



ConQuest® Cable in Conduit, 1 1/4 in, SDR 11, orange (P3® 625 JCASS)

- *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 cable-in-conduit |
| Product Brand | ConQuest® |
| Product Series | 625 Series |
| Government Requirements | Build America Buy America (BABA) compliant* |

General Specifications

| | |
|----------------------------------|-------------------------|
| Cable Type | 625 Series |
| Cable-In-Conduit Type | P3® in duct |
| Color | Orange |
| Conduit Type | Non-toneable |
| Location of Manufacturing | Catawba, North Carolina |
| Wall Type | Smooth |

Dimensions

| | |
|-----------------------------------|--------------------|
| Length | 731.52 m 2400 ft |
| Wall Thickness Designation | SDR 11 |
| Nominal Size | 1-1/4 in |

Packaging and Weights

| | |
|--------------------|----------------------------|
| Weight, net | 690.508 kg/km 464 lb/kft |
|--------------------|----------------------------|

Included Products

| | | |
|----------------------------------|---|---|
| 530101403 P3® 625 JCASS SM MT | – | 75 Ohm P3® Trunk and Distribution Cable, black PE jacket, flooded for underground |
|----------------------------------|---|---|

CX3350061 | 1250110P3625JCASS COEX

- 5308103 P3® 625 JCASS – 75 Ohm P3® Trunk and Distribution Cable, black PE jacket, flooded for underground
- CX3399760 1250110 EMPTY DUCT COEX – ConQuest® Empty Conduit, 1 1/4 in, SDR 11, orange



Product Classification

| | |
|----------------------|------------------------|
| Product Type | Coaxial hardline cable |
| Product Brand | P3® |
| Warranty | One year |

General Specifications

| | |
|--------------------------|------------|
| Cable Type | 625 Series |
| Construction Type | Swaged |
| Jacket Color | Black |

Dimensions

| | |
|--|----------------------|
| Cable Length | 731.52 m 2400 ft |
| Diameter Over Center Conductor, nominal | 3.48 mm 0.137 in |
| Diameter Over Dielectric, nominal | 14.351 mm 0.565 in |
| Diameter Over Inner Jacket, nominal | 17.653 mm 0.695 in |
| Diameter Over Jacket, nominal | 21.59 mm 0.85 in |
| Diameter Over Outer Conductor, nominal | 15.875 mm 0.625 in |
| Armor Thickness, nominal | 0.203 mm 0.008 in |
| Inner Jacket Thickness, nominal | 0.762 mm 0.03 in |
| Jacket Thickness, nominal | 0.762 mm 0.03 in |
| Outer Conductor Thickness, nominal | 0.762 mm 0.03 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) |

530101403 | P3® 625 JCASS SM MT

| | |
|--|---|
| dc Resistance, Inner Conductor, nominal | 2.756 ohms/km 0.84 ohms/kft |
| dc Resistance, Loop, nominal | 3.609 ohms/km 1.1 ohms/kft |
| dc Resistance, Outer Conductor, nominal | 0.853 ohms/km 0.26 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 | 0.43 | 0.13 |
| 55.0 | 1.48 | 0.45 |
| 85.0 | 1.84 | 0.56 |
| 204.0 | 2.92 | 0.89 |
| 211.0 | 3.02 | 0.92 |
| 250.0 | 3.28 | 1 |
| 300.0 | 3.54 | 1.08 |
| 350.0 | 3.87 | 1.18 |
| 400.0 | 4.17 | 1.27 |
| 450.0 | 4.43 | 1.35 |
| 500.0 | 4.69 | 1.43 |
| 550.0 | 4.92 | 1.5 |
| 600.0 | 5.18 | 1.58 |
| 750.0 | 5.84 | 1.78 |
| 865.0 | 6.33 | 1.93 |
| 1002.0 | 6.92 | 2.11 |
| 1218.0 | 7.62 | 2.32 |
| 1500.0 | 8.74 | 2.66 |
| 1794.0 | 9.7 | 2.96 |
| 1800.0 | 9.72 | 2.96 |
| 2000.0 | 10.34 | 3.15 |
| 2200.0 | 10.95 | 3.34 |

530101403 | P3® 625 JCASS SM MT

| | | |
|---------------|-------|------|
| 2500.0 | 11.81 | 3.6 |
| 2700.0 | 12.37 | 3.77 |
| 3000.0 | 13.19 | 4.02 |

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 | 114.3 mm 4.5 in |
| Pulling Tension, maximum | 215.456 kg 475 lb |

Environmental Specifications

| | |
|-----------------------------|------------|
| Corrosion Protection | Migraheal® |
| Environmental Space | Buried |

Packaging and Weights

| | |
|-----------------------|----------------------------|
| Packaging Type | Reel |
| Weight, gross | 278.287 kg/km 187 lb/kft |

Regulatory Compliance/Certifications

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



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

- *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 | 625 Series |
| Construction Type | Swaged |
| Jacket Color | Black |
| Location of Manufacturing | Catawba, North Carolina |
| Short Description | P3 625 JCASS SM PR997 |

Dimensions

| | |
|--|----------------------|
| Cable Length | 731.52 m 2400 ft |
| Diameter Over Center Conductor, nominal | 3.48 mm 0.137 in |
| Diameter Over Dielectric, nominal | 14.351 mm 0.565 in |
| Diameter Over Inner Jacket, nominal | 17.653 mm 0.695 in |
| Diameter Over Jacket, nominal | 21.59 mm 0.85 in |
| Diameter Over Outer Conductor, nominal | 15.875 mm 0.625 in |
| Armor Thickness, nominal | 0.203 mm 0.008 in |
| Inner Jacket Thickness, nominal | 0.762 mm 0.03 in |
| Jacket Thickness, nominal | 0.762 mm 0.03 in |
| Outer Conductor Thickness, nominal | 0.762 mm 0.03 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 | 2.756 ohms/km 0.84 ohms/kft |
| dc Resistance, Loop, nominal | 3.609 ohms/km 1.1 ohms/kft |
| dc Resistance, Outer Conductor, nominal | 0.853 ohms/km 0.26 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 | 0.43 | 0.13 |
| 55.0 | 1.48 | 0.45 |
| 85.0 | 1.84 | 0.56 |
| 204.0 | 2.92 | 0.89 |
| 211.0 | 3.02 | 0.92 |
| 250.0 | 3.28 | 1 |
| 300.0 | 3.54 | 1.08 |
| 350.0 | 3.87 | 1.18 |
| 400.0 | 4.17 | 1.27 |
| 450.0 | 4.43 | 1.35 |
| 500.0 | 4.69 | 1.43 |
| 550.0 | 4.92 | 1.5 |
| 600.0 | 5.18 | 1.58 |
| 750.0 | 5.84 | 1.78 |
| 865.0 | 6.33 | 1.93 |

5308103 | P3® 625 JCASS

| | | |
|---------------|-------|------|
| 1002.0 | 6.92 | 2.11 |
| 1218.0 | 7.62 | 2.32 |
| 1500.0 | 8.74 | 2.66 |
| 1794.0 | 9.7 | 2.96 |
| 1800.0 | 9.72 | 2.96 |
| 2000.0 | 10.34 | 3.15 |
| 2200.0 | 10.95 | 3.34 |
| 2500.0 | 11.81 | 3.6 |
| 2700.0 | 12.37 | 3.77 |
| 3000.0 | 13.19 | 4.02 |

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 | 114.3 mm 4.5 in |
| Pulling Tension, maximum | 215.456 kg 475 lb |

Environmental Specifications

| | |
|-----------------------------|------------|
| Corrosion Protection | Migraheal® |
| Environmental Space | Buried |

Packaging and Weights

| | |
|-----------------------|----------------------------|
| Packaging Type | Reel |
| Weight, gross | 278.287 kg/km 187 lb/kft |

Regulatory Compliance/Certifications

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

CX3399760 | 1250110 EMPTY DUCT COEX



ConQuest® Empty Conduit, 1 1/4 in, SDR 11, orange

Product Classification

| | |
|----------------------|---------------|
| Product Type | Empty conduit |
| Product Brand | ConQuest® |

General Specifications

| | |
|----------------------------|--|
| Color | Orange |
| Conduit Type | Non-toneable |
| Density Test Method | ASTM D792A |
| Density, maximum | 0.955 g/cm ³ 0.035 lb/in ³ |
| Density, minimum | 0.941 g/cm ³ 0.034 lb/in ³ |
| Design Standard | ASTM D3350-05 |
| Wall Type | Smooth |

Dimensions

| | |
|-----------------------------------|----------------------|
| Length | 914.4 m 3000 ft |
| Inner Diameter, nominal | 33.985 mm 1.338 in |
| Outer Diameter, nominal | 42.164 mm 1.66 in |
| Wall Thickness Designation | SDR 11 |
| Wall Thickness, minimum | 3.835 mm 0.151 in |
| Nominal Size | 1-1/4 in |

Material Specifications

| | |
|---------------------------------------|---------------------------------------|
| Flexural Modulus, minimum | 551.581 N/mm ² 80000 psi |
| Flexural Property Test Method | ASTM D790 |
| Hydrostatic Design Basis | Not pressure rated |
| Hydrostatic Design Test Method | ASTM D2837 |
| Material Type | High density polyethylene (HDPE) |
| Melt Flow Rate Test Method | ASTM D1238 |

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Melt Flow Rate, maximum 0.39 g/10 min

Mechanical Specifications

Minimum Bend Radius, unsupported 457.2 mm | 18 in

Tensile Property Test Method ASTM D638

Tensile Strength at yield, minimum 20.684 N/mm² | 3000 psi

Pulling Tension, maximum 689.46 kg | 1520 lb

Environmental Specifications

Environmental Stress Crack Resistance Failure rate of 10% within 96 hours

Environmental Stress Test Method ASTM D1693, ESCR Condition B

Packaging and Weights

Weight, net 476.212 kg/km | 320 lb/kft

Regulatory Compliance/Certifications

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

* Footnotes

Environmental Stress Crack Resistance ESCR—Environmental Stress Crack Resistance