

SERIES 107 ArmorLite™ ESD Bonds and Ground Straps

**BONDING +
GROUNDING**
FLEXIBLE BRAIDED STRAPS

107-108 ArmorLite CF Microfilament Copper Braid Configurable Crimp Lugs



HOW TO ORDER						
Sample Part Number	107-108	S	-RD	-64	A	E -6
Product Series	ArmorLite CF ground strap					
Braid Layers	S = Single D = Double					
Lug Configuration	-SQ = Square Lugs -RD = Radiused Lugs -RA = Right-Angle Lugs -DRU = Double Right-Angle Lugs, Up-Up					
Size Code	See Size Code in Tables below					
Lug 1 Hole	A – M, See Table. If two different sized lug holes are required, specify smaller lug hole in this location.					
Lug 2 Hole	A – M, See Table					
Length	-X In inches					

ARMORLITE™ CF

GROUND STRAP FEATURES

- Broad temperature tolerance, -80°C to +400°C
- Corrosion / harsh environment resistant
- For EMI noise suppression, equipotential bonding, and fault grounding in spacecraft applications
- Saves weight compared to standard NiCu braid
- Lightweight, durable, configurable crimp lugs: square, radiused, straight, single- and double-right-angle versions
- Available black or clear sleeving over braid

MATERIAL/FINISH

- ArmorLite CF, copper-stainless steel 316L
- Lugs - Stainless steel / nickel plate per AMS-C-26074
- Sleeving - per M23053 or equivalent

LUG HOLE SIZE CODES		
Hole Size Code	Ø C	Stud Size (Ref.)
X	.000	No Lug Hole
A	.114/.122 (2.90/3.10)	#4
B	.142/.152 (3.61/3.86)	#6
C	.168/.178 (4.27/4.52)	#8
D	.193/.203 (4.90/5.16)	#10
E	.260/.275 (6.60/6.99)	1/4
F	.323/.338 (8.20/8.59)	5/16
G	.385/.400 (9.78/10.16)	3/8
H	.448/.463 (11.38/11.76)	7/16
J	.510/.525 (12.95/13.34)	1/2
K	.573/.588 (14.55/14.94)	9/16
L	.651/.666 (16.54/16.92)	5/8
M	.770/.785 (19.56/19.94)	3/4

SINGLE-LAYER ARMORLITE CF GROUND STRAP					
Size Code	AWG Equivalent (ref.) ¹	Current Rating (Amps) ²	Nom. Resistance mOhm/m	Max. Lug Code	Braid Weight (g/m)
-12	17-16	24	28.0	B	14.0
-16	15	32	19.5	D	20.0
-20	15	34	16.0	E	21.0
-24	14-13	48	13.0	F	28.0
-32	11-10	58	6.0	G	52.5
-40	10	61	4.0	J	59.0
-48	9-8	72	3.5	L	76.0
-64	8-7	94	2.5	M	104.5

DOUBLE-LAYER ARMORLITE CF GROUND STRAP					
Size Code	AWG Equivalent (ref.) ¹	Current Rating ²	Nom. Resistance mOhm/m	Max. Lug Code	Braid Weight (g/m)
-12	14-13	37	14.0	B	28.0
-16	12-11	48	10.0	D	40.0
-20	12-11	49	8.0	E	42.0
-24	11-10	58	6.5	F	56.0
-32	8-7	90	3.0	G	105.0
-40	7	97	2.0	J	118.0
-48	6-5	117	1.8	L	152.0
-64	5-4	140	1.5	M	209.0

NOTES

- * AWG Equiv. based on total cross sectional area of braid conductors, not electrical performance.
- ** Current rating given for information only and is not a requirement. Values shown are for uninsulated wire in free air, based on ambient of 30°C and max temperature of 90°C. Values should be derated in insulated or if in close contact with other components.
- Lug hole sizes may differ from each other. Smaller lug hole diameter specified in "Lug 1" location in the part number. (Not applicable for RA right-angle lug configurations). Lug holes IAW AS7928
- Length tolerance: ± .250 inches (6.35 mm) up to 12 inches, or ± 2% for lengths > than 12".
- Consult Glenair for Ground Straps with larger cross-sectional area and braid gauge
- Ground Straps identified with Glenair name, P/N, and date code, space permitting

SERIES 107 ArmorLite™ ESD Bonds and Ground Straps



107-108 ArmorLite CF Microfilament Copper Braid Square Lugs / Radiused Lugs

SQ - SQUARE LUG DIMENSIONS										
Size Code	A		B		DS (Single-Layer)		DD (Double-Layer)		E	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
12	.240	6.10	.120	3.05	.052	1.32	.060	1.52	.240	6.10
16	.330	8.38	.165	4.19	.054	1.37	.062	1.57	.330	8.38
20	.410	10.41	.205	5.21	.072	1.83	.080	2.03	.410	10.41
24	.530	13.46	.265	6.73	.072	1.83	.080	2.03	.530	13.46
32	.740	18.80	.370	9.40	.088	2.24	.100	2.54	.740	18.80
40	.830	21.08	.415	10.54	.098	2.49	.110	2.79	.830	21.08
48	1.000	25.40	.500	12.70	.100	2.54	.115	2.92	1.000	25.40
64	1.180	29.97	.590	14.99	.100	2.54	.115	2.92	1.180	29.97

RD - RADIUS LUG DIMENSIONS

The diagram illustrates the dimensions for RD - Radius Lug. The top view shows a rectangular lug with rounded ends, labeled LUG 1 and LUG 2. The overall length is indicated as LENGTH. The diameter of the lug body is ØC. The radius of the lug ends is 2X R. The thickness of the lug is 2X A. The distance from the center of the lug to the edge of the lug is 2X B. A sleeve, optional, is shown around the lug. The side view shows the lug with a single-layer or double-layer construction. The thickness of the single-layer is 2X DS. The thickness of the double-layer is 2X DD. The distance from the center of the lug to the edge of the lug is 2X E.

Size Code	A		B		DS (Single-Layer)		DD (Double-Layer)		E		R	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
12	.240	6.10	.120	3.05	.052	1.32	.060	1.52	.630	16.00	.120	3.05
16	.330	8.38	.165	4.19	.054	1.37	.062	1.57	.630	16.00	.165	4.19
20	.410	10.41	.205	5.21	.072	1.83	.080	2.03	.750	19.05	.205	5.21
24	.530	13.46	.265	6.73	.072	1.83	.080	2.03	.750	19.05	.265	6.73
32	.740	18.80	.370	9.40	.088	2.24	.100	2.54	1.000	25.40	.370	9.40
40	.830	21.08	.415	10.54	.098	2.49	.110	2.79	1.100	27.94	.415	10.54
48	1.000	25.40	.500	12.70	.100	2.54	.115	2.92	1.250	31.75	.500	12.70
64	1.180	29.97	.590	14.99	.100	2.54	.115	2.92	1.400	35.56	.590	14.99

SERIES 107

ArmorLite™ ESD Bonds and Ground Straps



107-108 ArmorLite CF Microfilament Copper Braid Single / Double Right-Angle Lugs

RA - RIGHT-ANGLE LUG DIMENSIONS

The diagram illustrates the dimensions for Right-Angle (RA) lugs. It shows two views: a top view and a side view. The top view shows LUG 1 and LUG 2 with dimensions A (lug width), B (lug thickness), and LENGTH (lug length). A hole with diameter ØC is shown in LUG 1. A sleeve, optional, is shown between the lugs. The side view shows the lugs bent at a 90° angle. Dimensions include DS (lug thickness), DD (lug thickness), E (lug length), F (lug length), GS or GD (lug length), HS or HD (lug height), and J (lug height). A radius mfg. option is also shown.

Size Code	A		B		DS		DD		E		F Ref.		GS Ref. (Single-Layer)		GD Ref. (Double-Layer)		HS Ref. (Single-Layer)		HD Ref. (Double-Layer)		J		K Ref.	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
12	.240	6.10	.313	7.95	.052	1.32	.060	1.52	.630	16.00	.375	9.53	.427	10.85	.435	11.05	.600	15.24	.590	14.99	.650	16.51	.500	12.70
16	.330	8.38	.313	7.95	.054	1.37	.062	1.57	.630	16.00	.375	9.53	.429	10.90	.437	11.10	.650	16.51	.640	16.26	.700	17.78	.500	12.70
20	.410	10.41	.375	9.53	.072	1.83	.080	2.03	.750	19.05	.375	9.53	.447	11.35	.455	115.6	.680	17.27	.670	17.02	.750	19.05	.500	12.70
24	.530	13.46	.375	9.53	.072	1.83	.080	2.03	.750	19.05	.375	9.53	.447	11.35	.455	115.6	.830	21.08	.820	20.83	.900	22.86	.625	15.88
32	.740	18.80	.425	10.80	.088	2.24	.100	2.54	.850	21.59	.375	9.53	.463	11.76	.475	12.07	.910	23.11	.900	22.86	1.000	25.40	.625	15.88
40	.830	21.08	.550	13.97	.098	2.49	.110	2.79	1.100	27.94	.500	12.70	.598	15.19	.610	15.49	1.050	26.67	1.040	26.42	1.150	29.21	.750	19.05
48	1.000	25.40	.625	15.88	.100	2.54	.115	2.92	1.250	31.75	.500	12.70	.600	15.24	.615	15.62	1.150	29.21	1.140	28.96	1.250	31.75	.750	19.05
64	1.180	29.97	.700	17.78	.100	2.54	.115	2.92	1.400	35.56	.500	12.70	.600	15.24	.615	15.62	1.250	31.75	1.240	31.50	1.350	34.29	.750	19.05

DRU - DOUBLE RIGHT-ANGLE (UP-UP) LUGS DIMENSIONS

The diagram illustrates the dimensions for Double Right-Angle (DRU) lugs. It shows two views: a top view and a side view. The top view shows LUG 1 and LUG 2 with dimensions A (lug width), DS (lug thickness), DD (lug thickness), F (lug length), GS or GD (lug length), HS or HD (lug height), and J (lug height). A hole with diameter ØC is shown in LUG 1. A sleeve, optional, is shown between the lugs. The side view shows the lugs bent at a 90° angle. Dimensions include DS (lug thickness), DD (lug thickness), F (lug length), GS or GD (lug length), HS or HD (lug height), and J (lug height). A radius mfg. option is also shown.

Size Code	A		DS		DD		F Ref.		GS Ref. (Single-Layer)		GD Ref. (Double-Layer)		HS Ref. (Single-Layer)		HD Ref. (Double-Layer)		J		K Ref.	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
12	.240	6.10	.052	1.32	.060	1.52	.375	9.53	.427	10.85	.435	11.05	.600	15.24	.590	14.99	.650	16.51	.500	12.70
16	.330	8.38	.054	1.37	.062	1.57	.375	9.53	.429	10.90	.437	11.10	.650	16.51	.640	16.26	.700	17.78	.500	12.70
20	.410	10.41	.072	1.83	.080	2.03	.375	9.53	.447	11.35	.455	115.6	.680	17.27	.670	17.02	.750	19.05	.500	12.70
24	.530	13.46	.072	1.83	.080	2.03	.375	9.53	.447	11.35	.455	115.6	.830	21.08	.820	20.83	.900	22.86	.625	15.88
32	.740	18.80	.088	2.24	.100	2.54	.375	9.53	.463	11.76	.475	12.07	.910	23.11	.900	22.86	1.000	25.40	.625	15.88
40	.830	21.08	.098	2.49	.110	2.79	.500	12.70	.598	15.19	.610	15.49	1.050	26.67	1.040	26.42	1.150	29.21	.750	19.05
48	1.000	25.40	.100	2.54	.115	2.92	.500	12.70	.600	15.24	.615	15.62	1.150	29.21	1.140	28.96	1.250	31.75	.750	19.05
64	1.180	29.97	.100	2.54	.115	2.92	.500	12.70	.600	15.24	.615	15.62	1.250	31.75	1.240	31.50	1.350	34.29	.750	19.05