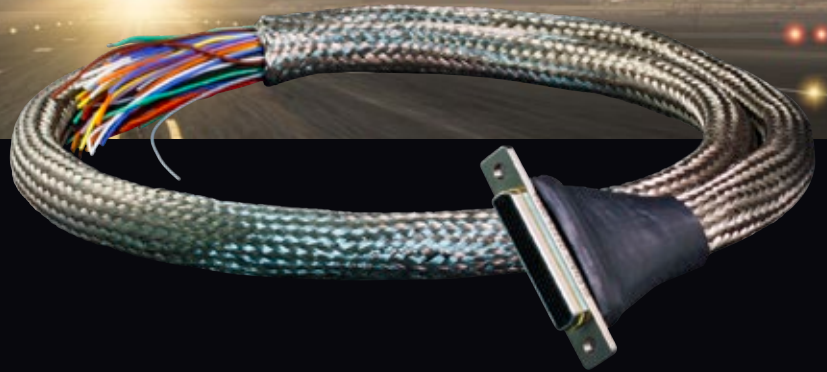
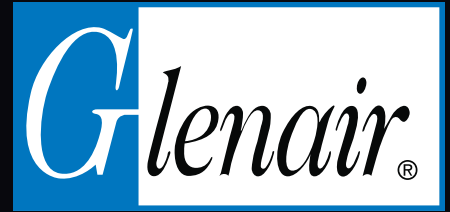


MISSION-CRITICAL
INTERCONNECT
SOLUTIONS



Glenair
SIGNATURE SERIES

ArmorLite Microfilament EMI/RFI Shielding

Signature Interconnect Solutions for Commercial Aircraft



Microfilament nickel-clad expandable stainless steel EMI/RFI braided shielding



Save weight and total cost-of-ownership every time you fly! All-Up-Weight (AUW) has met its match: ArmorLite™ microfilament stainless steel braid saves significant weight compared to standard QQ-B-575/A-A-59569 EMI/RFI shielding, as well as competitor solutions such as 44 AWG NiCu. By way of comparison, 100 feet of 5/8 inch ArmorLite™ is more than four pounds lighter than standard shielding.

ArmorLite™ is an expandable, flexible, high-strength, conductive stainless steel microfilament braid material designed for use as EMI/RFI shielding in high-performance wire interconnect systems. ArmorLite™ is packaged in a wide range of formats including bulk expandable shielding, mesh tape, turnkey backshell shield sock assemblies, factory overbraiding, ground straps, HSTs, and more. ArmorLite™ offers superior temperature tolerance compared to other lightweight tubular braided shielding including microfilament composite technologies. New ArmorLite™ CF offers advanced

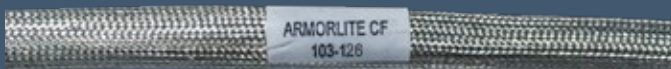
- Ultra-lightweight EMI/RFI braided sleeving for high-temperature applications -80°C to +260°C
- Microfilament stainless steel: 70% lighter than NiCu A-A-59569/QQB575
- Outstanding EMI/RFI shielding and conductivity
- ArmorLite™ CF with enhanced corrosion protection now available
- Superior flexibility and “windowing” resistance: 90 to 95% optical coverage
- 70,000 psi (min.) tensile strength
- Best performing metallic braid during lightning tests (IAW ANSI/EIA-364-75-1997 Waveform 5B)



ArmorLite™



ArmorLite™ 75% / 25% blend



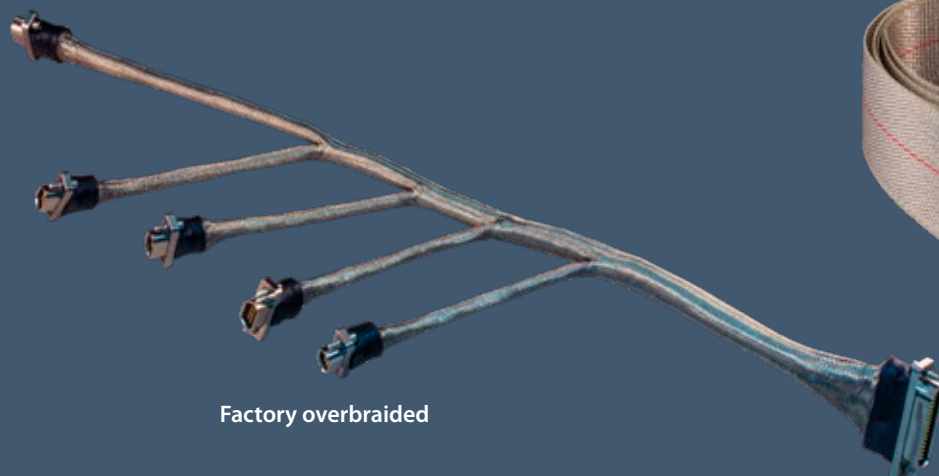
New enhanced corrosion resistance ArmorLite™ CF

