

GF120T-24CANB

24 AWG, GARMIN APPROVED CAN BUS CABLE



INNOVATIVELY DESIGNED CAN BUS

The GF120T-24CANB is a laser wire markable, Aerospace-grade CAN Bus, approved by Garmin, for use with Garmin's CAN Bus System architectures. CAN Bus is designed to be a 120 ohm Twinax, which means the insulation thickness is increased to achieve 120 ohms between the conductors. The increased thickness creates an issue with contact extraction because the insulation OD is larger than the contact. With GIGAFLIGHT's CAN Bus, we have solved this issue by using a dual-wall insulation design.

The first layer of insulation is a thinner wall high temp PFA with a finished diameter less than the contact OD. The second layer of insulation is a foamed FEP that provides the separation between the wires to maintain a 120 ohms-controlled impedance throughout. A section of the foamed insulation is removed in the termination process to provide access for contact removal. An added benefit of a dual-wall construction is that the solid insulation eliminates insulation creep back, a common issue with an all foam insulation design.

CABLE CONSTRUCTION

1	Conductors	24 AWG Stranded Silver-plated HSCA
2	Inner Insulation	Solid, High-temp Fluoropolymer
	Color Code	Blue, White
3	Outer Insulation	Foamed, High-temp Fluoropolymer
	Color Code	White, White
4	Filler	FEP
5	Binder	PTFE Tape
6	Shield	TPC Woven Strip Braid (92% Min Coverage)
7	Jacket	White, Laser-markable, Tefzel

ENVIRONMENTAL & MECHANICAL PROPERTIES

Outer Diameter	0.142" (3.56 mm)
Weight	17.5 lbs/1000 ft (26.04 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	1.0 (3.3)
	6 MHz	2.0 (6.6)
	10 MHz	2.7 (8.9)
	100 MHz	7.4 (24.3)



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).

