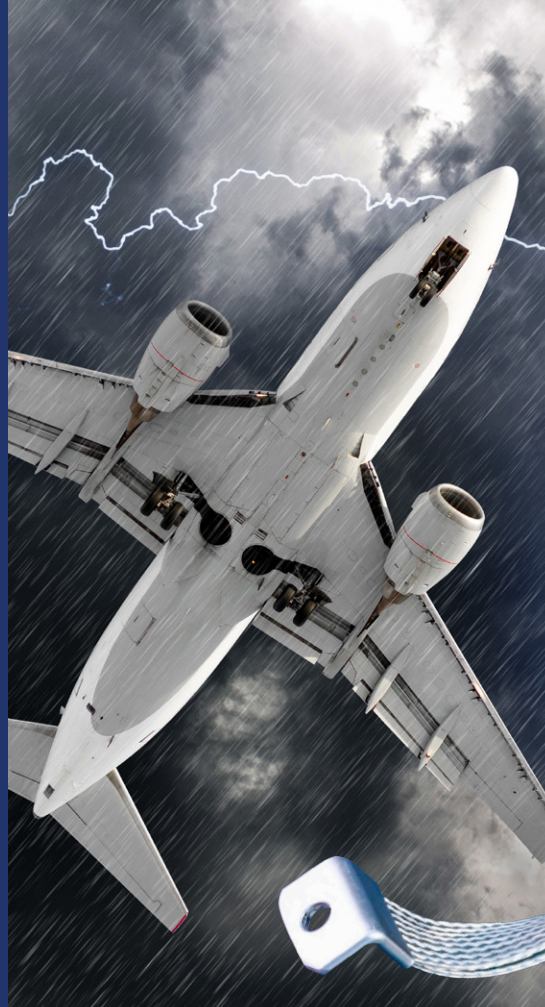


MISSION-CRITICAL
INTERCONNECT
SOLUTIONS



M24749 QUALIFIED AND GLENAIR SIGNATURE

Braided Ground Straps, ESD Bonds, and Flexible Busbars

Lightweight, Corrosion-Resistant ArmorLite™ Microfilament Solutions
Plus Industry-Standard Copper Material / QPL Straps, Joints, and Shunts

MAY 2024

**SERIES 107
FLEXIBLE
BRAIDED STRAPS**
GROUNDS, BONDS,
AND BUSBARS

Flexible braided straps for sea, air, and space grounding, ESD bonding, and busbar power distribution applications

From ultra low-resistance ESD bonds to large form-factor power distribution busbars—Glenair does it all

Glenair flexible braided straps are critical components in harsh sea, air, and space environments. They are used to establish reliable ground path connections, dissipate lightning strike energy, and prevent the build-up of electrostatic discharge. Special large form-factor straps are also employed in busbar applications for electrical power distribution up to 1000 Amps.

Glenair supplies a complete range of lugged flexible braided bonding, grounding, and power distribution solutions with lightweight ArmorLite microfilament material as well as low-resistance plated copper. In addition to high-availability catalog designs, we are also able to supply custom solutions in virtually any form factor, wire gauge, amperage, resistance, and mounting-lug configuration. Straps may also be supplied with and without insulation jacketing in wire rope (jumper) and flat profiles. Mil-qualified (QPL) straps are available for both topside and submarine applications.



PRODUCT LINE OFFERINGS

- Durable, low-resistance ground straps with highly conductive or dissipative performance
- Lightweight, low-resistance flexible bond straps for ESD dissipation
- Heavy-duty variants for low-voltage, high-current power distribution busbar applications
- Glenair signature and qualified military standard designs



Ultra flexible, lightweight ArmorLite microfilament ground straps and bonds

Flat and round cross-section straps, plus wire rope jumpers

High current AC and DC flexible busbars and shunts

Harsh-environment insulation and jacketing available for enhanced user safety and short-circuit prevention

Selection Guide

LIGHTWEIGHT STRAPS / BONDS

ArmorLite micro-filament ESD bonds and ground straps



- 107-105** 100% ArmorLite, our lightest weight braid
- 107-106** 75% ArmorLite 25% Nickel Copper weight-saving conductive blend
- 107-107** 50% ArmorLite 50% Nickel Copper weight-saving conductive blend
- 107-108** ArmorLite CF corrosion-free lightweight braid

LOW-RESISTANCE STRAPS / BONDS

A-A-59569 soft-drawn braided copper ground straps



- 107-101** Tin copper material ground straps
- 107-102** Silver copper material ground straps
- 107-103** Nickel copper material ground straps
- 107-104** Stainless steel material ground straps

MIL-SPEC GROUND STRAPS and BOND STRIPS

Glenair Signature designs with "better than mil-spec" configuration options



- M24749 Type I** wire rope ground strap
- M24749 Type II** flat CRES 316 strip
- M24749 Type III** flat copper strip
- M24749 Type IV** CRES 316 / Nickel 200 braided strap
- 107-500** M24749-IV style with configuration options
- 107-511** M24749-I type with lug hole / length options
- 107-502** M24749-II type with configuration options
- 107-503** M24749-III type with configuration options
- 107-504** M24749-IV type with lug hole / length options

TURBOFLEX WIRE ROPE JUMPERS

360° High flexibility



- 107-111** TurboFlex ultra-flexible rope-lay wire rope jumpers

FLEXIBLE BUSBARS

Heavy-duty high-current braided busbar



- 107-277** Single-layer, 30AWG, braided busbar
- 107-278** Double-layer, 30AWG, braided busbar
- 107-435** Triple-layer, 30AWG, braided busbar
- 107-436** Quad-layer, 30AWG, braided busbar
- 107-110** 5-10 layer, 30AWG, braided busbar

SUBMARINE GROUND STRAPS

IAW A-A-59569



- 107-086** Low-profile nickel-plated copper braid materials IAW ASTM B 355

BOLTS, BOSSES, AND LUGS

IAW M24749



- 107-505** Type I boss
- M1222** Bolt
- 851-005** Crimp Terminal Lugs for TurboFlex wire

FLEXIBLE · DURABLE · CORROSION-FREE

ARMORLITE™

Flexible nickel-clad microfilament stainless steel
conductive braid material for ESD bond applications



For most grounding and bonding applications, Glenair recommends short, wide ArmorLite strap configurations for best electrical performance.



ArmorLite is an innovative material ideally suited for ESD bonding as well as surge current grounding. The nickel-clad stainless steel microfilament material saves significant weight compared to standard QQ-B-575 copper material. A 100% ArmorLite bond strap, for example, is more than 70% lighter than a conventional plated copper solution of the same length.

Flexible, durable ArmorLite ESD bond straps are supplied in material blends optimized for the moderate current and resistance requirements of electrical potential bonding in aerospace applications. ArmorLite at 100% is the lightest weight of the four available blends. The 75/25 and 50/50 blends of ArmorLite and nickel copper improve current capacity for grounding applications at the cost of some additional weight. ArmorLite CF is a special construction of high-conductivity copper microfilaments with stainless steel cladding which offers optimal corrosion resistance, increased current capacity, and reduced resistance.

- **Ultra-lightweight** EMI/RFI braiding material for high-temperature applications -80°C to +260°C
- **Microfilament stainless steel: 70% lighter** than NiCu A-A-59569/QQB575
- **Good electrical performance:** shielding, conductivity, and grounding
- **Commercial and military aerospace qualifications**
- **Superior flexibility** and “windowing” resistance
- **Strong:** 70,000 psi (min.) tensile strength
- **Outstanding lightning strike performance** — ANSI/EIA-364-75-1997 Waveform 5B

for Aerospace Bonding and Grounding Applications

ARMORLITE MATERIAL COMPARISON MATRIX

Glenair ArmorLite™ is an innovative microfilament braid material that offers outstanding flexibility, durability, corrosion resistance, and virtually zero windowing. Four different materials are available with 100% ArmorLite offering best weight reduction performance. For ground strap and ESD bond applications, all configurations of ArmorLite offer good to moderate current-carrying capacity and moderate low-resistance, low-voltage drop performance compared to conventional copper wire braided ground straps. For most grounding and bonding applications, Glenair recommends short, wide strap configurations for best low-resistance performance.

ArmorLite™ Ground Strap / ESD Bond Comparison Matrix				
Performance Feature	ArmorLite 100%	ArmorLite 75%/25%	ArmorLite 50%/50%	ArmorLite CF
Weight reduction	Best	Good	Moderate	Good
Low Resistance	Moderate	Good	Best	Good
Current-Carrying Capacity	Moderate	Good	Best	Good
Corrosion Resistance	Good	Good	Good	Best

ArmorLite™ Material Performance Test Matrix			
DESCRIPTION	REQUIREMENT	PROCEDURE	REPORT
Altitude test 27,000 ft (5 PSIA nom.)	2.5% min.	RTCA DO-160F, Table 4-1, 4-2 Cat/ C temp. spec	ARM-103
Operating Temperature	-80°C to +260°C	(Shielding effectiveness 1000 hours)	ARM-103
Braid Resistivity test, Pre and Post	Test pre/post-5 cycles-minimal disparity per spec.	EIA-364-32D IAW AS85049	ARM-110/1
Surface Transfer Impedance	Transfer Impedance (10.0 kHz ~ 1.0 GHz)	IEC 62153-4-3 min. 90% optical coverage	GT-17-263
Shield Effectiveness test, Pre and Post	Screening Attenuation (0 ~ 4.00 GHz)	IEC 62153-4-4 min. 90% optical coverage	GT-17-263
Tensile/ Pull Strength	220 lbs. (min.). No anomalies within 8% - 10% of pre test for variable sizes	Glenair ATP- 183. 0 lbs. to 90 lbs, to 150 lbs, to 220lbs @ speed of 0.25 inches/min	ARM-105
Lightning Current Test	Glenair Qual. Test Plan 191/ DC resistance/voltage criteria per DO-160F Level for 3 sizes up to 30Ka.	ANSI/EIA-364-75-1977 Wave Form 5B SAE/ARP5416 Section 6.3 Waveform 1, 3 (1, 10MHz) and 5A	ARM-110 ARM-112
Salt Spray Test	DC Resistance IAW AS85049 .5 milliohm. No evidence of base metal on braid	ASTM B117-09 Sodium Chloride 5% 500 hrs.	ARM-100
Vibration Resistance	EAI Test Report 33247. DO160 section 8 Cat. R Vib. Curves E1	DO-160F RTCA/DO-160F, Section 9, Fig. 8-4. Curve E1. - 3 sizes - 3 hours on each axis.	ARM-111
Thermal Shock Cycling test and Resistivity	No adverse effects in visual inspection or resistance after 50 cycles	EIA-364-32D, Table 3 Test condition V -65°C to +175°C	ARM-113
Abrasion and Plating test	DC Resistance IAW AS 85049. Glenair internal QTR-003	ATP 180 20 continuous @ 6 cycles/min. over 3 arms with .030 radiused edges	ARM-107
Fluid Immersion Test	Material compatibility – see table below	Customer/AS4373D method 601 Mod	ARM-106
Flex Test	2 Cycles: starting 0° over vertical ctr. line across to 180° cycle. Total cycles of 25633	Glenair ATP 179	ARM-112

