

## E20® Coaxial/Fiber Hybrid Indoor 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

## Product Classification

|                       |                              |
|-----------------------|------------------------------|
| <b>Product Type</b>   | Hybrid cable, coax and fiber |
| <b>Product Brand</b>  | E20®                         |
| <b>Product Series</b> | 6 Series                     |
| <b>Warranty</b>       | One year                     |

## General Specifications

|                          |          |
|--------------------------|----------|
| <b>Cable Series</b>      | Series 6 |
| <b>Color</b>             | Black    |
| <b>Total Fiber Count</b> | 2        |

## Dimensions

|  |                      |
|--|----------------------|
| <b>Height</b>                          | 11.887 mm   0.468 in |
| <b>Outer Jacket Thickness, nominal</b> | 0.508 mm   0.02 in   |

## Mechanical Specifications

|                                 |                   |
|---------------------------------|-------------------|
| <b>Minimum Bend Radius</b>      | 81.28 mm   3.2 in |
| <b>Pulling Tension, maximum</b> | 33.112 kg   73 lb |

## Environmental Specifications

|                            |       |
|----------------------------|-------|
| <b>Environmental Space</b> | Riser |
|----------------------------|-------|

## Packaging and Weights

|                      |                         |
|----------------------|-------------------------|
| <b>Weight, gross</b> | 89.29 kg/km   60 lb/kft |
|----------------------|-------------------------|

## Regulatory Compliance/Certifications

### Agency

ISO 9001:2015



### Classification

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

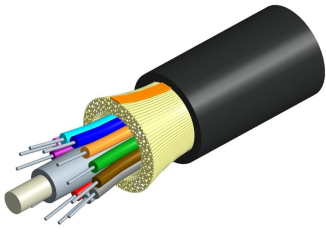
## Included Products

- |                                  |   |  |
|----------------------------------|---|--|
| 760150490<br>Z-002-DS-8W-FSUBK/D | - | TeraSPEED® Indoor/Outdoor Low Smoke Zero Halogen Riser Distribution Cable, 2 fiber single-unit |
| 7702003<br>F677TSVR XP           | - | XPRESSPREP® Coaxial Drop Cable, 75 Ohm, Series 6, black flame retardant PVC jacket             |

## \* Footnotes

### Warranty

For more information, please consult our Product Warranty guidelines



TeraSPEED® Indoor/Outdoor Low Smoke Zero Halogen Riser Distribution Cable, 2 fiber single-unit

## Product Classification

**Regional Availability**

Asia | Australia/New Zealand | EMEA | Latin America | North America

**Portfolio**

CommScope®

**Product Type**

Fiber indoor/outdoor cable

## General Specifications

**Cable Type**

Distribution

**Construction Type**

Non-armored

**Fiber Type, quantity**

2

**Jacket Color**

Black

**Total Fiber Count**

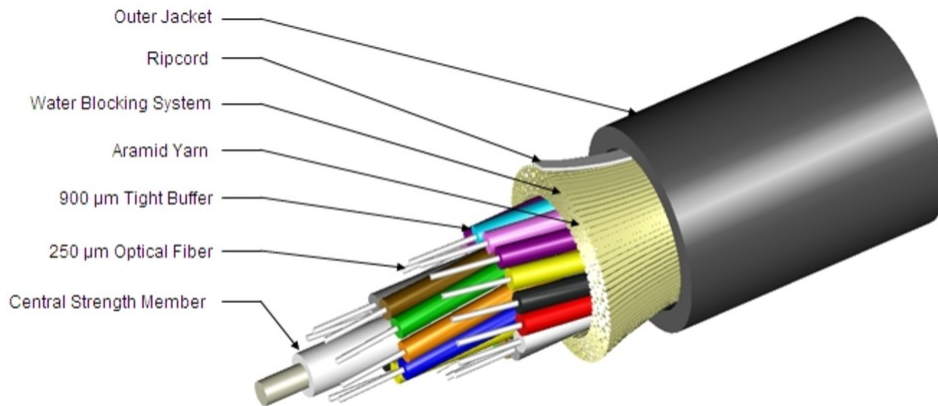
2

## Dimensions

**Diameter Over Jacket**

3.8 mm | 0.15 in

## Representative Image



## Mechanical Specifications

|  |                                       |
|--|---------------------------------------|
| <b>Minimum Bend Radius, loaded</b>       | 58 mm   2.283 in                      |
| <b>Minimum Bend Radius, unloaded</b>     | 38 mm   1.496 in                      |
| <b>Tensile Load, long term, maximum</b>  | 300 N   67.443 lbf                    |
| <b>Tensile Load, short term, maximum</b> | 1000 N   224.809 lbf                  |
| <b>Compression</b>                       | 22 N/mm   125.623 lb/in               |
| <b>Compression Test Method</b>           | FOTP-41   IEC 60794-1 E3              |
| <b>Flex</b>                              | 100 cycles                            |
| <b>Flex Test Method</b>                  | FOTP-104   IEC 60794-1 E6             |
| <b>Impact</b>                            | 5.88 N-m   52.042 in lb               |
| <b>Impact Test Method</b>                | FOTP-25   IEC 60794-1 E4              |
| <b>Strain</b>                            | See long and short term tensile loads |
| <b>Strain Test Method</b>                | FOTP-33   IEC 60794-1 E1              |
| <b>Twist</b>                             | 10 cycles                             |
| <b>Twist Test Method</b>                 | FOTP-85   IEC 60794-1 E7              |
| <b>Vertical Rise, maximum</b>            | 500 m   1,640.42 ft                   |

