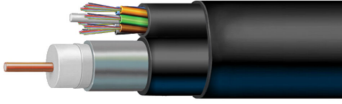


# E20540JCASS-48CT MICFIBR

## E20® Coaxial/Fiber Hybrid Buried Cable



- E20 is a solution that enables service providers the ability to bridge HFC networks to FTTx. The E20 composite coaxial/fiber product line combines fiber, microducts, and coaxial cable under one jacket
- Serves businesses in a new commercial serving area
- Mitigates future cost of fiber installation
- Saves on initial installation due to “single sheath” vs. multiple sheaths
- Ideal for commercial data customers that also require video
- All products tested to industry standards

**OBSOLETE**

### Product Classification

<b>Product Type</b>	Hybrid cable, coax and fiber
<b>Product Brand</b>	E20®

### General Specifications

<b>Cable Series</b>	QR 540
<b>Total Fiber Count</b>	48

### Dimensions

<b>Height</b>	24.638 mm   0.97 in
<b>Width</b>	17.018 mm   0.67 in
<b>Outer Jacket Thickness, nominal</b>	0.762 mm   0.03 in

### Material Specifications

<b>Outer Jacket Material</b>	Medium density polyethylene (MDPE)
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### Mechanical Specifications

<b>Minimum Bend Radius</b>	101.6 mm   4 in
<b>Pulling Tension, maximum</b>	33.112 kg   73 lb

### Environmental Specifications

<b>Environmental Space</b>	Buried
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## Packaging and Weights

**Weight, gross** 273.822 kg/km | 184 lb/kft

## Regulatory Compliance/Certifications

### Agency

ISO 9001:2015



### Classification

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

## Included Products

- |                                       |   |  |
|---------------------------------------|---|--|
| 5510192<br>QR® 540 JCASS              | - | 75 Ohm QR® Trunk and Distribution Cable, black PE jacket, flooded for underground                                  |
| 810008927/DB<br>B-048-LN-8W-F12NS/16G | - | LightScope ZWP® Blown Micro Single Jacket All-Dielectric Outdoor Stranded Loose Tube Arid-Core® Construction Cable |

# 5510192 | QR® 540 JCASS

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



## 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 JCASS SM PR2171

## Dimensions

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

## Electrical Specifications

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

# 5510192 | QR® 540 JCASS

<b>dc Resistance, Inner Conductor, nominal</b>	3.346 ohms/km   1.02 ohms/kft
<b>dc Resistance, Loop, nominal</b>	5.282 ohms/km   1.61 ohms/kft
<b>dc Resistance, Outer Conductor, nominal</b>	1.936 ohms/km   0.59 ohms/kft
<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>	24 dB @ 1003–1218 MHz   24 dB @ 1219–1794 MHz   30 dB @ 5–1002 MHz
<b>Structural Return Loss, Grade N</b>	=24 dB @ 1003–1218 MHz   =24 dB @ 1219–1794 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	1.54	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
2000.0	10.81	3.29
2200.0	11.46	3.49

# 5510192 | QR® 540 JCASS

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<b>2500.0</b>	12.41	3.78
<b>2700.0</b>	13.03	3.97
<b>3000.0</b>	13.93	4.24

## Material Specifications

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

## Mechanical Specifications

<b>Pulling Tension, maximum</b>	99.79 kg   220 lb
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## Environmental Specifications

<b>Corrosion Protection</b>	Migraheal®
<b>Environmental Space</b>	Buried

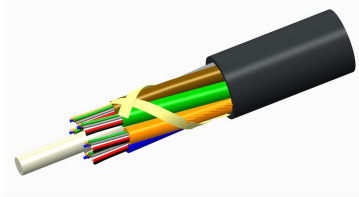
## Packaging and Weights

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

## Regulatory Compliance/Certifications

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





LightScope ZWP® Blown Micro Single Jacket All-Dielectric Outdoor Stranded Loose Tube Arid-Core® Construction Cable

## Product Classification

<b>Regional Availability</b>	Asia   Australia/New Zealand   EMEA   Latin America   North America
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber OSP cable
<b>Product Series</b>	B-LN

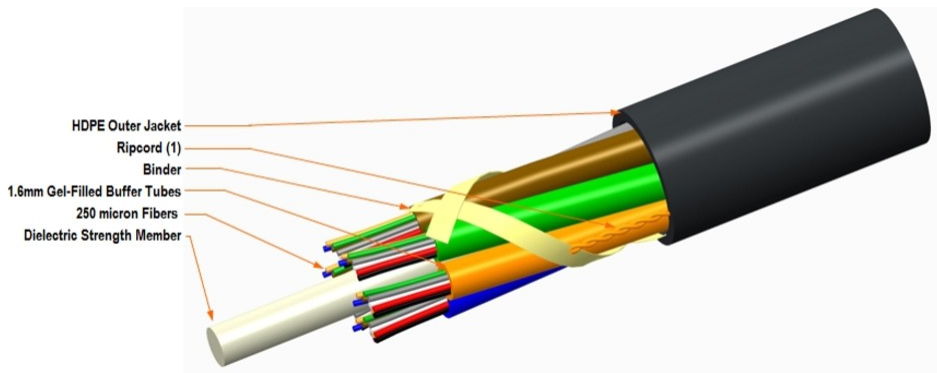
## General Specifications

<b>Cable Type</b>	Stranded loose tube
<b>Construction Type</b>	Non-armored
<b>Fiber Type, quantity</b>	48
<b>Fibers per Subunit, quantity</b>	12
<b>Filler, quantity</b>	1
<b>Jacket Color</b>	Black
<b>Jacket Marking</b>	Feet
<b>Subunit Type</b>	Gel-filled
<b>Subunit, quantity</b>	4
<b>Total Fiber Count</b>	48

## Dimensions

<b>Buffer Tube/Subunit Diameter</b>	1.6 mm   0.063 in
<b>Diameter Over Jacket</b>	5.5 mm   0.217 in

## Representative Image



## Material Specifications

**Jacket Material** High density polyethylene (HDPE)

## Mechanical Specifications

**Minimum Bend Radius, loaded** 83 mm | 3.268 in

**Minimum Bend Radius, unloaded** 55 mm | 2.165 in

**Tensile Load, long term, maximum** 97 N | 21.806 lbf

**Tensile Load, short term, maximum** 324 N | 72.838 lbf

**Compression** 10 N/mm | 57.101 lb/in

**Compression Test Method** FOTP-41 | IEC 60794-1 E3

**Flex** 25 cycles

**Flex Test Method** FOTP-104 | IEC 60794-1 E6

**Impact** 0.3 N-m | 2.655 in lb

**Impact Test Method** FOTP-25 | IEC 60794-1 E4

**Strain** See long and short term tensile loads

**Strain Test Method** FOTP-33 | IEC 60794-1 E1

**Twist** 10 cycles

**Twist Test Method** FOTP-85 | IEC 60794-1 E7

**Vertical Rise, maximum** 492 m | 1,614.173 ft

## Optical Specifications

**Fiber Type** G.652.D and G.657.A1 | G.652.D and G.657.A1

## Environmental Specifications

**Installation temperature** -30 °C to +70 °C (-22 °F to +158 °F)

<b>Operating Temperature</b>	-30 °C to +70 °C (-22 °F to +158 °F)
<b>Storage Temperature</b>	-30 °C to +75 °C (-22 °F to +167 °F)
<b>Cable Qualification Standards</b>	IEC 60794-5-10
<b>Environmental Space</b>	Air-blown, microduct
<b>Jacket UV Resistance</b>	UV stabilized
<b>Water Penetration</b>	24 h
<b>Water Penetration Test Method</b>	FOTP-82   IEC 60794-1 F5

## Environmental Test Specifications

<b>Cable Freeze</b>	-2 °C   28.4 °F
<b>Cable Freeze Test Method</b>	FOTP-98   IEC 60794-1 F15
<b>Drip</b>	70 °C   158 °F
<b>Drip Test Method</b>	FOTP-81   IEC 60794-1 E14
<b>Heat Age</b>	-30 °C to +85 °C (-22 °F to +185 °F)
<b>Heat Age Test Method</b>	IEC 60794-1 F9
<b>Low High Bend</b>	-30 °C to +60 °C (-22 °F to +140 °F)
<b>Low High Bend Test Method</b>	FOTP-37   IEC 60794-1 E11
<b>Temperature Cycle</b>	-30 °C to +70 °C (-22 °F to +158 °F)
<b>Temperature Cycle Test Method</b>	FOTP-3   IEC 60794-1 F1

## Packaging and Weights

<b>Cable weight</b>	20 kg/km   13.439 lb/kft
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## Regulatory Compliance/Certifications

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



### \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable