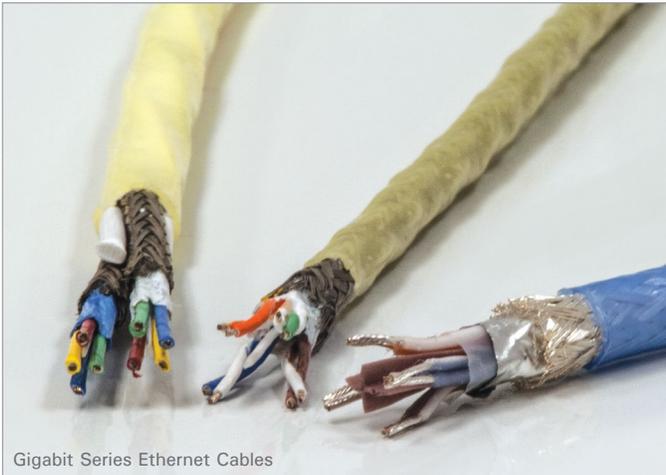
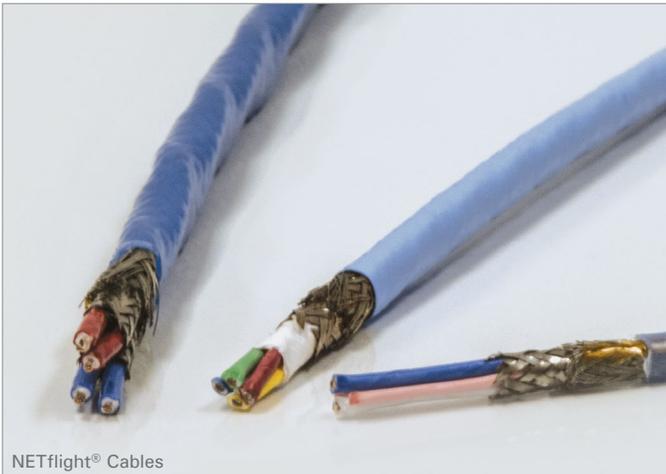


Data Cables



Gigabit Series Ethernet Cables



NETflight® Cables



Maxflite™ Cables

INTRODUCTION

Carlisle Interconnect Technologies (CarlisleIT) manufactures a wide variety of high performance data cables designed to meet the needs of the aerospace, defense, military, ground transportation, industrial and RF communication markets. Typical applications include: Ethernet backbone, avionics, high-definition video, cabin management systems, in-flight entertainment and databus applications.

Gigabit Series Ethernet cables have been developed in a wide variety of configurations to provide 1 and 10 Gb performance in the most demanding applications. Our proven NETflight® Ethernet cables in single pair, dual pair and quadrx configurations are widely used throughout the aerospace industry and provide superior electrical and mechanical performance. Our Maxflite™ series provides high speed performance for the popular video and data bus protocols: HDMI, DVI, USB, Firewire and CAN bus. In addition to the standard protocols, when a custom solution is required, CarlisleIT has experienced on-site engineering to design a cable to meet your needs.

Pair our Gigabit cables with an octax connector for an ultra high-speed assembly.

FEATURES & BENEFITS

- » Exceptional electrical and mechanical performance
- » Operating performance from -55°C to 200°C
- » Meets the requirements of aerospace and other harsh environments including FAR 25.853 flammability and Boeing/Airbus smoke and toxicity requirements
- » Multiple configurations to meet the needs of almost any application
- » Lightweight versions to address weight and space requirements
- » Advanced technologies such as Bonded-Pairs and an innovative X-Web reduce cross talk and ensure installable performance

