

ConQuest® Cable in Conduit, 1/2 in, SDR 11, terracotta (F677TSEF XP)



- *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	6 Series
Government Funding	Build America Buy America (BABA) compliant*

General Specifications

Cable Type	Series 6
Cable-In-Conduit Type	Drop in duct
Color	Gray
Conduit Type	Non-toneable
Wall Type	Smooth

Dimensions

Length	304.8 m 1000 ft
Wall Thickness Designation	SDR 11
Nominal Size	1/2 in

Packaging and Weights

Weight, net	165.93 kg/km 111.5 lb/kft
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Included Products

3099999 050T110 EMPTY DUCT	–	ConQuest® Empty Conduit, 1/2 in, SDR 11, terracotta
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302006100 | 050G110F677TSEF XP

4842903
F677TSEF XP (830BMU)

- XPRESSPREP® Coaxial Drop Cable, 75 Ohm, Series 6, black PE jacket, flooded for underground

3099999 | 050T110 EMPTY DUCT



ConQuest® Empty Conduit, 1/2 in, SDR 11, terracotta

Product Classification

Product Type	Empty conduit
Product Brand	ConQuest®

General Specifications

Color	Terracotta
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	304.8 m 1000 ft
Inner Diameter, nominal	16.967 mm 0.668 in
Outer Diameter, nominal	21.336 mm 0.84 in
Wall Thickness Designation	SDR 11
Wall Thickness, minimum	1.93 mm 0.076 in
Nominal Size	1/2 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 254 mm | 10 in

Tensile Property Test Method ASTM D638

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

Pulling Tension, maximum 176.901 kg | 390 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 126.494 kg/km | 85 lb/kft

Regulatory Compliance/Certifications

Agency

ISO 9001:2015

Classification

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



* Footnotes

Environmental Stress Crack Resistance ESCR—Environmental Stress Crack Resistance

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XPRESSPREP® Coaxial Drop Cable, 75 Ohm, Series 6, black PE jacket, flooded for underground



Product Classification

Product Type	Coaxial drop cable
Product Brand	XPRESSPREP®
Product Series	6 Series
Warranty	One year

General Specifications

Cable Type	Series 6
Center Conductor Type	Solid
Jacket Color	Black
Jacket Marking	Feet
Performance Note	Attenuation listed represents maximum values at standard condition of 20 °C (68 °F)
Shield Construction Type	Trishield

Dimensions

Diameter Over Center Conductor, nominal	1.016 mm 0.04 in
Diameter Over Dielectric, nominal	4.572 mm 0.18 in
Diameter Over Inner Shield (Tape), nominal	4.75 mm 0.187 in
Diameter Over Jacket, nominal	7.061 mm 0.278 in
Jacket Thickness, nominal	0.762 mm 0.03 in
Center Conductor Gauge	18 AWG
Inner Shield (Braid) Gauge	34 AWG

Electrical Specifications

Capacitance	53.15 pF/m 16.2 pF/ft
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Characteristic Impedance	75 ohm
Characteristic Impedance Tolerance	±3 ohm
dc Resistance Note	Nominal values based on a standard condition of 20 °C (68 °F)
dc Resistance, Inner Conductor, nominal	100.066 ohms/km 30.5 ohms/kft
dc Resistance, Loop, nominal	121.063 ohms/km 36.9 ohms/kft
dc Resistance, Outer Conductor, nominal	20.997 ohms/km 6.4 ohms/kft
Nominal Velocity of Propagation (NVP)	85 %
Operating Frequency Band	5–3000 MHz
Structural Return Loss, Grade A	≥15 dB @ 1801–3000 MHz ≥20 dB @ 5–1800 MHz
Structural Return Loss, Grade C	≥15 dB @ 1801–3000 MHz ≥20 dB @ 1002–1800 MHz ≥23 dB @ 5–1002 MHz
Structural Return Loss, Grade G	≥15 dB @ 1801–3000 MHz ≥20 dB @ 1002–1800 MHz ≥26 dB @ 5–1002 MHz

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
5.0	1.9	0.58
55.0	5.25	1.6
83.0	6.4	1.95
85.0	6.46	1.97
187.0	9.35	2.85
204.0	9.84	3
211.0	10	3.05
250.0	10.82	3.3
300.0	11.64	3.55
350.0	12.63	3.85
400.0	13.61	4.15
450.0	14.43	4.4
500.0	15.29	4.66
550.0	16.08	4.9
600.0	16.73	5.1
750.0	18.54	5.65
865.0	20.01	6.1
1000.0	21.49	6.55
1218.0	23.66	7.21

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1300.0	24.71	7.53
1400.0	25.71	7.84
1500.0	26.68	8.13
1600.0	27.63	8.42
1700.0	28.54	8.7
1794.0	29.39	8.96
1800.0	29.44	8.97
2000.0	31.17	9.5
2200.0	32.83	10.01
2500.0	35.2	10.73
2800.0	37.46	11.42
3000.0	38.91	11.86

Material Specifications

Center Conductor Material	Copper-clad steel
Dielectric Material	Foam PE
Jacket Material	PE
Inner Shield (Braid) Coverage	77 %
Inner Shield (Braid) Material	Aluminum
Inner Shield (Tape) Material	Aluminum/Polymer/Aluminum (APA) bonded
Outer Shield (Tape) Material	Aluminum/Polymer/Aluminum (APA) bonded

Environmental Specifications

Corrosion Protection	Migraheal®
Environmental Space	Buried (Network Powered)
Flame Test Listing	BMU NEC Article 830

Packaging and Weights

Packaging Type	Reel
Weight, gross	49.109 kg/km 33 lb/kft

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

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REACH-SVHC

Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS

Compliant

UK-ROHS

Compliant

