

75 Ohm QR® Trunk and Distribution Cable, black PE jacket with co-extruded orange stripes, flooded for underground



- *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	540 Series
Construction Type	Welded
Jacket Color	Black with co-extruded orange stripe
Short Description	QR 540 JCASST O SM PR2171

Dimensions

Cable Length	3700 ft 1,127.76 m
Diameter Over Center Conductor, nominal	0.124 in 3.15 mm
Diameter Over Dielectric, nominal	0.514 in 13.056 mm
Diameter Over Jacket, nominal	0.61 in 15.494 mm
Diameter Over Outer Conductor, nominal	0.54 in 13.716 mm
Jacket Thickness, nominal	0.035 in 0.889 mm
Outer Conductor Thickness, nominal	0.014 in 0.343 mm

Electrical Specifications

Capacitance	15.3 pF/ft 50.197 pF/m
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	1.02 ohms/kft 3.346 ohms/km
dc Resistance, Loop, nominal	1.61 ohms/kft 5.282 ohms/km
dc Resistance, Outer Conductor, nominal	0.59 ohms/kft 1.936 ohms/km
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	0.46	0.14
55.0	1.54	0.47
85.0	1.94	0.59
204.0	3.05	0.93
211.0	3.12	0.95
250.0	3.38	1.03
300.0	3.71	1.13
350.0	4.04	1.23
400.0	4.33	1.32
450.0	4.59	1.4
500.0	4.89	1.49
550.0	5.12	1.56
600.0	5.38	1.64
750.0	6.07	1.85
865.0	6.56	2
1002.0	7.12	2.17
1218.0	7.89	2.41
1500.0	9.07	2.76
1794.0	10.11	3.08
1800.0	10.13	3.09

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2000.0	10.81	3.29
2200.0	11.46	3.49
2500.0	12.41	3.78
2700.0	13.03	3.97
3000.0	13.03	3.97

Material Specifications

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

Mechanical Specifications

Minimum Bend Radius, bonded	4 in 101.6 mm
Pulling Tension, maximum	220 lb 99.79 kg

Environmental Specifications

Corrosion Protection	Migraheal®
Environmental Space	Buried

Packaging and Weights

Packaging Type	Reel
Weight, gross	120 lb/kft 178.58 kg/km

Regulatory Compliance/Certifications

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

