

# TWINLINK®

HIGH TEMPERATURE  
CONTROLLED IMPEDANCE TWISTED PAIR CABLES  
-90°C TO +260°C



HIGH TEMPERATURES  
CONTROLLED IMPEDANCE  
LOW SIGNAL ATTENUATION  
ELECTROMAGNETIC PROTECTION  
COMPACT SIZE  
REDUCED LINEAR WEIGHT



**TWINLINK®**  
*Data transmission  
in extreme conditions*

4 impedances available: 50/ 50/75/100 Ω



**CGP**  
CABLES FOR GLOBAL  
PERFORMANCE

# TWINLINK®

## HIGH TEMPERATURE CONTROLLED IMPEDANCE TWISTED PAIR CABLES -90°C TO +260°C

### PRODUCT DESCRIPTION

<b>Conductor</b>	Silver-plated copper core
<b>Insulation</b>	Fluoropolymer FEP or PFA
<b>Screen</b>	Silver-plated copper braid
<b>Sheath</b>	Fluoropolymer FEP or PFA

### ELECTRICAL CHARACTERISTICS

<b>Impedances</b>	50 Ω / 75 Ω / 100 Ω / 120 Ω
<b>Operating voltage</b>	< 600 V

### ELECTROMAGNETIC PROTECTION

Excellent electromagnetic protection  
Protection screen by CuAg braid with 91% coverage

### THERMAL CHARACTERISTICS

<b>Operating temperature</b>	
<b>TWINLINK® FP</b>	-60°C/+200°C
<b>TWINLINK® FA</b>	-90°C/+260°C

### MECHANICAL CHARACTERISTICS

Excellent abrasion resistance

### CHEMICAL CHARACTERISTICS

Excellent oil, hydrocarbon and chemical and biological agent resistance

**TWINLINK®** are controlled impedance paired cables that can withstand high temperatures. This range has been developed in our research centre with the electromagnetic compatibility and data transmission expertise of our engineers. **TWINLINK®** provides optimum signal transmission in extreme use conditions.

The **TWINLINK®** range is a true concentration of innovation with outstanding advantages: extreme temperature resistance, excellent electromagnetic protection, compact size, reduced linear weight, excellent abrasion resistance and excellent chemical resistance. **TWINLINK®** is used in cutting-edge applications in the defence and aerospace industries.

There are two **TWINLINK®** versions - FP et FA - and four different impedances:

**TWINLINK® FP** in fluoropolymer FEP for use -60°C/+200°C

**TWINLINK® FA** in fluoropolymer PFA for use -90°C/+260°C

We can also design miniature models in expanded PTFE.



### SIGNAL TRANSMISSION PROPERTIES

Impedance	50 Ω	75 Ω	100 Ω	120 Ω
<b>Tolerance</b>	+/- 5 Ω	+/- 8 Ω	+/- 10 Ω	+/- 12 Ω
<b>Max. attenuation at 20 MHz</b>	30 dB/100 m	15 dB/100 m	5 dB/100 m	4 dB/100 m
Transfer impedance at 1 MHz	5 to 25Ω/m			
Min. insulation resistance	> 1 500 MΩ.km			
Working capacity	40 to 90 pF/m			
Wave propagation speed	66 to 90%			
Operating voltage	< 600 V			

✓ Contact us to define with our sales engineers the product best suited to your application.

### DIMENSIONS AND LINEAR WEIGHT

AWG	Nominal stranding	Impedance 50 Ω		Impedance 75 Ω		Impedance 100 Ω		Impedance 120 Ω	
		Nom. diameter of the cable (mm)	Linear weight (kg/km)	Nom. diameter of the cable (mm)	Linear weight (kg/km)	Nom. diameter of the cable (mm)	Linear weight (kg/km)	Nom. diameter of the cable (mm)	Linear weight (kg/km)
AWG 26	19 x 0.10	2.3	13.0	2.8	15.4	3.7	23.3	4.4	30.9
AWG 24	19 x 0.13	2.7	16.1	3.4	21.5	4.4	30.9	5.3	51.2
AWG 22	19 x 0.16	3.2	22.0	4.1	30.3	5.3	51.2	6.5	70.3



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