Gigabit Series

	Gigabit-10HP™	Gigabit-Plus™		Gigabit-Flexx™		Gigabit-STP™	Gigabit-S2Q™		
	24 AWG	24 AWG	26 AWG	24 AWG	26 AWG	26 AWG	24 AWG	26 AWG	
Part Number*	MX10G-24HP	MX10G-24	MX10G-26	MX10G-24FLX	MX10G-26FLX	NF26-6BSTP-100	NF24-2Q100	NF26-2Q100	
Impedance (ohms)	100	100		100		100	100		
DC Resistance (100 ft)	2.76 ohms	2.76 ohms	4.38 ohms	2.76 ohms	4.38 ohms	4.38 ohms	2.76 ohms	4.38 ohms	
Velocity of Propagation	70%	70%		70%		77%	80%		
Attenuation	100 MHz (dB/100 m)	22.0	24.0	29.0	26.4	31.6	38.0	26.2	30.5
	250 MHz (dB/100 m)	32.0	40.0	48.0	-	-	62.0	-	-
	500 MHz (dB/100 m)	48.0	-	-	-	-	90.6	-	-
Weight: lbs/1000 ft (Kg/1000 m)	55 (82)	50 (74)	35 (52)	35 (52)	28 (42)	50 (74)	58 (86)	45 (68)	
Size: in. (mm)	0.290 (7.36)	0.270 (6.86)	0.220 (5.59)	0.245 (6.22)	0.195 (4.95)	0.300 (7.62)	0.305 (7.75)	0.265 (6.73)	
Min. Bend Radius: in. (mm)	0.50 (12.70)	2.00 (50.80)	1.75 (44.45)	1.00 (25.40)	0.75 (19.05)	3.00 (76.20)	3.05 (77.50)	2.65 (67.30)	
Operating Temperature	-55 to 150°C	-55 to 150°C		-55 to 200°C		-55 to 150°C	-55 to 150°C		
Other	RoHS Compliant	RoHS Compliant		RoHS Compliant		RoHS Compliant	Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity		
	Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity	Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity		Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity		Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity			

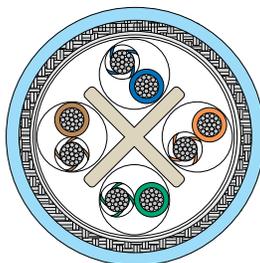
*Highlighted part numbers above are designed for use with CarlisleIT's Octax® connector. Reference Ultra High-Speed Interconnect Solutions brochure.

