

SERIES 107 ArmorLite™ ESD Bonds and Ground Straps



107-105 100% ArmorLite SS Microfilament Braid Configurable Crimp Lugs



HOW TO ORDER						
Sample Part Number	107-105	S	-RD	-64	A	E -6
Product Series	100% ArmorLite 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					



GROUND STRAP FEATURES

- For EMI noise suppression, equipotential bonding, and fault grounding in spacecraft applications
- 70+% weight savings over standard NiCu braid
- Approved for use by major airframe and equipment manufacturers
- Lightweight, durable, configurable crimp lugs: square, radiused, straight, single- and double-right-angle versions
- Available black or clear sleeving over braid

MATERIAL/FINISH

- ArmorLite, stainless steel 316L / nickel plate
- Lugs - Copper / 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 GROUND STRAP					
Size Code	AWG Equivalent (ref.) ¹	Current Rating (Amps) ²	Nom. Resistance mΩ/m	Max. Lug Code	Braid Weight (g/m)
-12	17-16	17	54.0	B	11.5
-16	15	23	36.0	D	16.5
-20	15	24	35.0	E	18.0
-24	14-13	31	27.5	F	21.5
-32	11-10	43	14.5	G	43.0
-40	10	50	12.5	J	52.5
-48	9	63	10.0	L	64.5
-64	8-7	80	7.0	M	85.0

DOUBLE-LAYER ARMORLITE GROUND STRAP					
Size Code	AWG Equivalent (ref.) ²	Current Rating ²	Nom. Resistance mΩ/m	Max. Lug Code	Braid Weight (g/m)
-12	14-13	27	27.0	B	23.0
-16	12	36	18.0	D	33.0
-20	12	36	17.5	E	36.0
-24	11-10	43	14.0	F	43.0
-32	8-7	70	7.5	G	86.0
-40	7	75	6.5	J	105.0
-48	6	92	5.0	L	129.0
-64	5-4	111	3.5	M	170.0

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



107-105 100% ArmorLite SS Microfilament 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 - RADIUSED LUG DIMENSIONS

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

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107-105 100% ArmorLite SS Microfilament Braid Single / Double Right-Angle Lugs

RA - RIGHT-ANGLE LUG DIMENSIONS

The diagram illustrates the dimensions and construction of a Right-Angle Lug (RA). It includes three views: a top view, a side view, and an end view. The top view shows a rectangular lug with a circular hole of diameter ØC. Dimensions include LENGTH, B (hole offset), 2X A (lug width), and 2X DD (lug thickness). A hatched area represents the 'Sleeve, optional' with a thickness of 'GS or GD'. The side view shows the lug's profile with a 90° bend, dimensions for the bend (HS or HD), and a 'Radius mfg. option'. The end view shows the lug's thickness as 2X DS for a 'Single-Layer' and 2X DD for a 'Double-Layer'. Dimension E is the length of the lug body, and F is the distance from the hole center to the end of the lug body.

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																						
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	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		