530093204 12.7MB-TW

530093204 | E20-2" SDR13.5-625JCASS-16MT-

E20® Coaxial/Microduct 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 preinstalled in conduit.
- Serves businesses in a new commercial serving area
- Mitigates future cost of fiber installation
- Pre-installed in high density PE conduit for added physical protection
- One-step installation saves on construction cost
- Ideal for commercial data customers that also require video
- All products tested to industry standards

Product Classification

Product Type Coaxial fiber cable-in-conduit

Product Brand E20®

General Specifications

Cable Series P3 625

Dimensions

 Height
 60.325 mm | 2.375 in

 Width
 60.325 mm | 2.375 in

 Outer Jacket Thickness, nominal
 4.724 mm | 0.186 in

Material Specifications

Outer Jacket Material High density polyethylene (HDPE)

Mechanical Specifications

Minimum Bend Radius 660.4 mm | 26 in

Pulling Tension, maximum 1,170.268 kg | 2580 lb

Environmental Specifications

Environmental Space Buried

Packaging and Weights

Weight, gross 1,110.17 kg/km | 746 lb/kft

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530093204 | E20-2" SDR13.5-625JCASS-16MT-12.7MB-TW

Regulatory Compliance/Certifications

Agency Classification

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



Included Products

16MT DUCT EMPTY

359998100 – ConQuest® Empty Conduit, 16 mm, SDR 11, terracotta

359998400 – ConQuest® Empty Conduit, 16 mm, SDR 11, terracotta

16MT DUCT EMPTY

360000000 – ConQuest® Empty Conduit, 12.7 mm, black

12.7MB DUCT EMPTY
360000013 - ConQuest® Empty Conduit, 12.7 mm, black

12.7MB DUCT EMPTY

8220001 – E20® Coaxial/Microduct Hybrid Buried Cable

PP Coated Tone Wire 0.0403 CCS

CX3799839 - ConQuest® Empty Conduit, 2 in, SDR 13.5, terracotta 200T135 EMPTY DUCT COEX



ConQuest® Empty Conduit, 16 mm, SDR 11, terracotta



Product Classification

Product TypeEmpty conduitProduct BrandConQuest®

General Specifications

ColorTerracottaConduit TypeNon-toneableDensity Test MethodASTM D792A

 Density, maximum
 0.955 g/cm³ | 0.035 lb/in³

 Density, minimum
 0.941 g/cm³ | 0.034 lb/in³

Design Standard ASTM D3350-05

Wall Type Smooth

Dimensions

 Length
 1,828.8 m | 6000 ft

 Inner Diameter, nominal
 12.725 mm | 0.501 in

 Outer Diameter, nominal
 15.875 mm | 0.625 in

Wall Thickness Designation SDR 11

Wall Thickness, minimum 1.397 mm | 0.055 in

Nominal Size 16 mm

Material Specifications

Flexural Modulus, minimum 551.581 N/mm² | 80000 psi

Flexural Property Test Method ASTM D790

Hydrostatic Design BasisNot pressure rated

COMMSCOPE®

Hydrostatic Design Test Method ASTM D2837

Material TypeHigh density polyethylene (HDPE)

Melt Flow Rate Test MethodASTM D1238Melt Flow Rate, maximum0.39 g/10 min

Mechanical Specifications

Minimum Bend Radius, unsupported 203.2 mm | 8 in

Tensile Property Test Method ASTM D638

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

Pulling Tension, maximum 95.254 kg | 210 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 68.456 kg/km | 46 lb/kft

Regulatory Compliance/Certifications

Agency Classification

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



* Footnotes



ConQuest® Empty Conduit, 16 mm, SDR 11, terracotta



Product Classification

Product TypeEmpty conduitProduct BrandConQuest®

General Specifications

ColorTerracottaConduit TypeNon-toneableDensity Test MethodASTM D792A

 Density, maximum
 0.955 g/cm³ | 0.035 lb/in³

 Density, minimum
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Design Standard ASTM D3350-05

Wall Type Smooth

Dimensions

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Wall Thickness Designation SDR 11

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Hydrostatic Design BasisNot pressure rated

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Material Type High density polyethylene (HDPE)

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Packaging and Weights

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Agency Classification

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* Footnotes



ConQuest® Empty Conduit, 12.7 mm, black



Product Classification

Product TypeEmpty conduitProduct BrandConQuest®

General Specifications

Color Black

Conduit TypeNon-toneableDensity Test MethodASTM D792A

 Density, maximum
 0.955 g/cm³ | 0.035 lb/in³

 Density, minimum
 0.941 g/cm³ | 0.034 lb/in³

Design Standard ASTM D3350-05

Wall Type Smooth

Dimensions

Inner Diameter, nominal10.008 mm | 0.394 inOuter Diameter, nominal12.7 mm | 0.5 inWall Thickness, minimum1.346 mm | 0.053 in

Nominal Size 12.7 mm

Material Specifications

Flexural Modulus, minimum 551.581 N/mm² | 80000 psi

Flexural Property Test Method ASTM D790

Hydrostatic Design BasisNot pressure rated

Hydrostatic Design Test Method ASTM D2837

Material Type High density polyethylene (HDPE)