ArmorLite™ Material Fluid Resistance Testing						
Test Fluid	Test Temp °C	Test Temp °F	Immersion Time(h)	Requirement	Procedure	
MIL-L-23699, Lubricating Oil, Aircraft Turbine Engine, Synthetic Base	48-50	118-122	20	No fraying, DC resistance within limits (AS85049 paragraph 4.6.3)	SAE AS1241 Table 15/Mil-Std 810F Method 504 (modified), for all Substances. Additional conformance to Test Criteria AS4373D method 601 Mod	
MIL-H-5606, Hydraulic Fluid, Petroleum Base, Aircraft Missile, and Ordnance	48-50	118-122	20			
TTI-H-735, Solvent, Isopropyl Alcohol	20-25	68-77	168			
ASTM D 1153, Methyl Isobutyl Ketone (For use in organic coatings)	20-25	68-77	168			
MIL-DTL-5624 , Turbine Fuel, Aviation, Grade JP-4 either or MIL-T-83133, JP-8	20-25	68-77	168			
SAE AMS1424, Anti-Icing and Deicing-Defrosting Fluid, undiluted	48-50	118-122	20			
SAE AMS1424, Anti-Icing and Deicing-Defrosting Fluid, diluted 60/40 (fluid/water) ratio. Supersedes Coolanol 25 Item Q	48-50	118-122	20			
MIL-C-43616, Cleaning Compound, Aircraft Surface	48-50	118-122	20			
SAE AS 1241 , Fire Resistant Hydraulic Fluid for Aircraft	48-50	118-122	20			
MIL-L-7808, Lubricating Oil, Aircraft Turbine Engine, Synthetic Base	118-121	244-250	30			
MIL-C-87937, Cleaning Compound, Aircraft Surface, Alkaline, undiluted	63-68	145-154	20			
MIL-C-87937, Cleaning Compound, Aircraft Surface, Alkaline Waterbase, diluted 25/75 (fluid/water) ratio	63-68	145-154	20			
TT-S-735, Standard Test Fluids; Hydrocarbon, Type I, II, III, VII	20-25	68-77	168			
MIL-PRF-87252, Coolant Fluid, Hydrolytically Stable, Dielectric	20-25	68-77	168			

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



HOW TO ORDER							
Sample Part Number	107-105	S	-RD	-64	A	E	-6 S
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	12 – 64, See Dimensions Tables						
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	In inches						
Insulation Sleeving	S = Black sleeving over braid C = Clear sleeving over braid Omit = No sleeving						



GROUND STRAP FEATURES

- For grounding airframe sections, dissipating static build-up in composite structures, dissipating lightning strike energy, and grounding individual moving parts
- 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
Z	.090/.098 (2.29/2.49)	#2
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

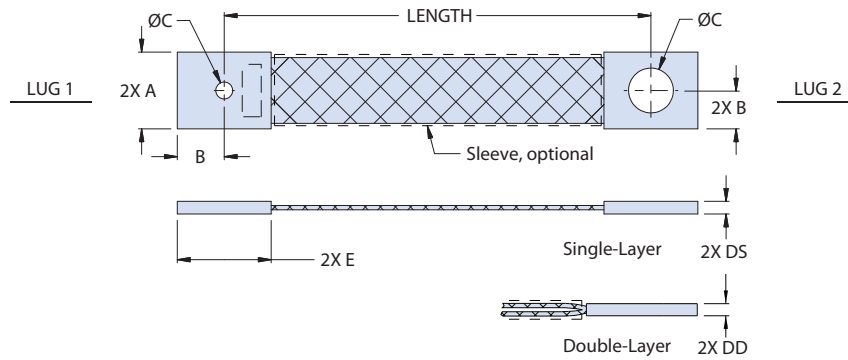
Size Code	AWG Equivalent (ref.) ¹	Current Rating ²	Nom. Resistance mΩ/m	Max. Lug Code	Braid Weight (g/m)
12	14-13	27	27.0	B	23.0
16	12	36	18.0	D	33.0
20	12	36	17.5	E	36.0
24	11-10	43	14.0	F	43.0
32	8-7	70	7.5	G	86.0
40	7	75	6.5	J	105.0
48	6	92	5.0	L	129.0
64	5-4	111	3.5	M	170.0

NOTES

- * AWG Eqiv. 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

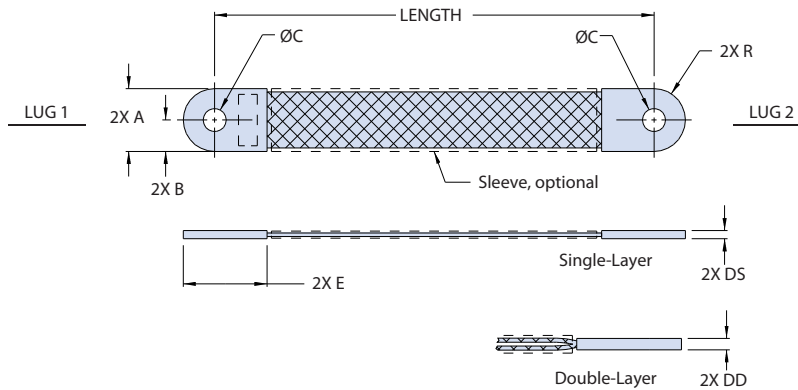
107-105 100% ArmorLite SS Microfilament Braid Square Lugs / Radiused Lugs

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

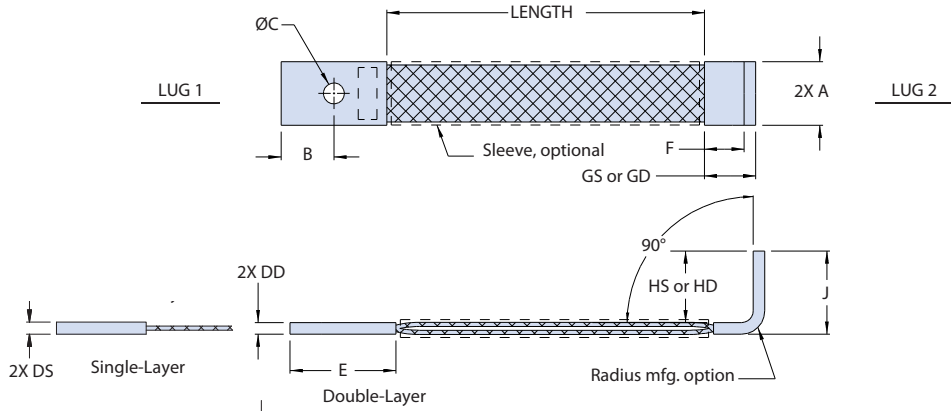
RD - RADIUSED LUG DIMENSIONS



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

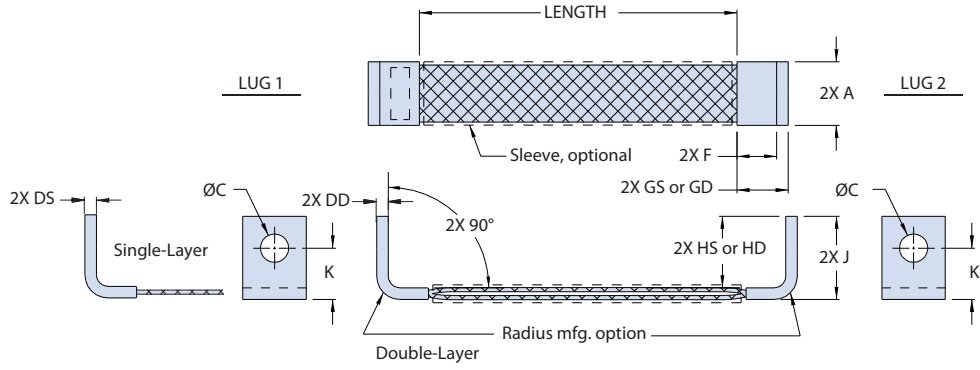
107-105 100% ArmorLite SS Microfilament Braid Single / Double Right-Angle Lugs

RA - RIGHT-ANGLE LUG DIMENSIONS



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
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

LIGHTWEIGHT, FLEXIBLE

ArmorLite™ ESD Bond and Ground Straps



107-106 75% SS ArmorLite / 25% Nickel/Copper Braid Configurable Crimp Lugs, Optional Insulation



HOW TO ORDER							
Sample Part Number	107-106	S	-RD	-64	A	E	-6 S
Product Series	75% / 25% 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	12 – 64, See Dimensions Tables						
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	In inches						
Insulation Sleeving	S = Black sleeving over braid C = Clear sleeving over braid Omit = No sleeving						



GROUND STRAP FEATURES

- For grounding airframe sections, dissipating static build-up in composite structures, dissipating lightning strike energy, and grounding individual moving parts
- Saves weight compared to 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

- 75% ArmorLite, stainless steel 316L / nickel plate
25% Copper / 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
Z	.090/.098 (2.29/2.49)	#2
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

