

770022003 | F677TSVR XP CAT6

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

Product Classification

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

General Specifications

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

Dimensions

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

Dimensions, Coaxial

Jacket Thickness	0.762 mm 0.03 in
Jacket Thickness, minimum spot	0.457 mm 0.018 in
Diameter Over Jacket	7.061 mm 0.278 in
Diameter Over Jacket Tolerance	±0.008 in

770022003 | F677TSVR XP CAT6

Electrical Specifications

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

Center Conductor Material	Copper-clad steel wire
Conductor Material	Bare copper
Dielectric Material	Foam PE

770022003 | F677TSVR XP CAT6

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

Mechanical Specifications

Minimum Bend Radius, loaded, times	20 times
Minimum Bend Radius, unloaded, times	10 times

Environmental Specifications

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

Packaging and Weights

Cable weight	89.29 kg/km 60 lb/kft
Packaging Type	Reel

Regulatory Compliance/Certifications

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



* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable