



LIGHTWEIGHT

ArmorLite™ Microfilament Ground Straps—for Aircraft ESD, Lightning Strike and Other Applications

Lightning interaction mechanisms and protection techniques are well known disciplines in aircraft design. But innovations are still required, particularly in support of efforts to reduce the size, weight and assembly complexity of aircraft electrical systems. Lightweight Glenair technologies for spot grounding are broadly utilized for:

- Grounding airframe sections
- Dissipating static build-up in composite structures
- Dissipating lightning strike energy
- Grounding individual moving parts in complex equipment such as landing gear

ArmorLite™ microfilament braid offers 70+% weight savings over standard NiCu braid—plus advantages in virtually every category due to Glenair’s ability to fine-tune the makeup of the material cross-section (core, cladding and protective plating) to the exact requirements of each application. Glenair ArmorLite™ lightweight microfilament braids, and hybrid ArmorLite™ and nickel braids are now approved for use by every major airframe and equipment manufacturer.

CUSTOM CONFIGURATIONS AVAILABLE



Hybrid Materials



Bent Lugs



Heavy Duty

ARMORLITE™



GLENAIR BONDING ENGINEERS ARE EXPERTS IN GROUND STRAP OPTIMIZATION FOR:

- Weight and conductivity
 - Electrical resistance and high operating temperature (200°C)
 - Rapid heat distribution
 - Bend cycle durability up to 250,000 cycles per EN4199-001
 - Material aging and corrosion resistance
- Comprehensive test reports available

LIGHT-DUTY, LOW PROFILE ArmorLite™ Single-Layer ESD Grounding Strap 107-098



LOW-PROFILE ESD GROUNDING STRAPS, LIGHT AND MEDIUM DUTY

107-098 light-duty single-layer

107-099 medium-duty double-layer

How To Order				
Sample Part Number	107-098	-A	-12	-6
Grounding Strap	-098 = Single layer light duty ArmorLite -099 = Dual layer medium duty ArmorLite			
Material	A = ArmorLite microfilament stainless steel braid			
Width Code	(See Table II)			
Length	Dimension (L) in one inch increment			

Table II: Mechanical/Electrical Parameters for ArmorLite Material												
Width Code	A ± .03	C	R	D	E	T	Nom. Resistance mOhm/m* (AWG Equiv.)	Lug Junction Resistance mOhm	Weight gr/m*	Inductance nH/m (Ref. Only)	Test Current Amps**	Tensile Strength Lbf
12	.290 (7.37)	.150 (3.81)	.145 (3.68)	.042 (1.06)	.480 (12.19)	.016 (.41)	48 (22)	0.129	9.0	1277	37	130
20	.480 (12.19)	.200 (5.08)	.240 (6.10)	.042 (1.06)	.690 (17.53)	.016 (.41)	26 (19)	0.111	13.4	1170	52	216
24	.590 (14.99)	.260 (6.60)	.295 (7.49)	.042 (1.06)	.790 (20.06)	.016 (.41)	23 (18)	0.097	17.9	1116	62	219
32	.820 (2.83)	.390 (9.91)	.375 (9.53)	.052 (1.32)	.950 (24.13)	.021 (.53)	13 (16)	0.089	35.8	1047	127	483
40	.870 (22.10)	.390 (9.91)	.375 (9.53)	.052 (1.32)	.950 (24.13)	.021 (.53)	11 (15)	0.061	40.3	1034	141	524
48	1.080 (27.43)	.390 (9.91)	.375 (9.53)	.052 (1.32)	.950 (24.13)	.021 (.53)	8 (14)	0.054	53.8	983	162	590
64	1.330 (33.78)	.390 (9.91)	.375 (9.53)	.052 (1.32)	.950 (24.13)	.021 (.53)	6 (12)	0.047	71.7	936	208	723
for 107-098 double-layer straps												
48	1.080 (27.43)	.390 (9.91)	.375 (9.53)	.080 (2.03)	1.15 (29.21)	.042 (1.06)	4 (11)	0.054	107.6	976	500	590
64	1.330 (33.78)	.390 (9.91)	.375 (9.53)	.080 (2.03)	1.15 (29.21)	.042 (1.06)	3 (10)	0.047	143.4	930	650	723

* Braid only, figures exclude termination lugs. **Test current is defined as the current required to reach 200° C at ambient temperature

GROUND CONTROL EARTH BOND SYSTEM



How To Order	
600-120	Hydraulic Setting Tool for 1/4" Earth Bonds
600-123	Hydraulic Setting Tool for 3/8" Earth Bonds
600-124	Hydraulic Setting Tool for M6 Earth Bonds
600-125	Hydraulic Setting Tool for M10 Earth Bonds

The tools feature one hand operation and ram retract mechanism actuated by release trigger. Consult factory for control gauges and earth bond part numbers for each material type and size.