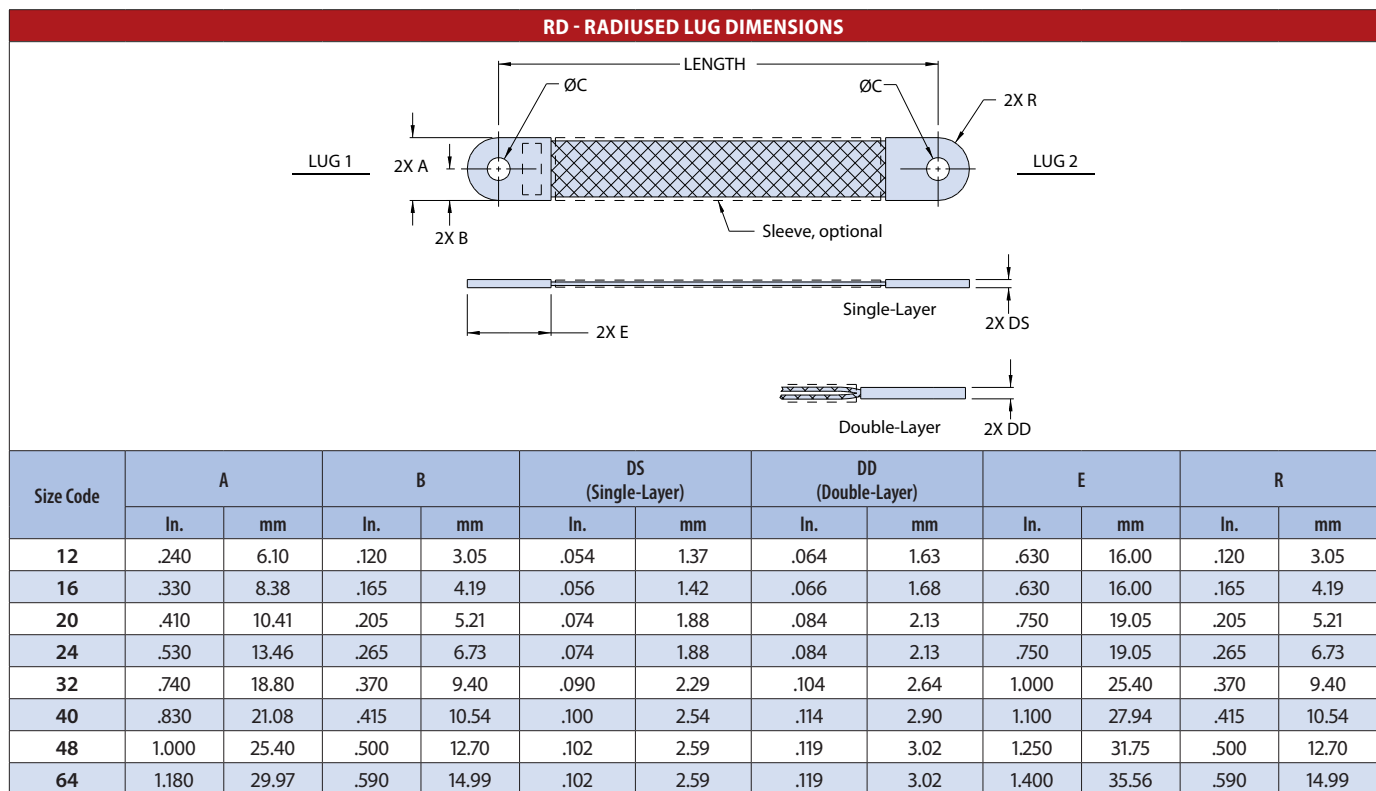
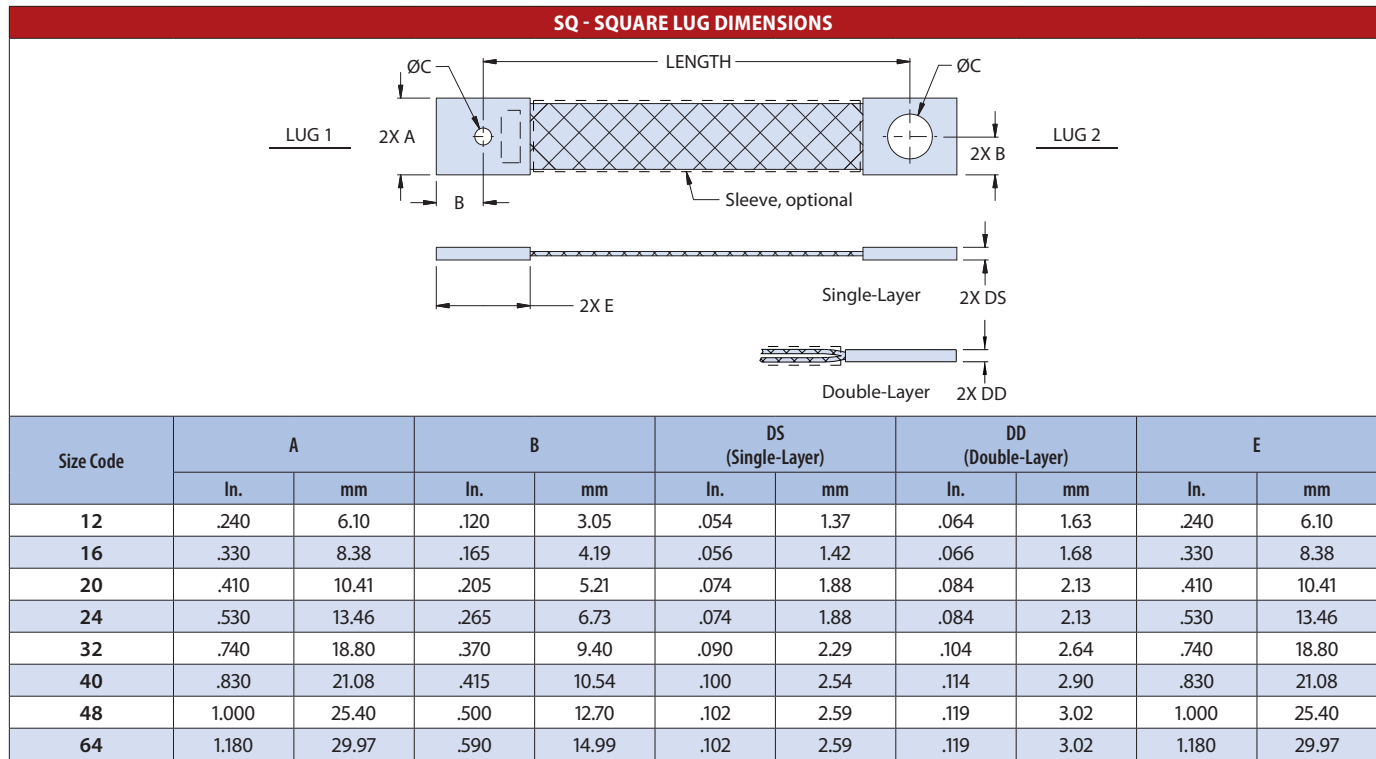
SINGLE-LAYER ARMORLITE GROUND STRAP					
Size Code	AWG Equivalent (ref.) ¹	Current Rating (Amps) ²	Nom. Resistance mOhm/m	Max. Lug Code	Braid Weight (g/m)
12	16–15	24	22.5	B	13.0
16	14	35	15.5	D	20.0
20	14	36	15.0	E	20.5
24	13–12	47	11.0	F	27.0
32	11–10	56	8.0	G	47.5
40	10	67	7.0	J	57.0
48	9	78	5.0	L	71.0
64	7	102	4.0	M	88.0

DOUBLE-LAYER ARMORLITE GROUND STRAP					
Size Code	AWG Equivalent (ref.) ¹	Current Rating ²	Nom. Resistance mOhm/m	Max. Lug Code	Braid Weight (g/m)
12	13–12	41	11.5	B	26.0
16	11	54	8.0	D	40.0
20	11	55	7.5	E	41.0
24	10–9	66	5.5	F	54.0
32	7	94	4.0	G	95.0
40	7	102	3.5	J	114.0
48	6–5	125	2.5	L	142.0
64	4	135	2.0	M	176.0

NOTES

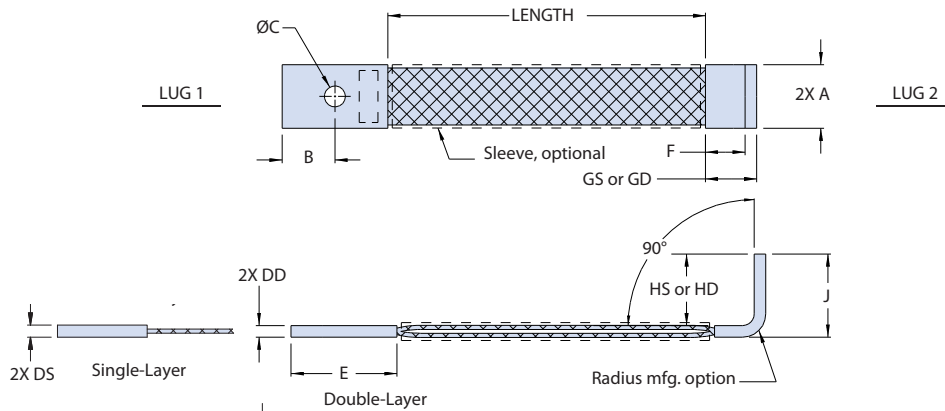
- * AWG Eqiv. based on total cross sectional area of braid conductors, not electrical performance.
- ** Current rating given for information only and is not a requirement. Values shown are for uninsulated wire in free air, based on ambient of 30°C and max temperature of 90°C. Values should be derated 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

107-106 75% SS ArmorLite / 25% Nickel/Copper Braid Square Lugs / Radiused Lugs



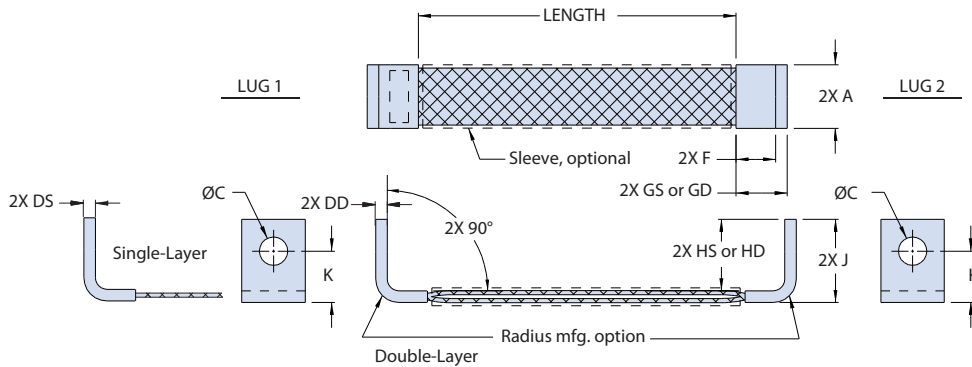
107-106 75% SS ArmorLite / 25% Nickel/Copper Braid Single / Double Right-Angle Lugs

RA - RIGHT-ANGLE LUG DIMENSIONS



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	.054	1.37	.064	1.63	.630	16.00	.375	9.53	.429	10.90	.439	11.15	.600	15.24	.590	14.99	.650	16.51	.500	12.70
16	.330	8.38	.313	7.95	.056	1.42	.066	1.68	.630	16.00	.375	9.53	.431	10.95	.441	11.20	.640	16.26	.630	16.00	.700	17.78	.500	12.70
20	.410	10.41	.375	9.53	.074	1.88	.084	2.13	.750	19.05	.375	9.53	.449	11.40	.459	11.66	.680	17.27	.670	17.02	.750	19.05	.500	12.70
24	.530	13.46	.375	9.53	.074	1.88	.084	2.13	.750	19.05	.375	9.53	.449	11.40	.459	11.66	.830	21.08	.820	20.83	.900	22.86	.625	15.88
32	.740	18.80	.425	10.80	.090	2.29	.104	2.64	.850	21.59	.375	9.53	.465	11.81	.479	12.17	.910	23.11	.900	22.86	1.000	25.40	.625	15.88
40	.830	21.08	.550	13.97	.100	2.54	.114	2.90	1.100	27.94	.500	12.70	.600	15.24	.614	15.60	1.050	26.67	1.040	26.42	1.150	29.21	.750	19.05
48	1.000	25.40	.625	15.88	.102	2.59	.119	3.02	1.250	31.75	.500	12.70	.602	15.29	.619	15.72	1.150	29.21	1.130	28.70	1.250	31.75	.750	19.05
64	1.180	29.97	.700	17.78	.102	2.59	.119	3.02	1.400	35.56	.500	12.70	.602	15.29	.619	15.72	1.250	31.75	1.230	31.24	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
12	.240	6.10	.054	1.37	.064	1.63	.375	9.53	.429	10.90	.439	11.15	.600	15.24	.590	14.99	.650	16.51	.500	12.70
16	.330	8.38	.056	1.42	.066	1.68	.375	9.53	.431	10.95	.441	11.20	.640	16.26	.630	16.00	.700	17.78	.500	12.70
20	.410	10.41	.074	1.88	.084	2.13	.375	9.53	.449	11.40	.459	11.66	.680	17.27	.670	17.02	.750	19.05	.500	12.70
24	.530	13.46	.074	1.88	.084	2.13	.375	9.53	.449	11.40	.459	11.66	.830	21.08	.820	20.83	.900	22.86	.625	15.88
32	.740	18.80	.090	2.29	.104	2.64	.375	9.53	.465	11.81	.479	12.17	.910	23.11	.900	22.86	1.000	25.40	.625	15.88
40	.830	21.08	.100	2.54	.114	2.90	.500	12.70	.600	15.24	.614	15.60	1.050	26.67	1.040	26.42	1.150	29.21	.750	19.05
48	1.000	25.40	.102	2.59	.119	3.02	.500	12.70	.602	15.29	.619	15.72	1.150	29.21	1.130	28.70	1.250	31.75	.750	19.05
64	1.180	29.97	.102	2.59	.119	3.02	.500	12.70	.602	15.29	.619	15.72	1.250	31.75	1.230	31.24	1.350	34.29	.750	19.05

107-107 50% SS ArmorLite / 50% Nickel/Copper Braid Configurable Crimp Lugs, Optional Insulation



HOW TO ORDER							
Sample Part Number	107-107	S	-RD	-64	A	E	-6 S
Product Series	50% / 50% 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	12 – 64, See Dimensions Tables						
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	In inches						
Insulation Sleeving	S = Black sleeving over braid C = Clear sleeving over braid Omit = No sleeving						



GROUND STRAP FEATURES

- For grounding airframe sections, dissipating static build-up in composite structures, dissipating lightning strike energy, and grounding individual moving parts
- Saves weight compared to 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

- 50% ArmorLite, stainless steel 316L / nickel plate
50% Copper / 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
Z	.090/.098 (2.29/2.49)	#2
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	15	32	14.0	B	18.5
16	13	47	10.0	D	27.0
20	13	47	9.0	E	28.0
24	12-11	58	7.0	F	36.0
32	10	72	5.5	G	56.0
40	10-9	76	5.0	J	60.5
48	9-8	84	4.5	L	100.5
64	7	119	2.5	M	109.0

DOUBLE-LAYER ARMORLITE GROUND STRAP

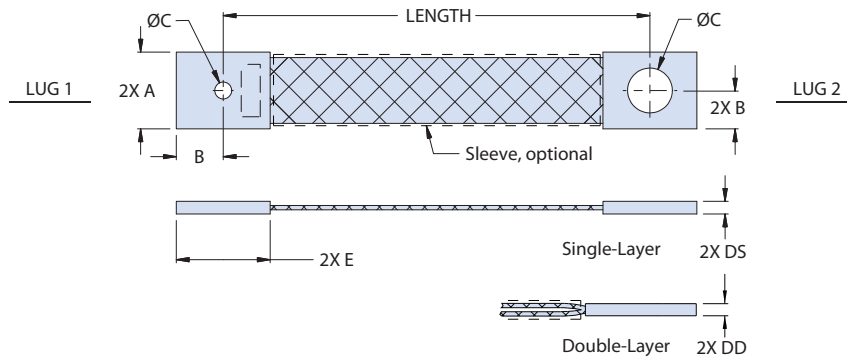
Size Code	AWG Equivalent (ref.) ¹	Current Rating ²	Nom. Resistance mΩ/m	Max. Lug Code	Braid Weight (g/m)
12	12-11	51	7.0	B	37.0
16	10	65	5.0	D	54.0
20	10	67	4.5	E	56.0
24	9-8	81	3.5	F	72.0
32	7	103	3.0	G	112.0
40	7-6	112	2.5	J	121.0
48	5	139	2.3	L	201.0
64	4	159	1.5	M	218.0

NOTES

- * AWG Eqiv. 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

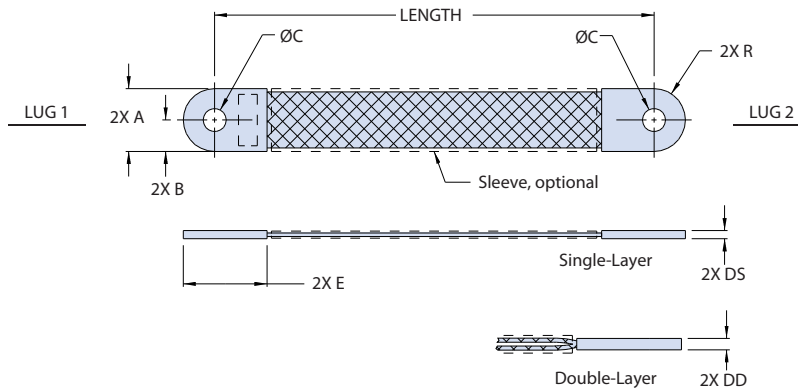
107-107 50% SS ArmorLite / 50% Nickel/Copper Braid Square Lugs / Radiused Lugs

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	.054	1.37	.064	1.63	.240	6.10
16	.330	8.38	.165	4.19	.056	1.42	.066	1.68	.330	8.38
20	.410	10.41	.205	5.21	.074	1.88	.084	2.13	.410	10.41
24	.530	13.46	.265	6.73	.074	1.88	.084	2.13	.530	13.46
32	.740	18.80	.370	9.40	.090	2.29	.104	2.64	.740	18.80
40	.830	21.08	.415	10.54	.100	2.54	.114	2.90	.830	21.08
48	1.000	25.40	.500	12.70	.102	2.59	.119	3.02	1.000	25.40
64	1.180	29.97	.590	14.99	.102	2.59	.119	3.02	1.180	29.97

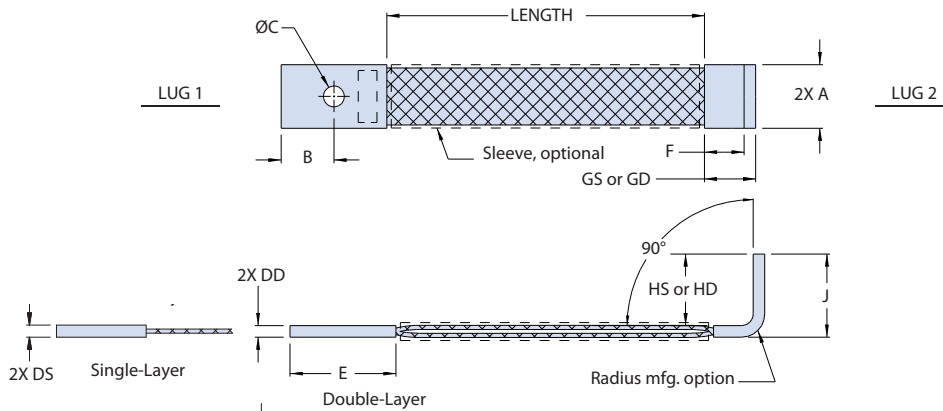
RD - RADIUSED LUG DIMENSIONS



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	.054	1.37	.064	1.63	.630	16.00	.120	3.05
16	.330	8.38	.165	4.19	.056	1.42	.066	1.68	.630	16.00	.165	4.19
20	.410	10.41	.205	5.21	.074	1.88	.084	2.13	.750	19.05	.205	5.21
24	.530	13.46	.265	6.73	.074	1.88	.084	2.13	.750	19.05	.265	6.73
32	.740	18.80	.370	9.40	.090	2.29	.104	2.64	1.000	25.40	.370	9.40
40	.830	21.08	.415	10.54	.100	2.54	.114	2.90	1.100	27.94	.415	10.54
48	1.000	25.40	.500	12.70	.102	2.59	.119	3.02	1.250	31.75	.500	12.70
64	1.180	29.97	.590	14.99	.102	2.59	.119	3.02	1.400	35.56	.590	14.99

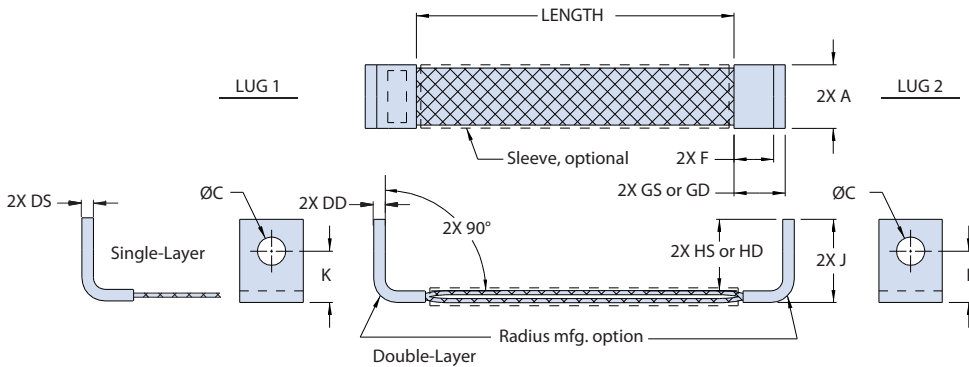
**107-107 50% SS ArmorLite / 50% Nickel/Copper Braid
 Single / Double Right-Angle Lugs**

RA - RIGHT-ANGLE LUG DIMENSIONS



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	.054	1.37	.064	1.63	.630	16.00	.375	9.53	.429	10.90	.439	11.15	.600	15.24	.590	14.99	.650	16.51	.500	12.70
16	.330	8.38	.313	7.95	.056	1.42	.066	1.68	.630	16.00	.375	9.53	.431	10.95	.441	11.20	.640	16.26	.630	16.00	.700	17.78	.500	12.70
20	.410	10.41	.375	9.53	.074	1.88	.084	2.13	.750	19.05	.375	9.53	.449	11.40	.459	11.66	.680	17.27	.670	17.02	.750	19.05	.500	12.70
24	.530	13.46	.375	9.53	.074	1.88	.084	2.13	.750	19.05	.375	9.53	.449	11.40	.459	11.66	.830	21.08	.820	20.83	.900	22.86	.625	15.88
32	.740	18.80	.425	10.80	.090	2.29	.104	2.64	.850	21.59	.375	9.53	.465	11.81	.479	12.17	.910	23.11	.900	22.86	1.000	25.40	.625	15.88
40	.830	21.08	.550	13.97	.100	2.54	.114	2.90	1.100	27.94	.500	12.70	.600	15.24	.614	15.60	1.050	26.67	1.040	26.42	1.150	29.21	.750	19.05
48	1.000	25.40	.625	15.88	.102	2.59	.119	3.02	1.250	31.75	.500	12.70	.602	15.29	.619	15.72	1.150	29.21	1.130	28.70	1.250	31.75	.750	19.05
64	1.180	29.97	.700	17.78	.102	2.59	.119	3.02	1.400	35.56	.500	12.70	.602	15.29	.619	15.72	1.250	31.75	1.230	31.24	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
12	.240	6.10	.054	1.37	.064	1.63	.375	9.53	.429	10.90	.439	11.15	.600	15.24	.590	14.99	.650	16.51	.500	12.70
16	.330	8.38	.056	1.42	.066	1.68	.375	9.53	.431	10.95	.441	11.20	.640	16.26	.630	16.00	.700	17.78	.500	12.70
20	.410	10.41	.074	1.88	.084	2.13	.375	9.53	.449	11.40	.459	11.66	.680	17.27	.670	17.02	.750	19.05	.500	12.70
24	.530	13.46	.074	1.88	.084	2.13	.375	9.53	.449	11.40	.459	11.66	.830	21.08	.820	20.83	.900	22.86	.625	15.88
32	.740	18.80	.090	2.29	.104	2.64	.375	9.53	.465	11.81	.479	12.17	.910	23.11	.900	22.86	1.000	25.40	.625	15.88
40	.830	21.08	.100	2.54	.114	2.90	.500	12.70	.600	15.24	.614	15.60	1.050	26.67	1.040	26.42	1.150	29.21	.750	19.05
48	1.000	25.40	.102	2.59	.119	3.02	.500	12.70	.602	15.29	.619	15.72	1.150	29.21	1.130	28.70	1.250	31.75	.750	19.05
64	1.180	29.97	.102	2.59	.119	3.02	.500	12.70	.602	15.29	.619	15.72	1.250	31.75	1.230	31.24	1.350	34.29	.750	19.05

107-108 ArmorLite CF Microfilament Copper Braid Configurable Crimp Lugs, Optional Insulation



HOW TO ORDER							
Sample Part Number	107-108	S	-RD	-64	A	E	-6 S
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	12 – 64, See Dimensions Tables						
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	In inches						
Insulation Sleeving	S = Black sleeving over braid C = Clear sleeving over braid Omit = No sleeving						



GROUND STRAP FEATURES

- Broad temperature tolerance, -80°C to +400°C
- Corrosion / harsh environment resistant
- For grounding airframe sections, dissipating static build-up in composite structures, dissipating lightning strike energy, and grounding individual moving parts
- 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
Z	.090/.098 (2.29/2.49)	#2
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

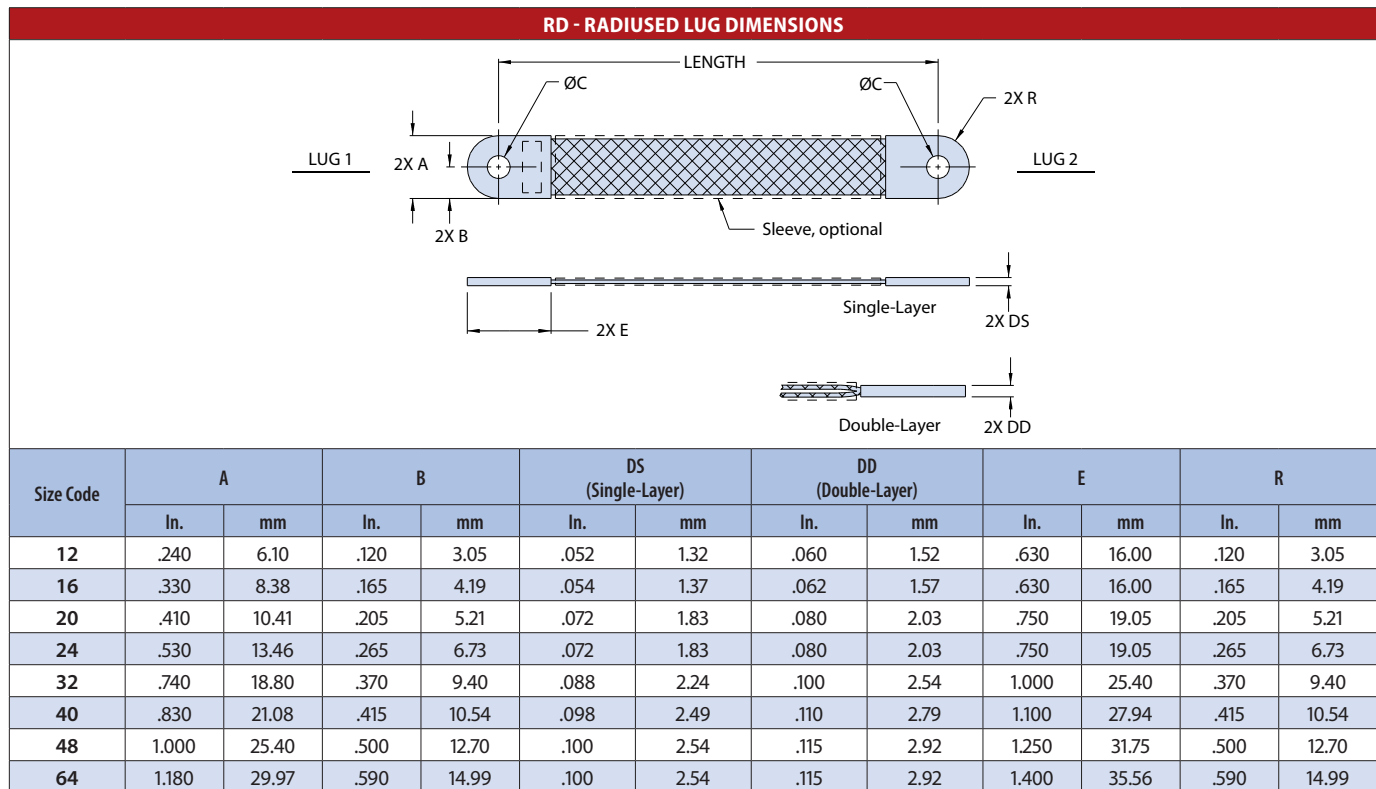
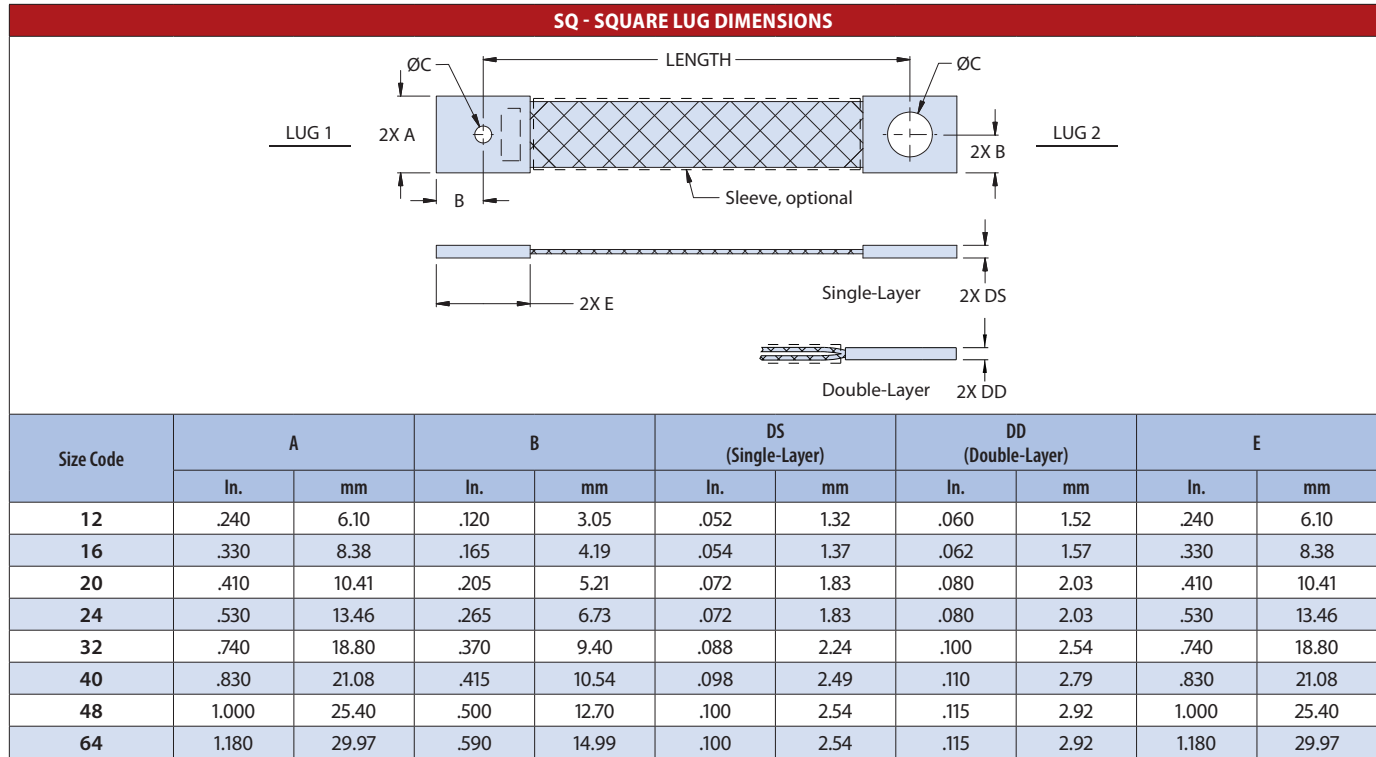
SINGLE-LAYER ARMORLITE CF GROUND STRAP					
Size Code	AWG Equivalent (ref.) ¹	Current Rating (Amps) ²	Nom. Resistance mOhm/m	Max. Lug Code	Braid Weight (g/m)
12	17–16	24	28.0	B	14.0
16	15	32	19.5	D	20.0
20	15	34	16.0	E	21.0
24	14–13	48	13.0	F	28.0
32	11–10	58	6.0	G	52.5
40	10	61	4.0	J	59.0
48	9–8	72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

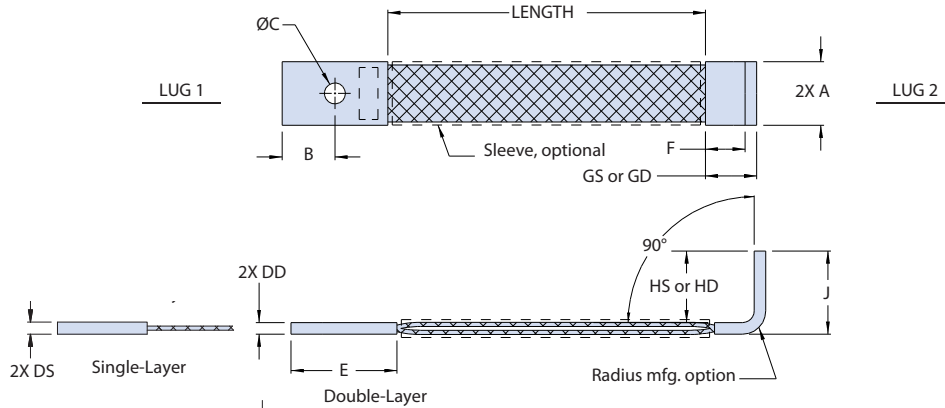
107-108 ArmorLite CF Microfilament Copper Braid Square Lugs / Radiused Lugs



ArmorLite™ ESD Bond and Ground Straps

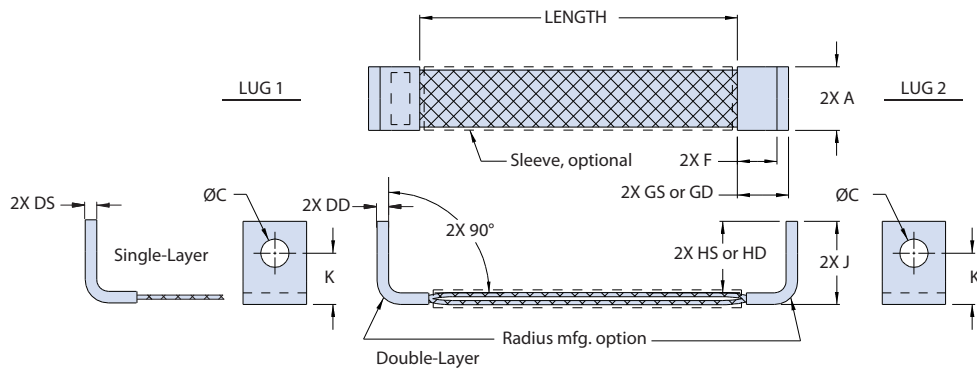
107-108 ArmorLite CF Microfilament Copper Braid Single / Double Right-Angle Lugs

RA - RIGHT-ANGLE LUG DIMENSIONS



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



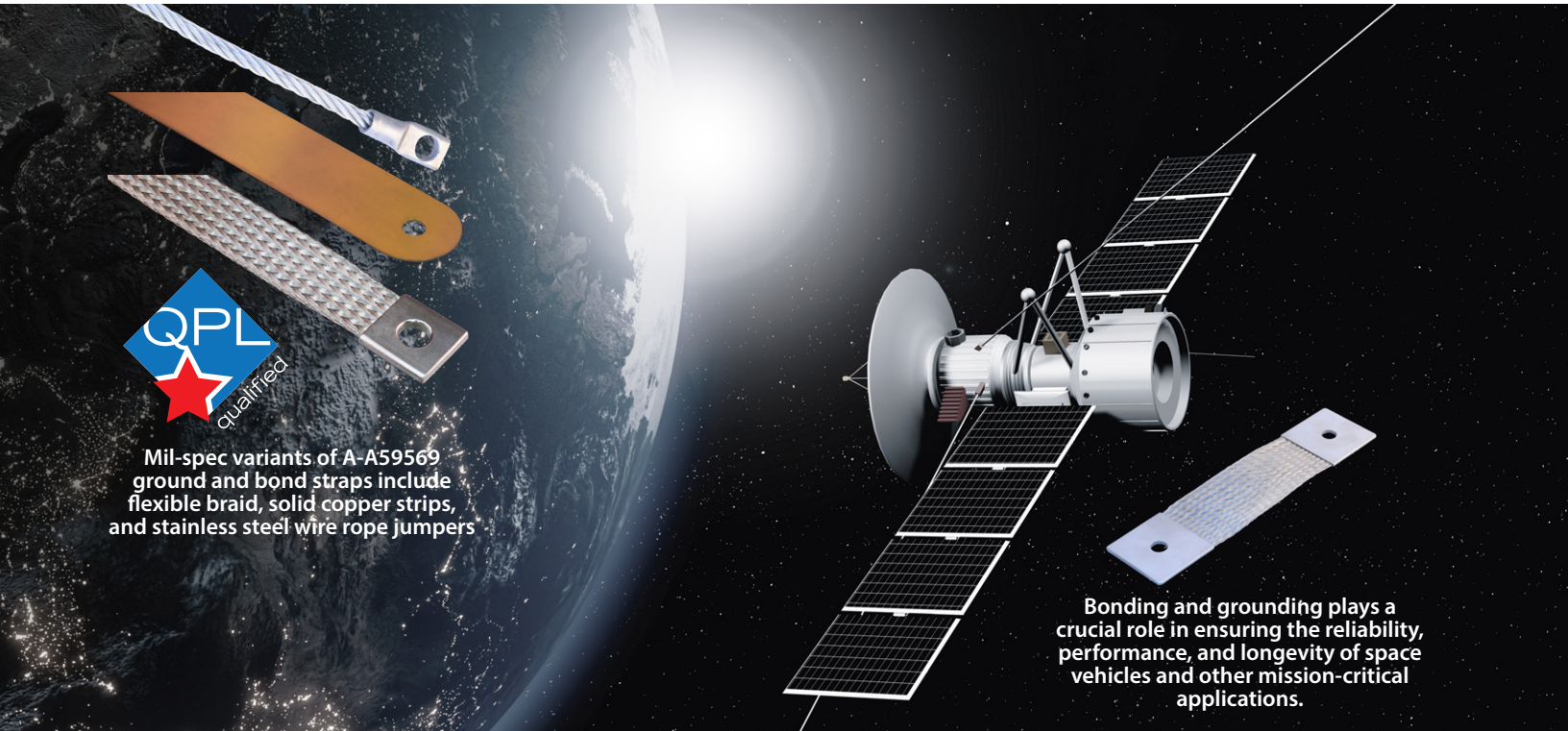
Size Code	A		DS		DD		F Ref.		GS Ref. (Single-Layer)		GD Ref. (Double-Layer)		HS Ref. (Single-Layer)		HD Ref. (Double-Layer)		J		K R ef.	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
12	.240	6.10	.052	1.32	.060	1.52	.375	9.53	.427	10.85	.435	11.05	.600	15.24	.590	14.99	.650	16.51	.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

SERIES 107
FLEXIBLE
BRAIDED STRAPS
GROUNDS, BONDS,
AND BUSBARS

LOW-RESISTANCE, FLEXIBLE

A-A-59569 Braided Copper Ground Straps and ESD Bonds

Tin, nickel, and silver-plated copper /
stainless steel designs—commercial and mil-spec



Equipotential Bonding: Auxiliary bond straps are used to establish an equipotential bonding network throughout the a satellite, aircraft, or missile system structure. Flexible bonds ensure that all metallic components within the system are electrically connected to each other and to the vehicle's main structure. This helps to prevent potential differences and minimize the risk of electrical arcing or damage due to electrostatic discharge (ESD).

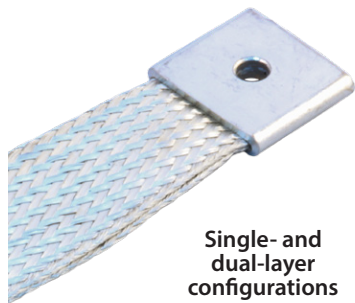
Grounding for Fault Current Dissipation: Ground straps, as compared to bonds, are specifically designed to provide a low-resistance path for fault currents to be safely conducted away from sensitive electronics and subsystems. They serve to dissipate fault currents, transient events, and static discharge to prevent damage and ensure the reliable operation of the satellite's electrical system. Ground straps are sized by the user to safely carry the maximum expected fault current without overheating or sustaining damage.

- **Standard duty and weight** Plated copper and stainless steel ground straps IAW A-A-59569
- **Low-resistance electrical performance** for both grounding and bonding applications
- **Robust current-carrying capacity** IAW military and commercial aerospace requirements
- **Space flight legacy and TRL 9 status** for nickel and silver-plated configurations
- **Outstanding availability:** both catalog and custom solutions routinely stocked in Glenair's same-day inventory

LOW-RESISTANCE, FLEXIBLE

A-A-59569 Soft-Drawn Copper Braid Straps

For Aerospace Bonding and Grounding Applications



Single- and dual-layer configurations



Configurable lug hole sizes and angles



Available with or without M23053 black or clear sleeving

Electrical Structure Network and Metallic Bond Network ground strap material selection depends on electrical resistance, current, and EMI shielding requirements, as well as environmental and regulatory standards. The following configurations of Glenair ground straps built IAW A-A-59569 have been fully tested and qualified.

Conductive and dissipative materials such as copper, are selected for their low resistance while dissipative materials such as steel are selected for their ability to discharge electromagnetic energy in the form of heat. The selection of the correct mix of conductive and dissipative materials for ground straps in aircraft depends on multiple factors including durability, weight and space requirements, as well as galvanic compatibility with other materials. Industry standards also dictate material selection for use in aircraft ground straps.

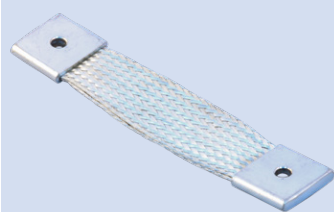
Tin-plated copper material is commonly used in most aerospace applications, and combines the excellent conductivity of copper with the good corrosion resistance of tin plating. This material is not recommended for space applications.

Silver-plated copper may be selected for applications where highest conductivity, excellent resistance to corrosion, and best low-resistance electrical performance are required. This material is recommended for space flight applications as well as non-SWAMP zone aircraft applications.

Nickel-plated copper is selected for excellent conductivity and best corrosion protection of these soft-drawn copper plated braids. This material is recommended for radiation resistance in space flight applications, as well as best corrosion-resistance in SWAMP zone aircraft applications.

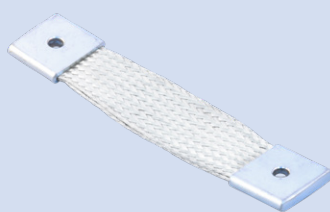
Finally, **stainless steel** is the most durable and corrosion-resistant material and should be selected for applications where high strength and resistance to environmental factors such as high heat, moisture, and salt are required. Stainless steel however is not as conductive as any of the copper-core material types, and exhibits higher electrical resistance than may be acceptable for certain bonding and grounding applications.

SELECTION GUIDE: A-A-59569 BRAIDED GROUND STRAPS AND ESD BONDS



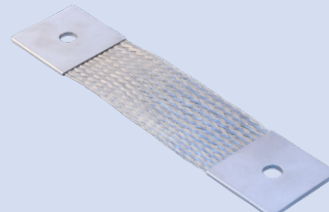
107-101

Tin-Plated Copper Braid



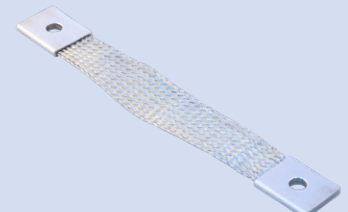
107-102

Silver-Plated Copper Braid



107-103

Nickel-Plated Copper Braid



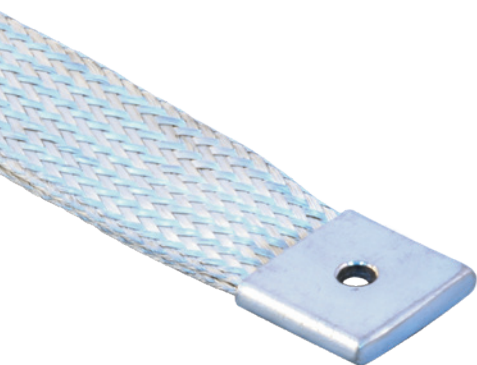
107-104

Stainless Steel Braid

LOW-RESISTANCE, FLEXIBLE A-A-59569 Ground and Bond Straps



107-101 Tin-Plated Copper Braid Configurable Crimp Lugs, Optional Insulation



HOW TO ORDER							
Sample Part Number	107-101	S	-RD	-2000	A	E	-6 S
Product Series	Tin-plated copper 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	125 - 2000, See Dimensions Tables						
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	In inches						
Insulation Sleeving	S = Black sleeving over braid C = Clear sleeving over braid Omit = No sleeving						

GROUND STRAP FEATURES

- Soft-drawn tin-plated copper braid
- EMI frequency effective from 10KHz to 1 GHz
- 150°C temperature tolerant
- 125 lbs. pull strength (.500 dia. braid)
- 48 hours salt spray corrosion resistant
- Good abrasion resistance
- Lightweight, durable, configurable crimp lugs: square, radiused, straight, single- and double-right-angle versions
- Available black or clear sleeving over braid

MATERIAL/FINISH

- 36 AWG Copper / tin plate IAW A-A-59569
- Lugs - Copper / tin plate per ASTM B545
- Sleeving - per M23053 or equivalent

LUG HOLE SIZE CODES

Hole Size Code	Ø C	Stud Size (Ref.)
X	.000	No Lug Hole
Z	.090/.098 (2.29/2.49)	#2
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 BRAID GROUND STRAP

Size Code	CSA (KCMIL)	CSA (mm ²)	Ref. AWG Equivalent*	Current Rating (Amps)**	Nom. Resistance mOhm/m	Max. Lug Code
125	3.0	1.5	16-15	35	11.90	B
203	7.8	4.0	12-11	63	4.70	D
250	9.6	4.9	11-10	72	3.90	E
437	10.8	5.5	10	78	3.40	F
500	13.2	6.7	9	88	2.95	G
1000	19.2	9.7	8-7	111	2.20	J
1500	23.4	11.9	7-6	126	1.90	L
2000	28.8	14.6	6-5	143	1.55	M