corrosion protection compared to all other shielding types with comparable electrical performance due to its innovative combination of conductive copper filament and stainless steel cladding.

LIGHTWEIGHT, FLEXIBLE
ArmorLite™ Microfilament Braid
for EMI/RFI Shielding Applications



ARMORLITE™ SHIELDING SOLUTIONS AND PACKAGING



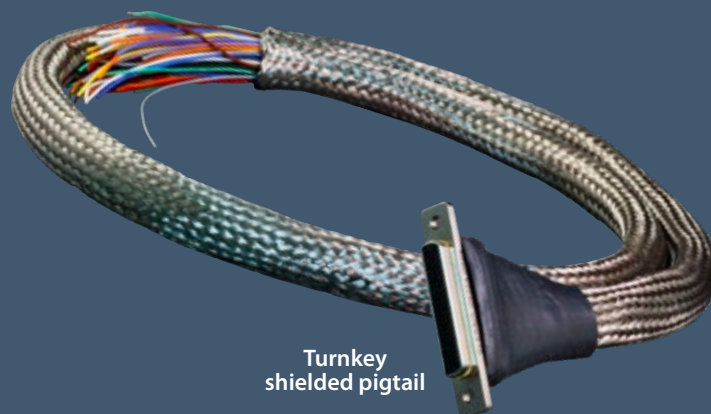
Factory overbraided



Mesh tape



Integrated shield sock



Turnkey shielded pigtail



MasterWrap



Bulk expandable shielding



Lightweight, flexible ground straps

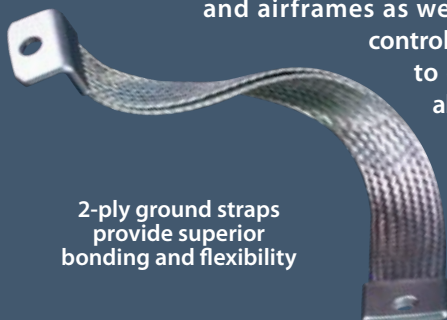
Ground Straps for electrostatic discharge, lightning strike and power equipment grounding



A single lightning strike can hit an aircraft with as much as 1,000,000 volts. Static electricity can charge an aircraft, particularly in cold and wet air, with enough electrical potential to result in a discharge that can ignite ground fueling equipment or fry avionics gear. Power generation systems (engines, alternators, starters, etc.) can also produce transient electrical current that can damage adjacent electronic systems.

Damage from these events is minimized and managed in aircraft through the use of electrical bonding. Flexible bonding straps are attached between equipment and airframes as well as between structural elements and flight control surfaces to conduct destructive electrical surges to ground or to bus bar components capable of absorbing significant amounts of transient voltage

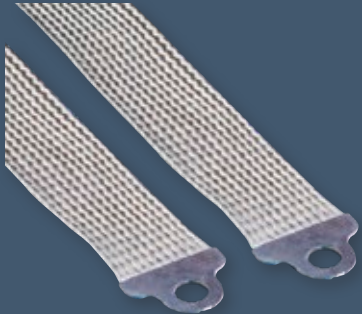
Glenair has designed and supplies a broad range of braided and solid material ground straps to both commercial and military aerospace customers. Our ground straps are exactly designed with appropriate conductive and dissipative materials for each application.



