

GF324J-CANB

24 AWG CAN BUS CABLE W/GROUND



INNOVATIVELY DESIGNED CAN BUS

The GF324J-CANB is a laser wire markable, Aerospace-grade CAN Bus designed as a 120 ohm Twinax featuring Nickel-plated, HSCA conductors and a CAN Bus ground.

As a 120Ω Twinax cable, achieving 120 ohms between conductors requires thicker insulation, which creates contact extraction problems. When insulation OD exceeds contact OD, termination becomes difficult. GIGAFLIGHT solved this through innovative dual-wall insulation design. The first layer, a thin-wall, high-temp fluoropolymer, maintains an OD smaller than the contact size for easy extraction. The second layer, foamed fluoropolymer, provides wire separation while maintaining precise 120Ω impedance control throughout the cable. During termination, a section of foam insulation is selectively removed to provide contact access. The dual-wall approach delivers an additional benefit: the solid inner insulation eliminates insulation creep back, a common problem with all-foam designs.

CABLE CONSTRUCTION

1	Conductors	24 AWG Stranded, Nickel-plated HSCA
2	Inner Insulation	Solid, High-temp Fluoropolymer
	Color Code	Dark Blue, White
3	Outer Insulation	Foamed, High-temp Fluoropolymer
	Color Code	Natural, Natural
4	Filler	FEP
5	CAN Bus GND	24 AWG Stranded, Nickel-plated HSCA
6	Insulation	Black ETFE
7	Binder	PTFE Tape
8	Shield	TPC Woven Strip Braid (92% Min Coverage)
9	Jacket	White, Laser-markable ETFE

ENVIRONMENTAL & MECHANICAL PROPERTIES

Outer Diameter	0.142" (3.56 mm)
Weight	17.7 lbs/1000 ft (26.3 kg/1000 m)
Operating Temperature	-55°C to +150°C
Minimum Bend Radius	0.76" (19.3 mm)

ELECTRICAL PROPERTIES

Impedance	120Ω	
Capacitance	11.5 pF/ft (37.7 pF/m)	
Velocity of Propagation	75%	
DC Resistance	28.1 Ω/1000 ft (92.2 Ω/1000 m)	
Shield DCR	13.3 Ω/1000 ft (43.6 Ω/1000 m)	
Dielectric Voltage Rating	1.5 kV RMS	
Attenuation (+25°C)	Frequency	dB/100 ft (m)
	1 MHz	1.15 (3.8)
	6 MHz	2.3 (7.5)
	10 MHz	3.11 (10.2)
	100 MHz	8.51 (27.9)



Don't forget to download the
CAN Bus stripping instructions

Direct URL: bit.ly/3Jwmy5y

GIGAFLIGHT's aerospace cables are designed to be resistant to Skydrol, will meet requirements of RoHS & REACH, & meets Federal Aviation Regulations 14 CFR part 25.869 (a)(4), Appendix F part I (a)(3).

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