DOUBLE-LAYER BRAID GROUND STRAP

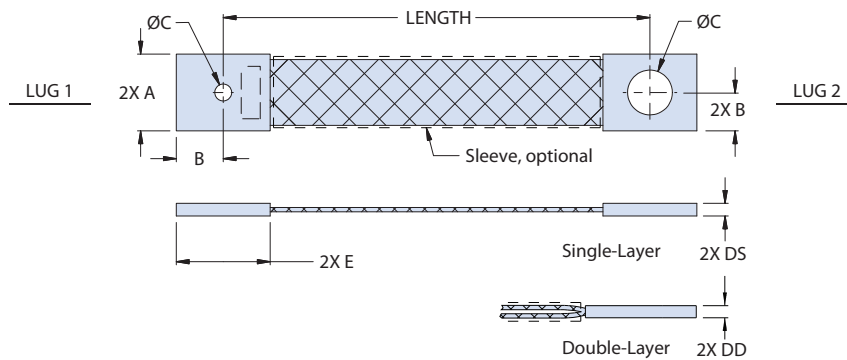
Size Code	CSA (KCMIL)	CSA (mm ²)	Ref. AWG Equivalent*	Current Rating (Amps)**	Nom. Resistance mOhm/m	Max. Lug Code
125	6.0	3.0	13-12	54	5.95	B
203	15.6	8.0	9-8	98	2.35	D
250	19.2	9.8	8-7	111	1.95	E
437	21.6	11.0	7	120	1.70	F
500	26.4	13.4	6	136	1.50	G
1000	38.4	19.4	5-4	171	1.10	J
1500	46.8	23.8	4-3	193	0.95	L
2000	57.6	29.2	3-2	220	0.80	M

NOTES

- * AWG Eqiv. 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

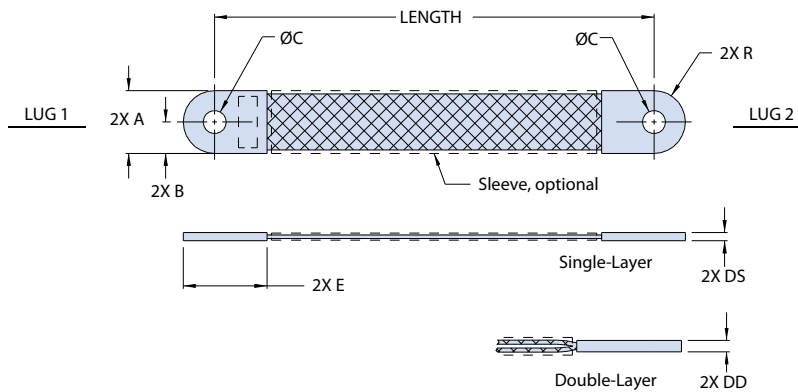
**107-101 Tin-Plated Copper Braid
 Square Lugs / Radiused Lugs**

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
125	.240	6.10	.120	3.05	.060	1.52	.075	1.91	.240	6.10
203	.330	8.38	.165	4.19	.070	1.78	.090	2.29	.330	8.38
250	.410	10.41	.205	5.21	.090	2.29	.120	3.05	.410	10.41
437	.530	13.46	.265	6.73	.085	2.16	.110	2.79	.530	13.46
500	.600	15.24	.300	7.62	.085	2.16	.110	2.79	.600	15.24
1000	.830	21.08	.415	10.54	.100	2.54	.130	3.30	.830	21.08
1500	1.000	25.40	.500	12.70	.100	2.54	.130	3.30	1.000	25.40
2000	1.180	29.97	.590	14.99	.100	2.54	.130	3.30	1.180	29.97

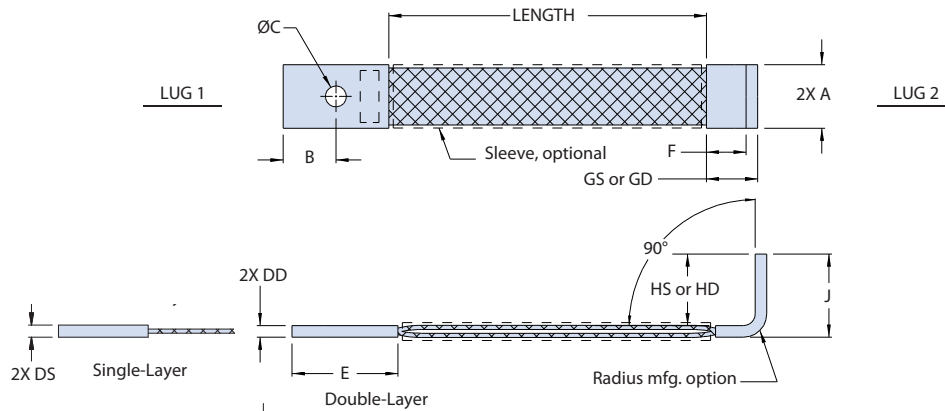
RD - RADIUSED LUG DIMENSIONS



Size Code	A		B		DS (Single-Layer)		DD (Double-Layer)		E		R	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
125	.240	6.10	.120	3.05	.060	1.52	.075	1.91	.630	16.00	.120	3.05
203	.330	8.38	.165	4.19	.070	1.78	.090	2.29	.630	16.00	.165	4.19
250	.410	10.41	.205	5.21	.090	2.29	.120	3.05	.750	19.05	.205	5.21
437	.530	13.46	.265	6.73	.085	2.16	.110	2.79	.750	19.05	.265	6.73
500	.600	15.24	.300	7.62	.085	2.16	.110	2.79	.850	21.59	.300	7.62
1000	.830	21.08	.415	10.54	.100	2.54	.130	3.30	1.100	27.94	.415	10.54
1500	1.000	25.40	.500	12.70	.100	2.54	.130	3.30	1.250	31.75	.500	12.70
2000	1.180	29.97	.590	14.99	.100	2.54	.130	3.30	1.400	35.56	.590	14.99

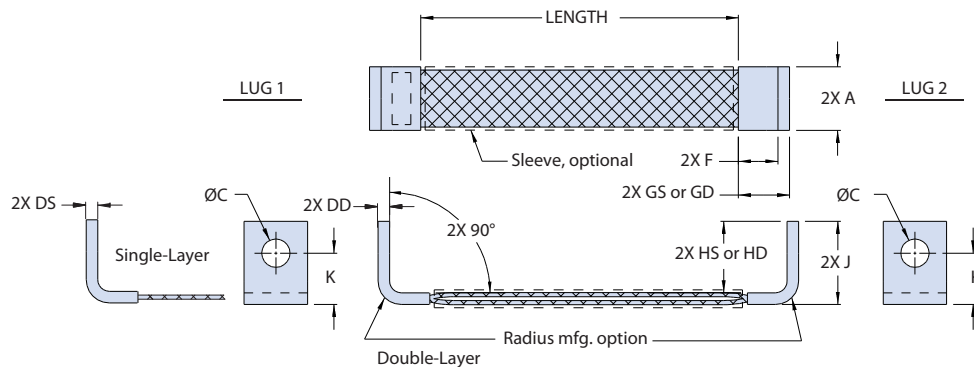
**107-101 Tin-Plated Copper Braid
 Single / Double Right-Angle Lugs**

RA - RIGHT-ANGLE LUG DIMENSIONS



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
125	.240	6.10	.313	7.95	.060	1.52	.075	1.91	.630	16.00	.375	9.53	.435	11.05	.450	11.43	.590	14.99	.580	14.73	.650	16.51	.500	12.70
203	.330	8.38	.313	7.95	.070	1.78	.090	2.29	.630	16.00	.375	9.53	.445	11.30	.465	11.81	.630	16.00	.610	15.49	.700	17.78	.500	12.70
250	.410	10.41	.375	9.53	.090	2.29	.120	3.05	.750	19.05	.375	9.53	.465	11.81	.495	12.57	.660	16.76	.630	16.00	.750	19.05	.500	12.70
437	.530	13.46	.375	9.53	.085	2.16	.110	2.79	.750	19.05	.375	9.53	.460	11.68	.485	12.32	.820	20.83	.790	20.07	.900	22.86	.625	15.88
500	.600	15.24	.425	10.80	.085	2.16	.110	2.79	.850	21.59	.375	9.53	.460	11.68	.485	12.32	.920	23.37	.890	22.61	1.000	25.40	.625	15.88
1000	.830	21.08	.550	13.97	.100	2.54	.130	3.30	1.100	27.94	.500	12.70	.600	15.24	.630	16.00	1.050	26.67	1.020	25.91	1.150	29.21	.750	19.05
1500	1.000	25.40	.625	15.88	.100	2.54	.130	3.30	1.250	31.75	.500	12.70	.600	15.24	.630	16.00	1.150	29.21	1.120	28.45	1.250	31.75	.750	19.05
2000	1.180	29.97	.700	17.78	.100	2.54	.130	3.30	1.400	35.56	.500	12.70	.600	15.24	.630	16.00	1.250	31.75	1.220	30.99	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
125	.240	6.10	.060	1.52	.075	1.91	.375	9.53	.435	11.05	.450	11.43	.590	14.99	.580	14.73	.650	16.51	.500	12.70
203	.330	8.38	.070	1.78	.090	2.29	.375	9.53	.445	11.30	.465	11.81	.630	16.00	.610	15.49	.700	17.78	.500	12.70
250	.410	10.41	.090	2.29	.120	3.05	.375	9.53	.465	11.81	.495	12.57	.660	16.76	.630	16.00	.750	19.05	.500	12.70
437	.530	13.46	.085	2.16	.110	2.79	.375	9.53	.460	11.68	.485	12.32	.820	20.83	.790	20.07	.900	22.86	.625	15.88
500	.600	15.24	.085	2.16	.110	2.79	.375	9.53	.460	11.68	.485	12.32	.920	23.37	.890	22.61	1.000	25.40	.625	15.88
1000	.830	21.08	.100	2.54	.130	3.30	.500	12.70	.600	15.24	.630	16.00	1.050	26.67	1.020	25.91	1.150	29.21	.750	19.05
1500	1.000	25.40	.100	2.54	.130	3.30	.500	12.70	.600	15.24	.630	16.00	1.150	29.21	1.120	28.45	1.250	31.75	.750	19.05
2000	1.180	29.97	.100	2.54	.130	3.30	.500	12.70	.600	15.24	.630	16.00	1.250	31.75	1.220	30.99	1.350	34.29	.750	19.05

LOW-RESISTANCE, FLEXIBLE A-A-59569 Ground and Bond Straps



107-102 Silver-Plated Copper Braid Configurable Crimp Lugs, Optional Insulation



HOW TO ORDER								
Sample Part Number	107-102	S	-RD	-2000	A	E	-6	S
Product Series	Silver-plated copper 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	125 – 2000, See Dimensions Tables							
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	In inches							
Insulation Sleeving	S = Black sleeving over braid C = Clear sleeving over braid Omit = No sleeving							

GROUND STRAP FEATURES

- Soft-drawn silver-plated copper braid
- High-temperature tolerant to 200°C
- EMI frequency effective from 10KHz to 1 GHz
- 125 lbs. pull strength (.500 dia. braid)
- 48 hours salt spray corrosion resistant
- Lightweight, durable, configurable crimp lugs: square, radiused, straight, single- and double-right-angle versions
- Available black or clear sleeving over braid

MATERIAL/FINISH

- Braid - 36 AWG copper / silver plate IAW A-A-59569
- Lugs - copper / silver plate per ASTM B700
- Sleeving - per M23053 or equivalent

