



75 Ohm P3® Trunk and Distribution Cable, black PE jacket

- \*Product complies with the Build America, Buy America Act (BABAA) requirements of the Infrastructure Investment and Jobs Act of 2021 (Pub. L. 117- 58, §§ 70901-70953), or is the subject of a waiver approved by the Secretary of Commerce or designee. Compliance requirements and waiver applicability vary based on government funding program. Check the laws and regulations for your specific program.

Product Classification

|                         |   |
|-------------------------|---|
| Regional Availability   | North America                               |
| Product Type            | Coaxial hardline cable                      |
| Product Brand           | P3®   |
| Government Requirements | Build America Buy America (BABA) compliant* |
| Warranty                | One year                                    |

General Specifications

|                           |                         |
|---------------------------|-------------------------|
| Cable Type                | 875 Series              |
| Construction Type         | Swaged                  |
| Jacket Color              | Black                   |
| Location of Manufacturing | Catawba, North Carolina |
| Short Description         | P3 875 JCA SM PR2171    |

Dimensions

|   |                      |
|---|----------------------|
| Cable Length                            | 762 m   2500 ft      |
| Diameter Over Center Conductor, nominal | 4.928 mm   0.194 in  |
| Diameter Over Dielectric, nominal       | 20.244 mm   0.797 in |
| Diameter Over Jacket, nominal           | 24.003 mm   0.945 in |
| Diameter Over Outer Conductor, nominal  | 22.225 mm   0.875 in |
| Jacket Thickness, nominal               | 0.889 mm   0.035 in  |
| Outer Conductor Thickness, nominal      | 0.991 mm   0.039 in  |

Electrical Specifications

|                       |                          |
|-----------------------|--------------------------|
| Capacitance           | 50.197 pF/m   15.3 pF/ft |
| Capacitance Tolerance | ±1.0 pF/ft               |

|   |   |
|---|---|
| Characteristic Impedance                | 75 ohm  |
| Characteristic Impedance Tolerance      | ±2 ohm  |
| dc Resistance Note                      | Nominal values based on a standard condition of 20 °C (68 °F)         |
| dc Resistance, Inner Conductor, nominal | 1.378 ohms/km   0.42 ohms/kft   |
| dc Resistance, Loop, nominal            | 1.804 ohms/km   0.55 ohms/kft   |
| dc Resistance, Outer Conductor, nominal | 0.427 ohms/km   0.13 ohms/kft   |
| Jacket Spark Test Voltage               | 5000 Vac  |
| Nominal Velocity of Propagation (NVP)   | 87 %  |
| Operating Frequency Band                | 5–3000 MHz  |
| Structural Return Loss                  | 24 dB @ 1003–1218 MHz   24 dB @ 1219–1794 MHz   30 dB @ 5–1002 MHz    |
| Structural Return Loss, Grade N         | ≥24 dB @ 1003–1218 MHz   ≥24 dB @ 1219–1794 MHz   ≥30 dB @ 5–1002 MHz |

## Attenuation

| Frequency (MHz) | Attenuation (dB/100 m) | Attenuation (dB/100 ft) |
|-----------------|------------------------|-------------------------|
| 5.0             | 0.3                    | 0.09                    |
| 55.0            | 1.08                   | 0.33                    |
| 85.0            | 1.31                   | 0.4                     |
| 204.0           | 2.07                   | 0.63                    |
| 211.0           | 2.17                   | 0.66                    |
| 250.0           | 2.36                   | 0.72                    |
| 300.0           | 2.56                   | 0.78                    |
| 350.0           | 2.76                   | 0.84                    |
| 400.0           | 2.99                   | 0.91                    |
| 450.0           | 3.18                   | 0.97                    |
| 500.0           | 3.38                   | 1.03                    |
| 550.0           | 3.54                   | 1.08                    |
| 600.0           | 3.74                   | 1.14                    |
| 750.0           | 4.23                   | 1.29                    |
| 865.0           | 4.63                   | 1.41                    |
| 1002.0          | 5.02                   | 1.53                    |
| 1218.0          | 5.57                   | 1.7                     |
| 1500.0          | 6.39                   | 1.95                    |
| 1794.0          | 7.13                   | 2.17                    |

|        |      |      |
|--------|------|------|
| 1800.0 | 7.14 | 2.18 |
| 2000.0 | 7.62 | 2.32 |
| 2200.0 | 8.09 | 2.46 |
| 2500.0 | 8.76 | 2.67 |
| 2700.0 | 9.19 | 2.8  |
| 3000.0 | 9.83 | 3    |

## Material Specifications

|                           |                      |
|---------------------------|----------------------|
| Center Conductor Material | Copper-clad aluminum |
| Dielectric Material       | Foam PE              |
| Jacket Material           | PE                   |
| Outer Conductor Material  | Aluminum             |

## Mechanical Specifications

|                             |                     |
|-----------------------------|---------------------|
| Minimum Bend Radius, bonded | 177.8 mm   7 in     |
| Pulling Tension, maximum    | 396.893 kg   875 lb |

## Environmental Specifications

|                     |        |
|---------------------|--------|
| Environmental Space | Aerial |
|---------------------|--------|

## Packaging and Weights

|                |                            |
|----------------|----------------------------|
| Packaging Type | Reel                       |
| Weight, gross  | 500.023 kg/km   336 lb/kft |

## Regulatory Compliance/Certifications

|               |  |
|---------------|--|
| Agency        | Classification   |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |