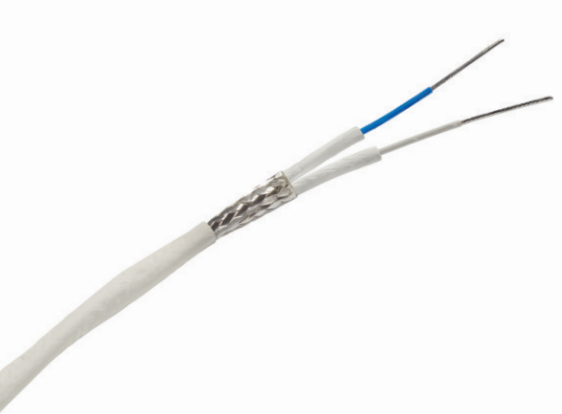


GORE® CAN Bus Cables (Controlled Impedance, 120 Ohms)



Suitable for today's faster digital networks, Gore's controlled-impedance cables ensure high-quality signals for high data rate transmission up to 1 GHz. They provide versatile protection to shield them from extreme mechanical and environmental impact (Table 1). These cables are built to perform accurately, reliably and securely over the aircraft's lifespan.

With a compact footprint, Gore's CAN Bus cables are 40% smaller than alternative cable designs, which makes them fundamentally lighter. This reduced diameter enables better flexibility and a smaller bend radius for trouble-free installation in tight aircraft areas (Figure 2).

Typical Applications

- Avionics networks
- Cabin management systems
- Controller area network
- Digital video systems
- Serial buses

Standards Compliance

- ABD0031 (AITM 2.0005); BSS7230; FAR Part 25, Appendix F, Part I: Flammability
- ABD0031 (AITM 3.0005); BSS7239: Toxicity
- ABD0031 (AITM 3.0008B); BSS7238; FAR Part 25, Appendix F, Part V: Smoke Density
- ANSI/NEMA WC 27500: Environmental Testing, Jacket and Marking
- SAE AS4373™: Test Methods for Insulated Electric Wire (Contact Gore for available data)

Table 1: Cable Properties

Electrical

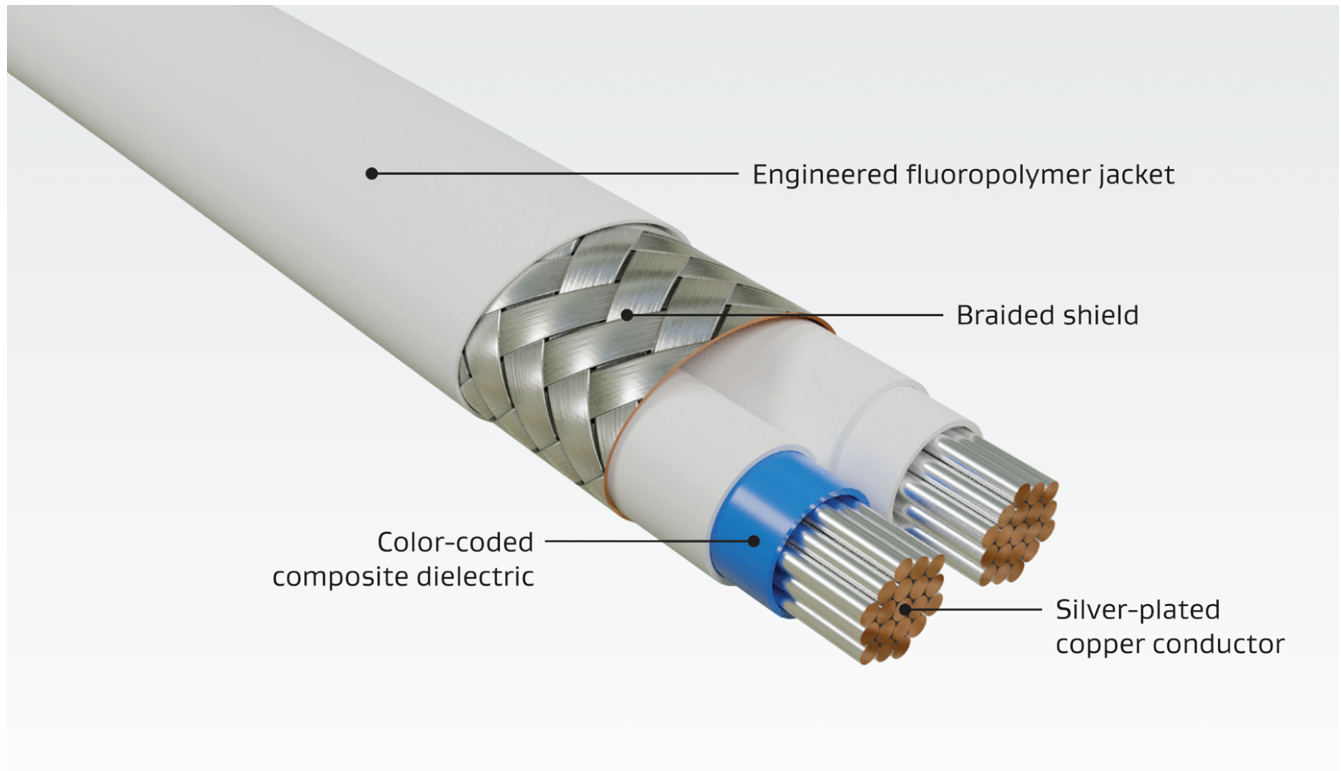
Property	Value
Standard Impedance Ohms	120 ± 10
Typical Operating Voltage V	< 15
Nominal Velocity of Propagation %	80
Nominal Time Delay ns/m (ns/ft)	4.10 (1.25)
Capacitance pF/m (pF/ft)	42.0 (12.8)
Dielectric Withstanding Voltage Vrms	
Conductor-to-Conductor	1500
Conductor-to-Shield	1000

