



**Product:** <u>81553</u> ☑

77Ω Twinax, #24 SCHSCA, TFE, SCHSCA Braid, PFA Jkt

# **Product Description**

Twinax, 77 ohm, 24 AWG stranded (19x36) .024" silver-coated high-strength copper alloy conductor, TFE insulation, silver-coated high strength copper alloy braid shield (93% coverage), PFA jacket, commercial non-QPL product

# **Technical Specifications**

# **Product Overview**

Suitable Applications: Harsh Environment, IIoT, Factory or Process Automation, Video, Audio, Data Communication, etc.

# **Construction Details**

#### Conductor

No. of Elements	Size	Stranding	Nom. Diameter	Material
2	24 AWG	19x36	0.024 in	SHSCA - Silver Coated High Strength Copper Alloy

#### Insulation

Material	Nom. Insulation Diameter	Color Code
PTFE - Polytetrafluoroethylene	0.042 in (1.1 mm)	White & Blue

#### Outer Shield

Outer Shield Typ	Material Material	Coverage
Braid	Silvered High Strength Copper Alloy (SHSCA)	93%

# **Outer Jacket**

Material	Nom. Diameter
PFA - Perfluoroalkoxy	0.129 in (3.28 mm)

# **Electrical Characteristics**

#### Attenuation

Frequency	Nom. Attenuation
1 MHz	1.2 dB/100ft
10 MHz	4.0 dB/100ft
50 MHz	9.2 dB/100ft
100 MHz	13.0 dB/100ft
200 MHz	18.4 dB/100ft
400 MHz	26.1 dB/100ft
700 MHz	34.6 dB/100ft
900 MHz	39.3 dB/100ft
1000 MHz	41.4 dB/100ft

# Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.	Max. Delay Skew
24.5 Ohm/1000ft	7.3 Ohm/1000ft (24 Ohm/km)	24.0 pF/ft (78.7 pF/m)	77 Ohm	70%	70 ns/100m

#### Voltage

UL Voltage Rating

# **Mechanical Characteristics**

#### Temperature

UL Temperature	Operating
200°C	-55°C To +200°C

#### **Bend Radius**

Stationary Min.	Installation Min.
1.29 in (32.8 mm)	1.29 in (32.8 mm)
Max. Pull Tension:	51 lbs (23 kg)
Bulk Cable Weight:	:: 15 lbs/1000ft

# **Standards and Compliance**

Environmental Suitability:	Indoor, Indoor	
Flammability / Reaction to Fire:	NFPA 262 (UL 910), IEC 60332-1-2	
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca	
NEC / UL Compliance:	Article 725, CL2P	
Military Compliance:	Commercial, non-QPL product (M17/176-00002, MIL-STD-1553 Data Bus Cable)	
UK Regulation Compliance:	UKCA Mark	
APAC Compliance:	China RoHS II (GB/T 26572-2011)	

# **Product Notes**

changed to 90%.	Notes:	PF_81553 1)# Elements@Conductor1:-In Stibo it was Blank and now changed to 2.2)Size@Conductor1:-In Stibo it was 24 now changed to 24AWG. 3)Color@Color Chart1 01:- In Stibo it was Blank now Changed to 0.129 in. 5)Coverage@OuterShield1 2 - in Stibo it was 93% Now changed to 90%.
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# **History**

Update and Revision:	: Revision Number: 0.474 Revision Date: 02-03-2025

# **Part Numbers**

#### Variants

Item #	Color	Putup Type	Length	UPC	Footnote
81553 006500	Blue	Reel	500 ft	612825195559	FZ
81553 0061000	Blue	Reel	1,000 ft	612825195542	FZ

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