



## Broadband Solutions

5506302 | QR® 540 JCA

75 Ohm Quantum Reach® Trunk and Distribution Cable, black PE jacket

## Construction Materials

Jacket Material	PE
Center Conductor Material	Copper-clad aluminum
Construction Type	Welded
Dielectric Material	PE
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
Jacket Thickness, nominal	0.8890 mm		0.0350 in
Outer Conductor Thickness, nominal	0.3429 mm		0.0135 in
Cable Length	869 m		2850 ft
Shipping Weight	120.00 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	5–1000 MHz
Structural Return Loss	30 dB @ 5–1000 MHz

## Environmental Specifications

Environmental Space	Aerial
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## General Specifications

Brand	QR®
Cable Type	540 series
Jacket Color	Black
Packaging Type	Reel
Short Description	QR 540 JCA SM PR2171

5506302 | QR@ 540 JCA

Warranty Ten years

## Mechanical Specifications

Minimum Bend Radius, bonded 101.60 mm | 4.00 in  
Pulling Tension, maximum 41 kg | 90 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
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

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

## Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system