

# 5528902 | QR® 540 JCAM109 SM MT

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



## Product Classification

<b>Product Type</b>	Coaxial hardline cable
<b>Product Brand</b>	QR®

## General Specifications

<b>Cable Type</b>	540 series
<b>Construction Type</b>	Welded
<b>Jacket Color</b>	Black
<b>Short Description</b>	QR 540 JCAM109 SM MT PR7276

## Dimensions

<b>Cable Length</b>	3700 ft   1,127.76 m
<b>Diameter Over Center Conductor, nominal</b>	0.124 in   3.15 mm
<b>Diameter Over Dielectric, nominal</b>	0.514 in   13.056 mm
<b>Diameter Over Jacket, nominal</b>	0.61 in   15.494 mm
<b>Diameter Over Messenger Wire, nominal</b>	0.109 in   2.769 mm
<b>Diameter Over Outer Conductor, nominal</b>	0.54 in   13.716 mm
<b>Jacket Thickness, nominal</b>	0.035 in   0.889 mm
<b>Outer Conductor Thickness, nominal</b>	0.014 in   0.343 mm

## Electrical Specifications

<b>Capacitance</b>	15.3 pF/ft   50.197 pF/m
<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)

# 5528902 | QR® 540 JCAM109 SM MT

<b>dc Resistance, Inner Conductor, nominal</b>	1.02 ohms/kft   3.346 ohms/km
<b>dc Resistance, Loop, nominal</b>	1.61 ohms/kft   5.282 ohms/km
<b>dc Resistance, Outer Conductor, nominal</b>	0.59 ohms/kft   1.936 ohms/km
<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>	26 dB @ 1002–1218 MHz   30 dB @ 5–1002 MHz

## Attenuation

<b>Frequency (MHz)</b>	<b>Attenuation (dB/100 m)</b>	<b>Attenuation (dB/100 ft)</b>
5.0	0.46	0.14
55.0	1.56	0.48
83.0	1.9	0.58
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
1000.0	7.12	2.17
1002.0	7.13	2.17
1218.0	8.05	2.45
1300.0	8.34	2.54
1400.0	8.68	2.65
1500.0	9.01	2.75
1600.0	9.34	2.85
1700.0	9.65	2.94
1794.0	9.94	3.03

# 5528902 | QR® 540 JCAM109 SM MT

---

1800.0	9.96	3.04
2000.0	10.56	3.22
2200.0	11.13	3.39
2400.0	11.68	3.56
2600.0	12.21	3.72
2800.0	12.73	3.88
3000.0	13.23	4.03

## Material Specifications

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

## Mechanical Specifications

<b>Minimum Bend Radius, bonded</b>	4 in   101.6 mm
<b>Messenger Wire Breaking Strength, minimum</b>	1800 lb   816.466 kg
<b>Pulling Tension, maximum</b>	220 lb   99.79 kg

## Environmental Specifications

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

## Packaging and Weights

<b>Packaging Type</b>	Reel
<b>Weight, gross</b>	170 lb/kft   23.503 kg/km

## Regulatory Compliance/Certifications

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