CABLE CROSS SECTIONS

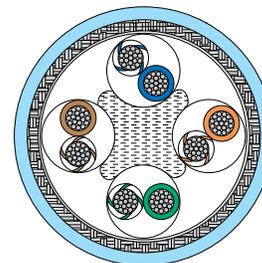
Gigabit-10HP™



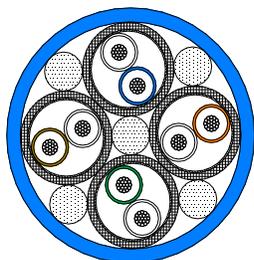
Gigabit-Plus™



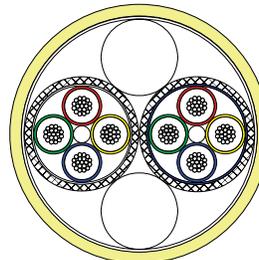
Gigabit-Flexx™



Gigabit-STP™



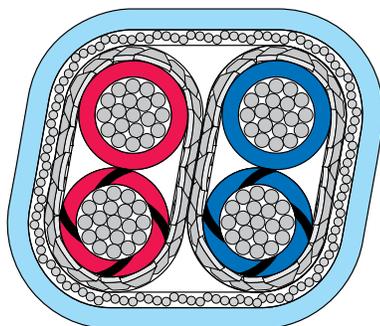
Gigabit-S2Q™



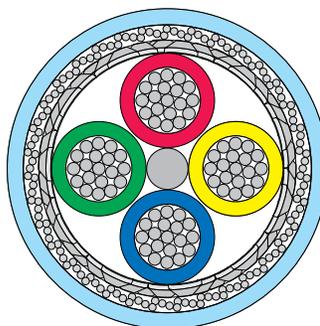
	100 Base-T – Twisted Pair		100 Base-T – Shielded Quad			100 Base-T – Single Twisted Pair		
	22 AWG	24 AWG	22 AWG	24 AWG	26 AWG	22 AWG	24 AWG	26 AWG
Part Number	NF22P100	NF24P100	NF22Q100	NF24Q100	NF26Q100	NF22T100	NF24T100	NF26T100
Impedance (ohms)	100		100			100		
Velocity of Propagation	80%		80%			80%		
Attenuation at 100 MHz (dB/100 ft)	5.6	6.0	6.4	8.0	9.3	5.8	6.6	8.5
Weight: lbs/1000 ft (Kg/1000 m)	43 (64)	35 (51)	35 (51)	25 (37)	18 (39)	26 (38)	18 (26)	15 (22)
Size: in. (mm)	0.195 x 0.290 (4.95 x 7.37)	0.175 x 0.270 (4.45 x 6.86)	0.190 (4.83)	0.163 (4.14)	0.137 (3.45)	0.180 (4.57)	0.145 (3.68)	0.132 (3.35)
Bend Radius: in. (mm)	1.95 (49.5)	1.75 (44.5)	1.90 (48.3)	1.63 (41.4)	1.37 (34.5)	1.80 (45.7)	1.45 (36.8)	1.32 (33.5)
Operating Temperature	-55 to 150°C		-55 to 150°C			-55 to 150°C		
Other	Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity		Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity			Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity		

CABLE CROSS SECTIONS

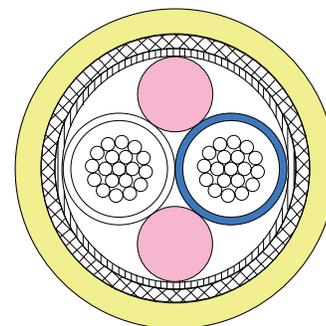
100 Base-T – Twisted Pair



100 Base-T – Shielded Quad



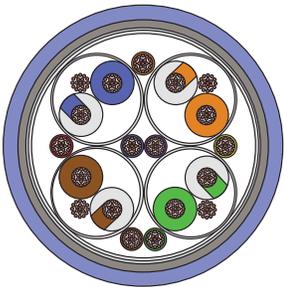
100 Base-T – Single Twisted Pair



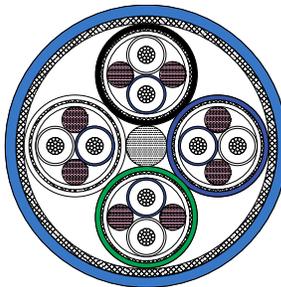
	HDMI (1.3)	DVI	USB 2.0	IEEE 1394 Firewire	CAN Bus
Part Number	1586-305	24463/05099X-8(LD)	28433/02171LX-4	24483/03063LX-6(LD)	CAN24TST120
Impedance (ohms)	100	100	90	110	120
Velocity of Propagation	70%	75%	69%	79%	79%
Attenuation (dB/100 ft)	15 at 300 MHz	N/A	14 at 100 MHz	11 at 200 MHz	1 at 1 MHz
	36 at 1.6 GHz		24 at 200 MHz	17 at 400 MHz	2 at 6 MHz
	59 at 4.1 GHz		36 at 400 MHz	24 at 800 MHz	2.7 at 10 MHz
Cable Weight: lbs/1000 ft (Kg/1000 m)	72 (107)	105 (156)	15 (23)	78 (116)	14 (20)
Cable Diameter: in. (mm)	0.315 (8.00)	0.40 (10.16)	0.140 (3.56)	0.34 (8.64)	0.142 (3.61)
Min. Bend Radius: in. (mm)	1.89 (48)	4.0 (102)	1.40 (36)	3.40 (86)	1.42 (36)
Operating Temperature	-55 to 150°C				
Other	Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity	Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity	Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity	Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity	Meets FAR 25.853 and Boeing/Airbus Smoke and Toxicity

CABLE CROSS SECTIONS

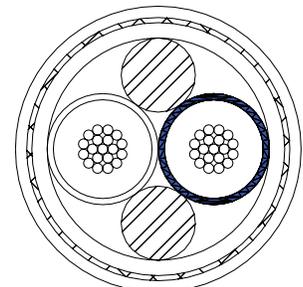
HDMI (1.3)



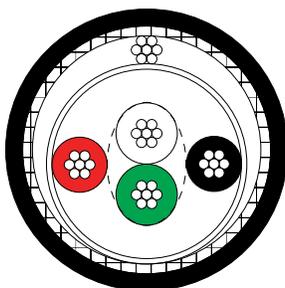
DVI



CAN Bus



USB 2.0



IEEE 1394 Firewire

