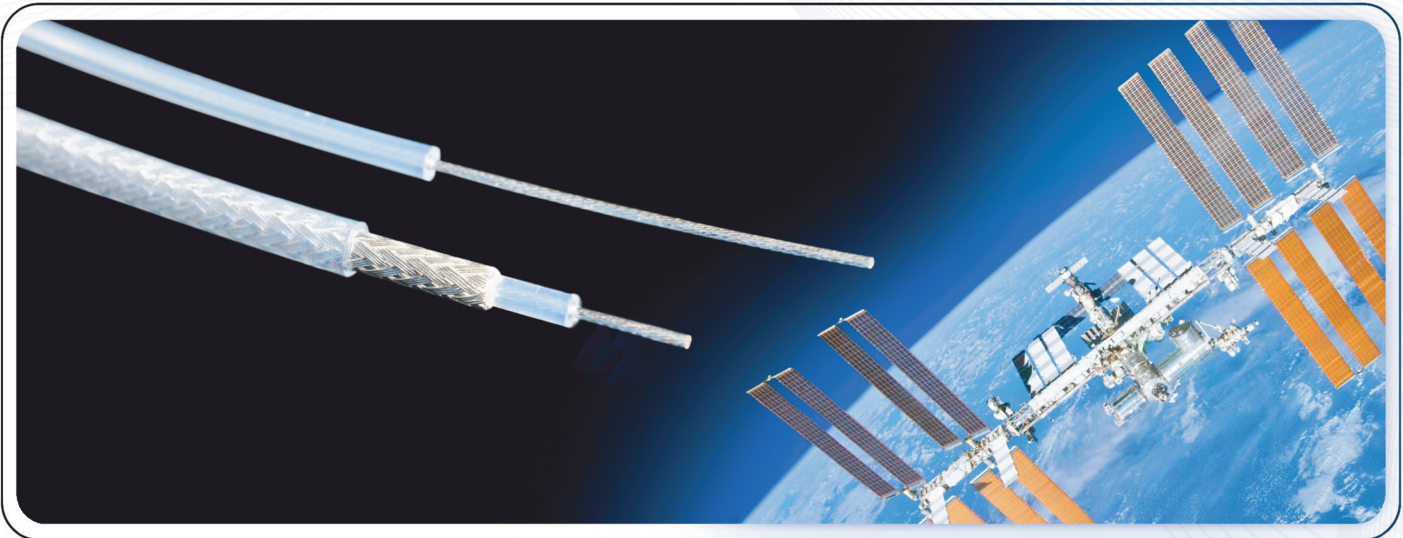




# HIGH VOLTAGE WIRE

Up to 18kVDC | -55°C to 200°C | FEP Insulation | Shielded & Non-Shielded



**Teledyne Reynolds** is a trusted supplier of high voltage wire and cable products for many space applications, from low Earth orbit to the extreme environmental conditions of deep space.

The heritage and design experience that Teledyne Reynolds offers in meeting the demanding requirements imposed on high voltage interconnection systems for space applications is unsurpassed.

Teledyne Reynolds range of High Voltage Wire has performed successfully on launchers, satellite electric propulsion, payload and scientific instrument applications.

## Product Features:

- Excellent dielectric strength FEP Insulation - Small in diameter, volume and bend radius
- Excellent 'Red Plague' Resistance - 3µm silver plating
- Excellent outgassing properties - Inherently low outgassing materials
- Excellent chemical resistance - FEP is chemically inert and resistant to virtually all chemicals
- Excellent electrical properties - Cu-OF (Oxygen Free High Conductivity) Copper conductor



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## Wire Options Available

Teledyne Reynolds Reference	Voltage Rating kV DC	Conductor			Insulation		Shielding	Jacket		Weight gm/m
		AWG	Strands	Current Rating	Material	Diameter mm	AWG	Material	Diameter mm	
503-0018	18	26	19/38	2.5A	FEP	1.3	38	FEP	2.2	11.9
503-0019	18	26	19/38	2.5A	FEP	1.3	N/A	N/A	N/A	3.72

## Conductor Tests:

<b>Elongation</b>	TESTED IAW ESCC3901 PARA 11
<b>Resistance</b>	TESTED IAW ESCC3901 PARA 9.5
<b>Plating Thickness</b>	TESTED IAW ESCC3901 PARA 5.3.2
<b>Strand Diameter</b>	TESTED IAW ESCC3901 PARA 9.3
<b>Plating Continuity</b>	TESTED IAW ESCC3901 PARA 9.4.1(a)
<b>Wrap Test</b>	TESTED IAW ESCC3901 PARA 9.4.1(b)

## Wire Tests:

<b>INSULATION RESISTANCE</b>	TESTED IAW ESCC3901 PARA 9.8
<b>STRIPPING CAPABILITY</b>	TESTED IAW ESCC3901 PARA 9.9
<b>ACCELERATED AGEING</b>	TESTED IAW ESCC3901 PARA 9.12
<b>WRAP TEST</b>	TESTED IAW ESCC3901 PARA 9.13
<b>VOLTAGE TEST</b>	TESTED IAW ESCC3901 PARA 9.14
<b>SHRINKAGE</b>	TESTED IAW ESCC3901 PARA 9.15
<b>BLOCKING</b>	TESTED IAW ESCC3901 PARA 9.16
<b>COLD BEND</b>	TESTED IAW ESCC3901 PARA 9.17
<b>CUT THROUGH RESISTANCE</b>	TESTED IAW ESCC3901 PARA 9.18
<b>NOTCH RESISTANCE</b>	TESTED IAW ESCC3901 PARA 9.19
<b>SURFACE RESISTANCE</b>	TESTED IAW ESCC3901 PARA 9.22
<b>ABRASION RESISTANCE</b>	TESTED IAW ESCC3901 PARA 9.23
<b>SOLDERING SHRINKAGE</b>	TESTED IAW ESCC3901 PARA 9.24
<b>OVERLOAD RESISTANCE</b>	TESTED IAW ESCC3901 PARA 9.27
<b>LONG TERM AGEING</b>	TESTED IAW ESCC3901 PARA 9.28
<b>ANTHONY &amp; BROWN</b>	TESTED IAW ESCC3901 para. 9.10
<b>SOLDERABILITY</b>	TESTED IAW ESCC3901 para. 9.25
<b>SPARK TEST</b>	TESTED IAW ESCC3901 para. 9.6
<b>LOW Ohm RESISTANCE</b>	TESTED IAW ESCC3901 para. 9.5
<b>EXTERNAL VISUAL INSPECTION</b>	TESTED IAW ESCC3901 PARA 9.1
<b>WEIGHT</b>	TESTED IAW ESCC3901 PARA 9.2
<b>DIMENSIONS</b>	TESTED IAW ESCC3901 PARA 9.3

To learn more about Teledyne Reynolds Space Assured Wire and Connector products, please visit:

[www.teledynereynolds.co.uk](http://www.teledynereynolds.co.uk)