Melt Flow Rate Test MethodASTM D1238Melt Flow Rate, maximum0.39 g/10 min

Mechanical Specifications

Minimum Bend Radius, unsupported 152.4 mm | 6 in

Tensile Property Test Method ASTM D638

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

Pulling Tension, maximum 86.183 kg | 190 lb

Environmental Specifications

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

Environmental Stress Test MethodASTM D1693, ESCR Condition B

Packaging and Weights

Weight, net 46.133 kg/km | 31 lb/kft

Regulatory Compliance/Certifications

Agency Classification

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



* Footnotes



ConQuest® Empty Conduit, 12.7 mm, black



Product Classification

Product TypeEmpty conduitProduct BrandConQuest®

General Specifications

Color Black

Conduit Type Non-toneable

Density Test Method ASTM D792A

 Density, maximum
 0.955 g/cm³ | 0.035 lb/in³

 Density, minimum
 0.941 g/cm³ | 0.034 lb/in³

Design Standard ASTM D3350-05

Wall Type Smooth

Dimensions

Inner Diameter, nominal10.008 mm | 0.394 inOuter Diameter, nominal12.7 mm | 0.5 inWall Thickness, minimum1.346 mm | 0.053 in

Nominal Size 12.7 mm

Material Specifications

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Hydrostatic Design BasisNot pressure rated

Hydrostatic Design Test Method ASTM D2837

Material Type High density polyethylene (HDPE)



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Mechanical Specifications

Minimum Bend Radius, unsupported 152.4 mm | 6 in

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

Pulling Tension, maximum 86.183 kg | 190 lb

Environmental Specifications

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

Environmental Stress Test MethodASTM D1693, ESCR Condition B

Packaging and Weights

Weight, net 46.133 kg/km | 31 lb/kft

Regulatory Compliance/Certifications

Agency Classification

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



* Footnotes



8220001 | PP Coated Tone Wire 0.0403 CCS

E20® Coaxial/Microduct Hybrid Buried Cable



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- Pre-installed in high density PE conduit for added physical protection
- One-step installation saves on construction cost
- Ideal for commercial data customers that also require video
- All products tested to industry standards

Product Classification

Product Type Coaxial fiber cable-in-conduit

Product Brand E20®

General Specifications

Conductor Elongation, maximum1 %Conductor TypeSolidInsulation Elongation, minimum200 %

Dimensions

Conductor Diameter1.024 mm0.04 inInsulation Thickness, nominal0.008 mm0 in

Conductor Gauge 18 AWG

Electrical Specifications

Conductor Resistance 87.598 ohms/km | 26.7 ohms/kft

Material Specifications

Insulation Material TypePolypropylene coated copper-clad steel wire

Outer Jacket Material High density polyethylene (HDPE)

Mechanical Specifications

Conductor Tensile Strength, minimum827.371 N/mm² | 120000 psiInsulation Tensile Strength, minimum31.026 N/mm² | 4500 psi

COMMSCOPE®

8220001 | PP Coated Tone Wire 0.0403 CCS

Environmental Specifications

Environmental Space Buried

Regulatory Compliance/Certifications

Agency Classification

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



CX3799839 | 200T135 EMPTY DUCT COEX

ConQuest® Empty Conduit, 2 in, SDR 13.5, terracotta



Product Classification

Product TypeEmpty conduitProduct BrandConQuest®

General Specifications

ColorTerracottaConduit TypeNon-toneableDensity Test MethodASTM D792A

 Density, maximum
 0.955 g/cm³ | 0.035 lb/in³

 Density, minimum
 0.941 g/cm³ | 0.034 lb/in³

Design Standard ASTM D3350-05

Wall Type Smooth

Dimensions

Length 762 m | 2500 ft

Inner Diameter, nominal50.876 mm | 2.003 inOuter Diameter, nominal60.325 mm | 2.375 in

Wall Thickness Designation SDR 13.5

Wall Thickness, minimum 4.47 mm | 0.176 in

Nominal Size 2 in

Material Specifications

Flexural Modulus, minimum 551.581 N/mm² | 80000 psi

Flexural Property Test Method ASTM D790

Hydrostatic Design BasisNot pressure rated

COMMSCOPE®

CX3799839 | 200T135 EMPTY DUCT COEX

Hydrostatic Design Test MethodASTM D2837

Material TypeHigh density polyethylene (HDPE)

Melt Flow Rate Test MethodASTM D1238Melt Flow Rate, maximum0.39 g/10 min

Mechanical Specifications

Minimum Bend Radius, unsupported 660.4 mm | 26 in

Tensile Property Test Method ASTM D638

Tensile Strength at yield, minimum $20.684 \text{ N/mm}^2 \mid 3000 \text{ psi}$ Pulling Tension, maximum $1,170.268 \text{ kg} \mid 2580 \text{ lb}$

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 791.703 kg/km | 532 lb/kft

Regulatory Compliance/Certifications

Agency Classification

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



* Footnotes

