Product Specifications

COMMSCOPE®

Broadband Solutions

5514002 | QR® 540 JCASS SM MT

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

Construction Materials

Corrosion Protection	Migraheal®
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	Buried

General Specifications

Brand	QR®
Cable Type	540 series
Jacket Color	Black
Packaging Type	Reel

Product Specifications

5514002 | QR® 540 JCASS SM MT

Short Description	QR 540 JCASS SM MT PR2352
Warranty	Ten years

Mechanical Specifications

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
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