
|----------------------------|--------|

Packaging and Weights

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|-----------------------|----------------------------|
| 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 |