

# HIGH-TEMPERATURE TOLERANT ThermaRex HT Interconnect Ecosystem



## ArmorLite CF Lightweight High-Temperature Braided Shielding 103-126

THERMAREX™ HT



P/N 103-126

How To Order ArmorLite CF		
Sample Part Number	103-126	-024
Series / Basic Part No.	103-026 ArmorLite CF lightweight braided shielding	
Dash No.	See Table I	

- Stainless steel over copper microfilament EMI shield
- High temperature -80°C to 300°C
- Tested to 400°C for 1000 hours with minimal change in resistance
- Corrosion / harsh environment resistant
- 1000 hour salt spray testing completed
- 70% reduced weight vs. standard braid
- Superb electrical resistance and shielding performance

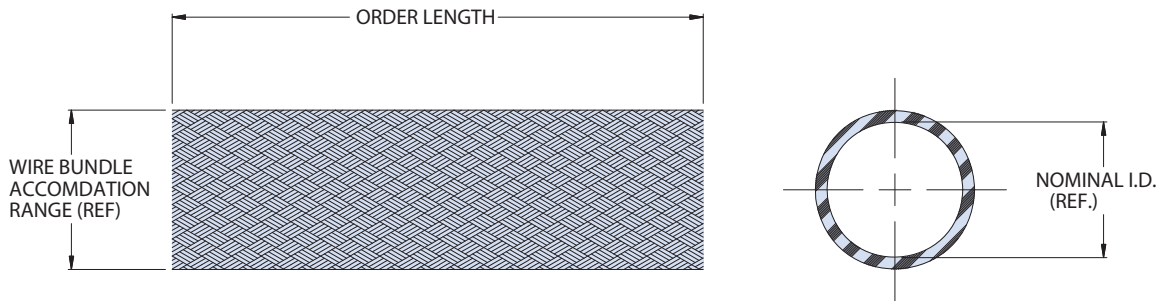


Table I - Dash No.

Dash No.	Nominal I.D. (ref.)		Ref. Wire Bundle Range (nominal)		Weight (approx.)		Resistance (approx.)	
	In.	mm	In.	mm	grams/ft	grams/m	mΩ/ft.	mΩ/m
001	.031	.8	.016	.4	-	-	-	-
			.047	1.2				
002	.062	1.6	.040	1.0	-	-	-	-
			.075	1.9				
004	.125	3.2	.093	2.4	1.4	4.6	12.0	39.5
			.140	3.5				
008	.250	6.4	.125	3.2	2.8	9.2	7.8	25.5
			.312	7.9				
012	.375	9.5	.250	6.4	-	-	-	-
			.406	10.3				
016	.500	12.7	.375	9.5	5.5	18.0	5.3	17.4
			.560	14.2				
020	.625	15.9	.375	9.5	-	-	-	-
			.700	17.8				
024	.750	19.1	.500	12.7	7.6	25.0	3.6	11.8
			.800	20.3				
032	1.000	25.4	.780	19.8	-	-	-	-
			1.100	27.9				
040	1.250	31.8	.938	23.8	-	-	-	-
			1.312	33.3				
048	1.500	38.1	1.187	30.1	-	-	-	-
			1.590	40.4				
064	2.000	50.8	1.312	33.3	-	-	-	-
			2.090	53.1				

## ArmorLite CF High-Temperature Braided Shielding 103-126



ArmorLite CF was laboratory-tested up to 400°C for 1000 hours, with minimal change in resistance. The complete Test Report document *GT-20-766, ArmorLite CF Braid (103-126-016) Thermal Shock and Endurance* is available on [glenair.com](http://glenair.com)

THERMAREX<sup>TM</sup> HT

ArmorLite CF Braid (103-126-016) Pull Test		
Test Requirement	Sample	Pull Test (lbf)
IAW 6059 Test Method 404. Samples will be installed onto tensile tester and put under tension at a rate of 25mm/min.	001	308
	002	246
	003	400
	<b>Avg.</b>	<b>318.0</b>

ArmorLite CF Braid (103-126-016) Thermal Shock Test -150°C to 300°C; 10 cycles, 30 minute durations				
Test Requirement	Sample	Pre-Test Resistance (mΩ/ft)	Post-Test Resistance (mΩ/ft)	Post-Test Pull (lbf)
IAW EN 6059 Test Method 308. Assemblies will undergo thermal cycling from -150°C to 300°C for 30 minute durations until 10 cycles have been completed at each temperature.	004	4.565	4.562	322
	005	4.523	4.512	313
	006	4.545	4.655	317
	<b>Avg.</b>	<b>4.544</b>	<b>4.576</b>	<b>317.3</b>

ArmorLite CF Braid (103-126-016) Thermal Endurance 300°C for 1000 hours				
Test Requirement	Sample	Pre-Test Resistance (mΩ/ft)	Post-Test Resistance (mΩ/ft)	Post-Test Pull (lbf)
IAW EN 6059 Test Method 302. Samples min. length of 600mm. Samples undergo thermal endurance for 1000 hours at 300°C. Temperature tolerances will be ±5°C of the maximum temperature as stated in EN 6059-302.	007	4.646	4.226	254
	008	4.543	4.544	274
	009	4.554	4.899	259
	<b>Avg.</b>	<b>4.581</b>	<b>4.556</b>	<b>262.3</b>

ArmorLite CF Braid (103-126-016) Thermal Endurance 400°C for 1000 hours				
Test Requirement	Sample	Pre-Test Resistance (mΩ/ft)	Post-Test Resistance (mΩ/ft)	Post-Test Pull (lbf)
IAW EN 6059 Test Method 302. Samples min. length of 600mm. Samples undergo thermal endurance for 1000 hours at 400°C. Temperature tolerances will be ±5°C of the maximum temperature as stated in EN 6059-302.	010	4.638	4.313	2.18
	011	4.606	4.653	175
	012	4.665	4.980	232
	<b>Avg.</b>	<b>4.636</b>	<b>4.649</b>	<b>208.3</b>

Resistance Testing IAW EN 3475 Test Method 301. Samples will be placed in chamber CE034 @ 20°C and will be attached to Micro-Ohmmeter with voltage probes spaced at a distance of 12" ±0.12". Samples will be tested at a current of 20 millivolts.

Complete Test Report GT-20-766, ArmorLite CF Braid (103-126-016) Thermal Shock and Endurance available on [glenair.com](http://glenair.com)