Mechanical / Environmental

Property	Value
Jacket Material	Engineered Fluoropolymer
Jacket Color	White (Laser Markable)
Conductor	Silver-Plated Copper/SPC Alloy
Conductor Color-Coding	Blue/White
Dielectric Material	ePTFE/PTFE
Temperature Range °C	-65 to +200

GORE® CAN Bus Cables (Controlled Impedance, 120 Ohms)

Figure 2: Compact Footprint



Cable Preparation

GORE® CAN Bus Cables include an inverted dielectric design that enables easier wire preparation and insertion in smaller connector systems.

Standard 120-ohm primary wires have a much larger diameter due to high impedance and typically will not fit into smaller holes unless wires are insulated with thin heat shrink. However, Gore's unique design eliminates the need to remove several inches of insulation from the end and apply heat shrink to fit wires into smaller holes.

The inverted dielectric layers can be stripped off using sharp mechanical strippers set at the next largest AWG size. Carefully cut the outer layers and use your fingertips to pull off gently. For more information regarding cable preparation, please contact a Gore representative.

Contact-Connector Options

GORE® CAN Bus Cables are designed to fit a variety of high-speed aerospace and defense connector systems and backshells such as ARINC and MIL-STD-38999 with size 8 and 22D contacts. Please contact the specific manufacturer such as Amphenol® and Glenair® for exact part numbers, tooling information, and termination instructions.

Table 2: Cable Characteristics

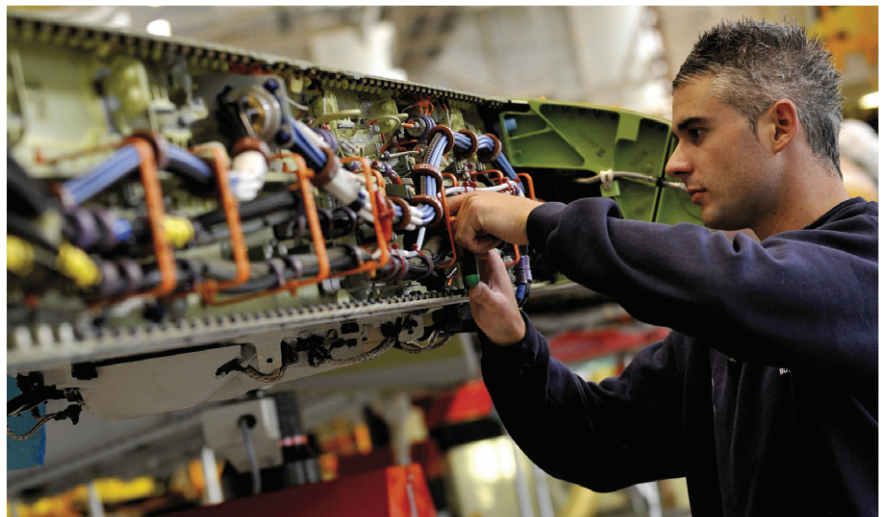
Gore Part Number	AWG Size (Stranding)	Nominal Outer Diameter mm (in)	Minimum Bend Radius mm (in)	Nominal Weight kg/km (lb/1000 ft)	Typical Insertion Loss dB/30 m (100 ft)			
					100 MHz	200 MHz	500 MHz	1 GHz
GSC-03-85752-22D	22 (19/34)	5.1 (0.20)	25.5 (1.00)	28.0 (18.82)	5.6	8.5	13.5	19.0
GSC-03-85752-24D	24 (19/36)	4.2 (0.17)	21.0 (0.83)	23.0 (15.46)	6.5	10.0	16.0	22.0
GSC-03-85752-26D	26 (19/38)	3.5 (0.14)	17.5 (0.69)	15.4 (10.35)	8.0	12.0	18.0	24.0

Ordering Information

GORE® CAN Bus Cables are available in standard sizes (Table 2). Visit gore.com/cable-distributors for the list of distributors. In addition, visit gore.com/hdrsamplerflyer regarding Gore’s full inventory of sample products and lead times.

For more information or to discuss specific characteristic limits and application needs, please contact a Gore representative.

With a compact footprint, Gore’s CAN Bus cables enable better flexibility and a smaller bend radius for trouble-free installation in tight aircraft areas.



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