

# 770023003 | F677TSVR XP PLUS CAT6

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F677TSVR XP PLUS w/ Category 6 Twisted Pair, Sidecar Cable, Riser, black jacket, 1000 ft (305 m) reel

## Product Classification

|                              |   |
|------------------------------|---|
| <b>Regional Availability</b> | Asia   Australia/New Zealand   EMEA   Latin America   North America |
| <b>Portfolio</b>             | CommScope®  |
| <b>Product Type</b>          | Hybrid cable, coax and twisted pair                                 |

## General Specifications

|                              |             |
|------------------------------|-------------|
| <b>ANSI/TIA Category</b>     | 6           |
| <b>Cable Type</b>            | Hybrid      |
| <b>Center Conductor Type</b> | Solid       |
| <b>Construction Type</b>     | Non-armored |
| <b>Jacket Color</b>          | Black       |

## Dimensions

|   |                        |
|---|------------------------|
| <b>Overall Cable Width</b>                        | 14.3 mm   0.563 in     |
| <b>Cable Length</b>                               | 304.8 m   1000 ft      |
| <b>Diameter Over Center Conductor Tolerance</b>   | ±0.0004 in             |
| <b>Diameter Over Center Conductor, specific</b>   | 0.0403 in per 1 strand |
| <b>Diameter Over Conductor, singles, specific</b> | 0.0254 in per 1 strand |
| <b>Diameter Over Dielectric</b>                   | 4.572 mm   0.18 in     |
| <b>Diameter Over Dielectric Tolerance</b>         | ±0.004 in              |
| <b>Diameter Over Outer Shield (Braid)</b>         | 5.385 mm   0.212 in    |
| <b>Center Conductor Gauge</b>                     | 18 AWG                 |
| <b>Inner Shield (Braid) Gauge</b>                 | 34 AWG                 |

## Dimensions, Coaxial

|                                       |                     |
|---------------------------------------|---------------------|
| <b>Jacket Thickness</b>               | 0.762 mm   0.03 in  |
| <b>Jacket Thickness, minimum spot</b> | 0.457 mm   0.018 in |
| <b>Diameter Over Jacket</b>           | 7.061 mm   0.278 in |
| <b>Diameter Over Jacket Tolerance</b> | ±0.008 in           |

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## Electrical Specifications

|   |                               |
|---|-------------------------------|
| <b>Capacitance</b>                              | 52.493 pF/m   16 pF/ft        |
| <b>Characteristic Impedance</b>                 | 75 ohm                        |
| <b>Characteristic Impedance Tolerance</b>       | ±3 ohm                        |
| <b>Conductor dc Resistance</b>                  | 21.325 ohms/km   6.5 ohms/kft |
| <b>Dielectric Strength, conductor to shield</b> | 2500 Vdc                      |
| <b>Jacket Spark Test Voltage</b>                | 2500 Vac                      |
| <b>Nominal Velocity of Propagation (NVP)</b>    | 82 %                          |
| <b>Shield dc Resistance</b>                     | 16.076 ohms/km   4.9 ohms/kft |
| <b>Structural Return Loss</b>                   | 15 dB @ 5–2200 MHz            |
| <b>Structural Return Loss Test Method</b>       | 100% Swept Tested             |

## Attenuation

| Frequency (MHz) | Attenuation (dB/100 m) | Attenuation (dB/100 ft) |
|-----------------|------------------------|-------------------------|
| 1.0             | 1.21                   | 0.37                    |
| 10.0            | 2.16                   | 0.66                    |
| 50.0            | 4.62                   | 1.41                    |
| 100.0           | 6.3                    | 1.92                    |
| 200.0           | 8.66                   | 2.64                    |
| 400.0           | 12.23                  | 3.73                    |
| 700.0           | 16.56                  | 5.05                    |
| 900.0           | 18.99                  | 5.79                    |
| 1000.0          | 20.04                  | 6.11                    |
| 1200.0          | 22.07                  | 6.73                    |
| 1450.0          | 24.57                  | 7.49                    |
| 1800.0          | 27.65                  | 8.43                    |
| 2200.0          | 30.67                  | 9.35                    |
| 2500.0          | 32.7                   | 9.97                    |
| 3000.0          | 35.82                  | 10.92                   |

## Material Specifications

|                                  |                        |
|----------------------------------|------------------------|
| <b>Center Conductor Material</b> | Copper-clad steel wire |
| <b>Conductor Material</b>        | Bare copper            |
| <b>Dielectric Material</b>       | Foam PE                |

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|                                      |                           |
|--------------------------------------|---------------------------|
| <b>Jacket Material</b>               | PVC                       |
| <b>Inner Shield (Braid) Coverage</b> | 77 %                      |
| <b>Inner Shield (Braid) Material</b> | Aluminum                  |
| <b>Inner Shield (Tape) Material</b>  | Aluminum/Poly, bonded     |
| <b>Outer Shield (Tape) Material</b>  | Aluminum/Poly, non-bonded |

## Mechanical Specifications

|   |          |
|---|----------|
| <b>Minimum Bend Radius, loaded, times</b>   | 20 times |
| <b>Minimum Bend Radius, unloaded, times</b> | 10 times |

## Environmental Specifications

|                                 |                                       |
|---------------------------------|---------------------------------------|
| <b>Installation temperature</b> | -18 °C to +60 °C (-0.4 °F to +140 °F) |
| <b>Operating Temperature</b>    | -40 °C to +75 °C (-40 °F to +167 °F)  |
| <b>Environmental Space</b>      | Non-plenum                            |
| <b>Temperature Rating, UL</b>   | 60 °C   140 °F                        |
| <b>Flame Test Method</b>        | CMR                                   |
| <b>Safety Standard</b>          | ETL   cETL                            |

## Packaging and Weights

|                       |                         |
|-----------------------|-------------------------|
| <b>Cable weight</b>   | 89.29 kg/km   60 lb/kft |
| <b>Packaging Type</b> | Reel                    |

## Regulatory Compliance/Certifications

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



## \* Footnotes

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