2-ply ground straps provide superior bonding and flexibility

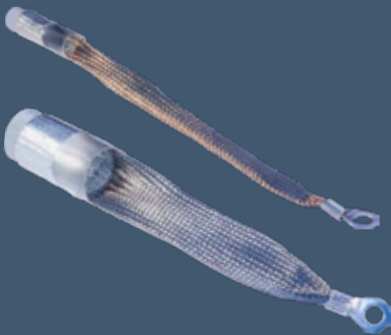
- Ultra-lightweight ground straps with highly conductive or dissipative performance
- Metal-clad microfilament braided solutions
- Significant contribution to weight reduction initiatives in commercial and military aircraft
- Heavy-duty variants for electrical potential grounding from engines, starters, and power units
- Fast turnaround on requests for unusual and build-to-print requirements

LIGHTWEIGHT ARMORLITE™ MICROFILAMENT GROUND STRAPS



- Ultra lightweight metal-clad stainless steel braid material
- Low-profile lug design and assembly
- Available in seven widths and any length
- Low electrical resistance and high temperature tolerance
- High conductivity-to-weight / material-cross-section ratio
- Corrosion resistant materials for life-of-system durability
- Bend cycle durability up to 250,000 cycles per EN4199-001

LARGE-DIAMETER, LIGHTWEIGHT ARMORLITE™ EWIS GROUNDING HSTS



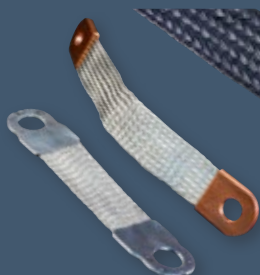
- Oversized heat shrink termination sleeves for grounding of long-run overbraided EWIS harnesses
- Manufactured in-house by Glenair (made in America)
- Fabricated from lightweight, highly flexible ArmorLite™ microfilament EMI/RFI braid material
- Weight reduction up to 70% lighter compared to legacy NiCu A-A-59569 / QQB575 materials

GROUND PLANE ADAPTER PLATE FOR USE WITH COMPOSITE THERMOPLASTIC PANELS

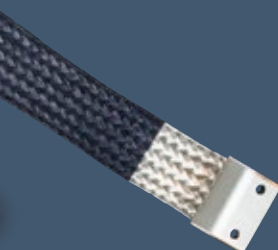


- Resolves connector-to-panel grounding issues in composite fuselage aircraft
- Fabricated from highly conductive tinned beryllium copper IAW AMS 4530 or ASTM B194 and ASTM B545
- Available for all popular aerospace connectors with straight and 90° ground attachments

FAST TURNAROUND ON UNUSUAL/BUILD-TO-PRINT REQUESTS



Hybrid braid materials and customizable lug material options



Specialized lug configurations including integrated bonding hardware and angled lugs



Heavy-duty braid and lug configurations



Round cross-section braid



Harsh environment and chemical-resistant ground strap jacketing

ADVANCED
PERFORMANCE
WIRE MANAGEMENT
SOLUTIONS



Flexible, lightweight wraparound
EMI/RFI shielding and abrasion
protection material



Tubular braided sleeving meets the broad range of EMC shielding and mechanical protection requirements of aircraft harness assemblies. But the need to apply shielding materials over already-installed aircraft wire and cable bundles requires new technology. Legacy self-wrapping cable braid has long been available for EMI/RFI applications and abrasion protection, albeit with poor performance due to its heavy weight, inflexibility, and “windowing,” which results in poor shielding performance.

MasterWrap™, a lightweight, easy-to-install, side-entry, self-wrapping shielding solution—available in conductive ArmorLite™ and now in abrasion-resistant Nomex®—solves these problems and more. MasterWrap™ is ideally suited for both long-run wire harness protection as well as spot coverage and maintenance of EWIS cable applications—all with outstanding weight reduction and ease-of-assembly. MasterWrap™ ArmorLite™ and MasterWrap™ Nomex® are qualified for use at major aircraft manufacturers for long cable runs, spot coverage, and repairs.

Material design provides uniform surface with limited interference to structures and clamps. Reduces kinking and windowing compared to full metal braid solutions for excellent shielding performance



Interwoven with high-temperature PEEK composite thermoplastic spring members ensure up to 95% optical / mechanical coverage

MASTERWRAP ARMORLITE

- Up to 70% weight reduction
- 500 hour salt spray corrosion resistance
- 50,000 cycle 90°–120° bend flex tested
- Temperature tolerant from -65°C to 200°C

MASTERWRAP NOMEX®

- Soft, abrasion resistant unbonded Nomex® yarn
- -60° to +240°C temperature range
- 90,000 PSI yield tensile strength
- Excellent chemical resistance; will not melt

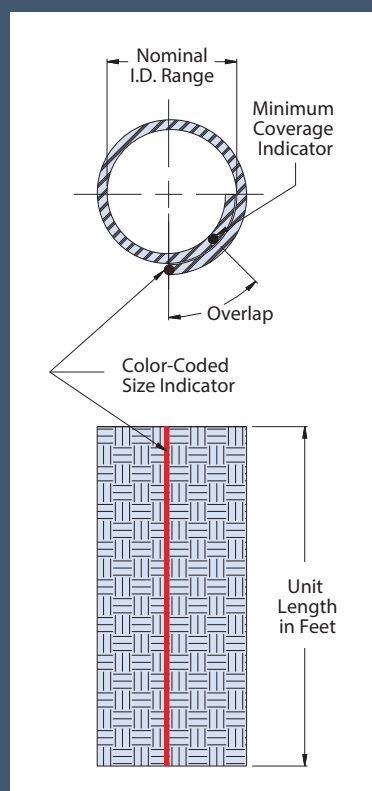
NEW MASTERWRAP™ WITH NOMEX®

MasterWrap™ Nomex® flexible, lightweight wraparound abrasion / thermal protection

for spot mechanical coverage and repair of wire harnesses

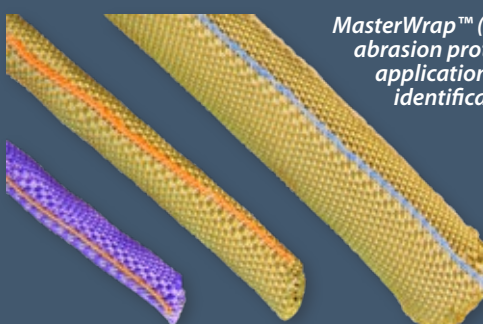


MASTERWRAP (NOMEX®): DIMENSIONAL INFORMATION • HOW TO ORDER



How To Order			
Sample Part Number	103-095	-024	GY
Basic No.	MasterWrap™ (Nomex®) material		
Dash No.	See Table I		
Color option	W = White R = Red GN = Green GY = Gray TN = Desert Tan OR = Orange Omit = for standard Black		

Table I								
Dash No	Nominal I.D. (Ref.)		Ref. Wire Bundle Range Nominal		Approx. Weight Grams/Ft.	Min. Pull Strength (lbs)	Size Indicator color code	Quantity feet/spool
	In.	mm	In.	mm				
004	.125	3.2	.093 .170	2.4 4.3	1.8	39	Black	50-500
008	.250	6.4	.170 .300	4.3 7.6	2.3	75	Brown	50-400
012	.375	9.5	.300 .406	7.6 10.3	3.2	94	Red	50-300
016	.500	12.7	.406 .520	10.3 13.2	3.7	116	Orange	50-250
020	.625	15.9	.520 .675	13.2 17.2	5.0	158	Yellow	50-200
024	.750	19.1	.675 .825	17.2 21.0	6.0	193	Green	50-100
032	1.000	25.4	.825 1.100	21.0 27.9	7.3	237	Blue	50-100
040	1.250	31.8	.938 1.312	23.8 38.3	10.0	TBD	Violet	50-75
048	1.500	38.1	1.187 1.590	30.1 40.4	11.0	TBD	Gray	50
064	2.000	50.8	1.812 2.090	33.0 53.1	12.2	TBD	White	50



MasterWrap™ (Nomex®) is the ideal solution for mechanical abrasion protection of wire bundle harnessing in aircraft applications. Available color selections allow for easy identification and labeling of wire circuitry.

NOTES

Product ordered in 1 foot increments, packaged in boxed spools. See Table I. Lengths of 1-49 feet will be packaged in individual polybags.

Materials:

Woven mesh - high temperature DuPont™ Nomex®; Monofilament - PEEK; Overlap tracer - high temperature DuPont™ Nomex® thread

DuPont™ and Nomex® are trademarks or registered trademarks of E.I. duPont de Nemours and Company.



MISSION-CRITICAL INTERCONNECT SOLUTIONS

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