

75 Ohm QR® Trunk and Distribution Cable, black PE jacket with integrated figure 8 self-supporting galvanized solid steel messenger



Product Classification

Brand	QR®
Product Type	Coaxial hardline cable

Construction Materials

Jacket Material	PE
Center Conductor Material	Copper-clad aluminum
Construction Type	Welded
Dielectric Material	Foam PE
Messenger Wire Material	Steel
Outer Conductor Material	Aluminum

Dimensions

Diameter Over Center Conductor, nominal	3.150 mm 0.124 in
Diameter Over Dielectric, nominal	13.056 mm 0.514 in
Diameter Over Outer Conductor, nominal	13.716 mm 0.540 in
Diameter Over Jacket, nominal	15.494 mm 0.610 in
Diameter Over Messenger Wire, nominal	2.769 mm 0.109 in
Jacket Thickness, nominal	0.8890 mm 0.0350 in
Outer Conductor Thickness, nominal	0.3429 mm 0.0135 in
Cable Length	1128 m 3700 ft
Shipping Weight	170.00 lb/kft

Electrical Specifications

dc Resistance, Inner Conductor, nominal	1.02 ohms/kft
dc Resistance, Outer Conductor, nominal	0.59 ohms/kft
dc Resistance, Loop, nominal	1.61 ohms/kft
dc Resistance Note	Nominal values based on a standard condition of 20 °C (68 °F)
Capacitance	50.2 pF/m 15.3 pF/ft

Capacitance Tolerance	±1.0 pF/ft
Characteristic Impedance	75 ohm
Characteristic Impedance Tolerance	±2 ohm
Jacket Spark Test Voltage	5000 Vac
Nominal Velocity of Propagation (NVP)	88 %
Operating Frequency Band	5–3000 MHz
Structural Return Loss	26 dB @ 1002–1218 MHz 30 dB @ 5–1002 MHz

Environmental Specifications

Environmental Space	Aerial
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General Specifications

Cable Type	540 series
Jacket Color	Black
Packaging Type	Reel
Short Description	QR 540 JCAM109 SM MT PR7276

Mechanical Specifications

Messenger Wire Breaking Strength, minimum	816 kg 1800 lb
Minimum Bend Radius, bonded	101.60 mm 4.00 in
Pulling Tension, maximum	100 kg 220 lb

Electrical Performance

Frequency	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
5 MHz	0.46	0.14
55 MHz	1.56	0.48
83 MHz	1.90	0.58
85 MHz	1.94	0.59
204 MHz	3.05	0.93
211 MHz	3.12	0.95
250 MHz	3.38	1.03
300 MHz	3.71	1.13
350 MHz	4.04	1.23
400 MHz	4.33	1.32
450 MHz	4.59	1.40
500 MHz	4.89	1.49
550 MHz	5.12	1.56
600 MHz	5.38	1.64
750 MHz	6.07	1.85
865 MHz	6.56	2.00
1000 MHz	7.12	2.17
1002 MHz	7.13	2.17
1218 MHz	8.05	2.45
1300 MHz	8.34	2.54

1400 MHz	8.68	2.65
1500 MHz	9.01	2.75
1600 MHz	9.34	2.85
1700 MHz	9.65	2.94
1794 MHz	9.94	3.03
1800 MHz	9.96	3.04
2000 MHz	10.56	3.22
2200 MHz	11.13	3.39
2400 MHz	11.68	3.56
2600 MHz	12.21	3.72
2800 MHz	12.73	3.88
3000 MHz	13.23	4.03

* Attenuation listed represents maximum values at standard condition of 20 °C (68 °F)

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU
ISO 9001:2015

Classification

Compliant
Designed, manufactured and/or distributed under this quality management system