## Optical Specifications

|                   |  |
|-------------------|--|
| <b>Fiber Type</b> | G.652.D and G.657.A1 , TeraSPEED®   G.652.D and G.657.A1, TeraSPEED® |
|-------------------|--|

## Environmental Specifications

|                                 |                                      |
|---------------------------------|--------------------------------------|
| <b>Installation temperature</b> | -30 °C to +60 °C (-22 °F to +140 °F) |
|---------------------------------|--------------------------------------|

# 760150490 | Z-002-DS-8W-FSUBK/D

|   |  |
|---|--|
| <b>Operating Temperature</b>                        | -40 °C to +70 °C (-40 °F to +158 °F)   |
| <b>Storage Temperature</b>                          | -40 °C to +75 °C (-40 °F to +167 °F)   |
| <b>Cable Qualification Standards</b>                | ANSI/ICEA S-104-696   EN 187105   Telcordia GR-20 (water penetration)   Telcordia GR-409 |
| <b>EN50575 CPR Cable EuroClass Fire Performance</b> | Dca  |
| <b>EN50575 CPR Cable EuroClass Smoke Rating</b>     | s1a  |
| <b>EN50575 CPR Cable EuroClass Droplets Rating</b>  | d1   |
| <b>EN50575 CPR Cable EuroClass Acidity Rating</b>   | a2   |
| <b>Environmental Space</b>                          | Low Smoke Zero Halogen (LSZH)   Riser  |
| <b>Flame Test Listing</b>                           | NEC OFNR-LS (ETL) and c(ETL)   |
| <b>Flame Test Method</b>                            | IEC 60332-3   IEC 60754-2   IEC 61034-2   IEEE 383   UL 1666   UL 1685                   |
| <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 Test Method</b>      | IEC 60794-1 F15                      |
| <b>Heat Age</b>                      | -40 °C to +85 °C (-40 °F to +185 °F) |
| <b>Heat Age Test Method</b>          | IEC 60794-1 F9                       |
| <b>Low High Bend</b>                 | -40 °C to +70 °C (-40 °F to +158 °F) |
| <b>Low High Bend Test Method</b>     | FOTP-37   IEC 60794-1 E11            |
| <b>Temperature Cycle</b>             | -40 °C to +70 °C (-40 °F to +158 °F) |
| <b>Temperature Cycle Test Method</b> | FOTP-3   IEC 60794-1 F1              |

## Packaging and Weights

|                     |                           |
|---------------------|---------------------------|
| <b>Cable weight</b> | 11.6 kg/km   7.795 lb/kft |
|---------------------|---------------------------|

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| CENELEC       | EN 50575 compliant, Declaration of Performance (DoP) available   |
| CHINA-ROHS    | Below maximum concentration value  |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system   |
| REACH-SVHC    | Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| ROHS          | Compliant  |



## \* Footnotes

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

# 7702003 | F677TSVR XP

XPRESSPREP® Coaxial Drop Cable, 75 Ohm, Series 6, black flame retardant PVC jacket



## Product Classification

|                       |                    |
|-----------------------|--------------------|
| <b>Product Type</b>   | Coaxial drop cable |
| <b>Product Brand</b>  | XPRESSPREP®        |
| <b>Product Series</b> | 6 Series           |
| <b>Warranty</b>       | One year           |

## General Specifications

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

## Dimensions

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

## Electrical Specifications

|                    |                         |
|--------------------|-------------------------|
| <b>Capacitance</b> | 53.15 pF/m   16.2 pF/ft |
|--------------------|-------------------------|

# 7702003 | F677TSVR XP

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



# 7702003 | F677TSVR XP

|        |       |       |
|--------|-------|-------|
| 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

|                                      |  |
|--------------------------------------|--|
| <b>Center Conductor Material</b>     | Copper-clad steel                      |
| <b>Dielectric Material</b>           | Foam PE                                |
| <b>Jacket Material</b>               | Fire retardant PVC                     |
| <b>Inner Shield (Braid) Coverage</b> | 77 %                                   |
| <b>Inner Shield (Braid) Material</b> | Aluminum                               |
| <b>Inner Shield (Tape) Material</b>  | Aluminum/Polymer/Aluminum (APA) bonded |
| <b>Outer Shield (Tape) Material</b>  | Aluminum/Polymer/Aluminum (APA) bonded |

## Environmental Specifications

|                            |                         |
|----------------------------|-------------------------|
| <b>Environmental Space</b> | Riser                   |
| <b>Flame Test Listing</b>  | CATVR   NEC Article 820 |

## Packaging and Weights

|                       |                          |
|-----------------------|--------------------------|
| <b>Packaging Type</b> | Reel                     |
| <b>Weight, gross</b>  | 44.645 kg/km   30 lb/kft |

## Regulatory Compliance/Certifications

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