LUG HOLE SIZE CODES		
Hole Size Code	Ø C	Stud Size (Ref.)
X	.000	No Lug Hole
Z	.090/.098 (2.29/2.49)	#2
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 BRAID GROUND STRAP						
Size Code	CSA (KCMIL)	CSA (mm²)	Ref. AWG Equivalent*	Current Rating (Amps)**	Nom. Resistance mOhm/m	Max. Lug Code
125	3.0	1.5	16–15	35	7.90	B
203	7.8	4.0	12–11	63	3.10	D
250	9.6	4.9	11–10	72	2.65	E
437	10.8	5.5	10	78	2.20	F
500	13.2	6.7	9	88	2.00	G
1000	19.2	9.7	8–7	111	1.45	J
1500	23.4	11.9	7–6	126	1.30	L
2000	28.8	14.6	6–5	143	1.05	M

DOUBLE-LAYER BRAID GROUND STRAP						
Size Code	CSA (KCMIL)	CSA (mm²)	Ref. AWG Equivalent*	Current Rating (Amps)**	Nom. Resistance mOhm/m	Max. Lug Code
125	6.0	3.0	13–12	54	3.95	B
203	15.6	8.0	9–8	98	1.55	D
250	19.2	9.8	8–7	111	1.35	E
437	21.6	11.0	7	120	1.10	F
500	26.4	13.4	6	136	1.00	G
1000	38.4	19.4	5–4	171	0.75	J
1500	46.8	23.8	4–3	193	0.65	L
2000	57.6	29.2	3–2	220	0.55	M

NOTES

- * AWG Eqiv. 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

**107-102 Silver-Plated 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
125	.240	6.10	.120	3.05	.060	1.52	.075	1.91	.240	6.10
203	.330	8.38	.165	4.19	.070	1.78	.090	2.29	.330	8.38
250	.410	10.41	.205	5.21	.090	2.29	.120	3.05	.410	10.41
437	.530	13.46	.265	6.73	.085	2.16	.110	2.79	.530	13.46
500	.600	15.24	.300	7.62	.085	2.16	.110	2.79	.600	15.24
1000	.830	21.08	.415	10.54	.100	2.54	.130	3.30	.830	21.08
1500	1.000	25.40	.500	12.70	.100	2.54	.130	3.30	1.000	25.40
2000	1.180	29.97	.590	14.99	.100	2.54	.130	3.30	1.180	29.97

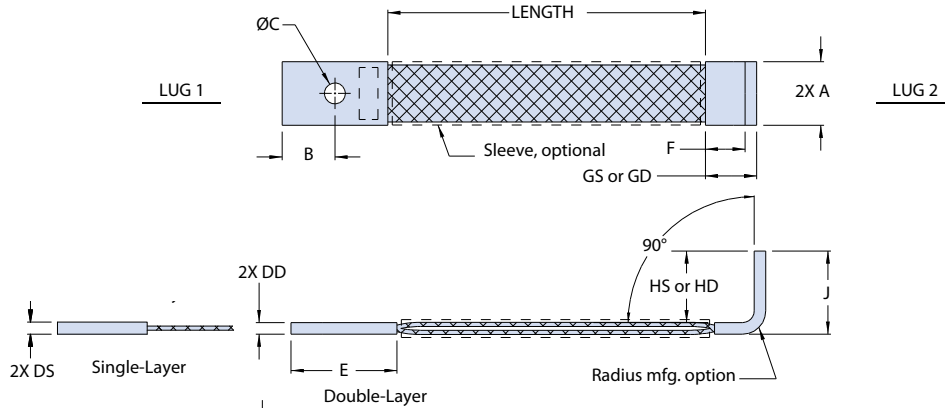
RD - RADIUSED LUG DIMENSIONS												
Size Code	A		B		DS (Single-Layer)		DD (Double-Layer)		E		R	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
125	.240	6.10	.120	3.05	.060	1.52	.075	1.91	.630	16.00	.120	3.05
203	.330	8.38	.165	4.19	.070	1.78	.090	2.29	.630	16.00	.165	4.19
250	.410	10.41	.205	5.21	.090	2.29	.120	3.05	.750	19.05	.205	5.21
437	.530	13.46	.265	6.73	.085	2.16	.110	2.79	.750	19.05	.265	6.73
500	.600	15.24	.300	7.62	.085	2.16	.110	2.79	.850	21.59	.300	7.62
1000	.830	21.08	.415	10.54	.100	2.54	.130	3.30	1.100	27.94	.415	10.54
1500	1.000	25.40	.500	12.70	.100	2.54	.130	3.30	1.250	31.75	.500	12.70
2000	1.180	29.97	.590	14.99	.100	2.54	.130	3.30	1.400	35.56	.590	14.99

LOW-RESISTANCE, FLEXIBLE A-A-59569 Ground and Bond Straps



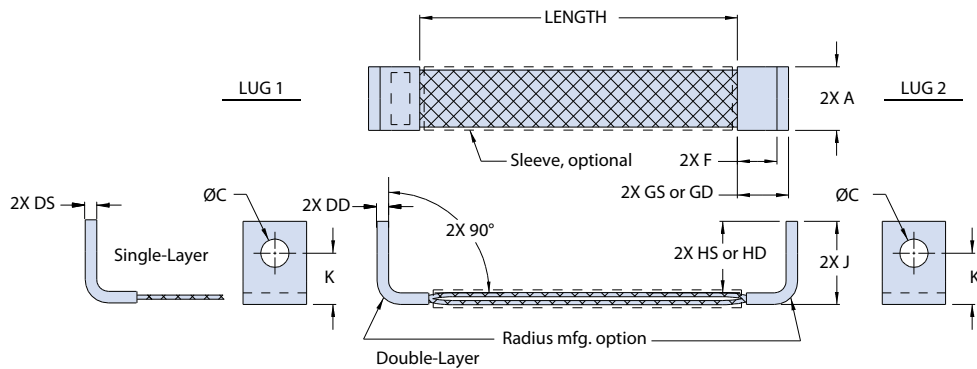
107-102 Silver-Plated Copper Braid Single / Double Right-Angle Lugs

RA - RIGHT-ANGLE LUG DIMENSIONS



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
125	.240	6.10	.313	7.95	.060	1.52	.075	1.91	.630	16.00	.375	9.53	.435	11.05	.450	11.43	.590	14.99	.580	14.73	.650	16.51	.500	12.70
203	.330	8.38	.313	7.95	.070	1.78	.090	2.29	.630	16.00	.375	9.53	.445	11.30	.465	11.81	.630	16.00	.610	15.49	.700	17.78	.500	12.70
250	.410	10.41	.375	9.53	.090	2.29	.120	3.05	.750	19.05	.375	9.53	.465	11.81	.495	12.57	.660	16.76	.630	16.00	.750	19.05	.500	12.70
437	.530	13.46	.375	9.53	.085	2.16	.110	2.79	.750	19.05	.375	9.53	.460	11.68	.485	12.32	.820	20.83	.790	20.07	.900	22.86	.625	15.88
500	.600	15.24	.425	10.80	.085	2.16	.110	2.79	.850	21.59	.375	9.53	.460	11.68	.485	12.32	.920	23.37	.890	22.61	1.000	25.40	.625	15.88
1000	.830	21.08	.550	13.97	.100	2.54	.130	3.30	1.100	27.94	.500	12.70	.600	15.24	.630	16.00	1.050	26.67	1.020	25.91	1.150	29.21	.750	19.05
1500	1.000	25.40	.625	15.88	.100	2.54	.130	3.30	1.250	31.75	.500	12.70	.600	15.24	.630	16.00	1.150	29.21	1.120	28.45	1.250	31.75	.750	19.05
2000	1.180	29.97	.700	17.78	.100	2.54	.130	3.30	1.400	35.56	.500	12.70	.600	15.24	.630	16.00	1.250	31.75	1.220	30.99	1.350	34.29	.750	19.05

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

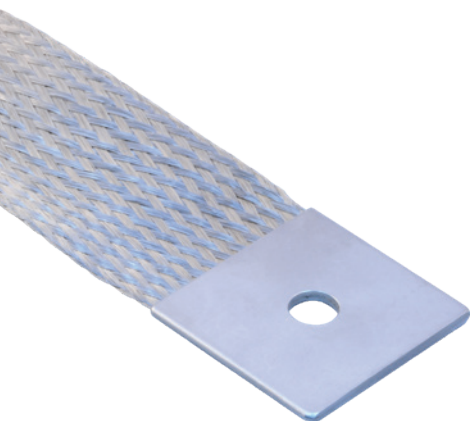


Size Code	A		DS		DD		F Ref.		GS Ref. (Single-Layer)		GD Ref. (Double-Layer)		HS Ref. (Single-Layer)		HD Ref. (Double-Layer)		J		K Ref.	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
125	.240	6.10	.060	1.52	.075	1.91	.375	9.53	.435	11.05	.450	11.43	.590	14.99	.580	14.73	.650	16.51	.500	12.70
203	.330	8.38	.070	1.78	.090	2.29	.375	9.53	.445	11.30	.465	11.81	.630	16.00	.610	15.49	.700	17.78	.500	12.70
250	.410	10.41	.090	2.29	.120	3.05	.375	9.53	.465	11.81	.495	12.57	.660	16.76	.630	16.00	.750	19.05	.500	12.70
437	.530	13.46	.085	2.16	.110	2.79	.375	9.53	.460	11.68	.485	12.32	.820	20.83	.790	20.07	.900	22.86	.625	15.88
500	.600	15.24	.085	2.16	.110	2.79	.375	9.53	.460	11.68	.485	12.32	.920	23.37	.890	22.61	1.000	25.40	.625	15.88
1000	.830	21.08	.100	2.54	.130	3.30	.500	12.70	.600	15.24	.630	16.00	1.050	26.67	1.020	25.91	1.150	29.21	.750	19.05
1500	1.000	25.40	.100	2.54	.130	3.30	.500	12.70	.600	15.24	.630	16.00	1.150	29.21	1.120	28.45	1.250	31.75	.750	19.05
2000	1.180	29.97	.100	2.54	.130	3.30	.500	12.70	.600	15.24	.630	16.00	1.250	31.75	1.220	30.99	1.350	34.29	.750	19.05

LOW-RESISTANCE, FLEXIBLE A-A-59569 Ground and Bond Straps



107-103 Nickel-Plated Copper Braid Configurable Crimp Lugs, Optional Insulation



HOW TO ORDER							
Sample Part Number	107-103	S	-RD	-2000	A	E	-6 S
Product Series	Nickel-plated copper 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	125 - 2000, See Dimensions Tables						
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	In inches						
Insulation Sleeving	S = Black sleeving over braid C = Clear sleeving over braid Omit = No sleeving						

GROUND STRAP FEATURES

- Highly-conductive soft-drawn nickel-plated copper braid
- EMI frequency effective from 10KHz to 1 GHz
- 200°C temperature tolerant
- 125 lbs. pull strength (.500 dia. braid)
- 500 hours salt spray corrosion resistant
- Good abrasion resistance
- Lightweight, durable, configurable crimp lugs: square, radiused, straight, single- and double-right-angle versions
- Available black or clear sleeving over braid

MATERIAL/FINISH

- Braid - 36 AWG copper / nickel plate IAW A-A-59569
- 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
Z	.090/.098 (2.29/2.49)	#2
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 BRAID GROUND STRAP

Size Code	CSA (KCMIL)	CSA (mm ²)	Ref. AWG Equivalent*	Current Rating (Amps)**	Nom. Resistance mOhm/m	Max. Lug Code
125	3.0	1.5	16-15	35	12.65	B
203	7.8	4.0	12-11	63	5.00	D
250	9.6	4.9	11-10	72	4.25	E
437	10.8	5.5	10	78	3.60	F
500	13.2	6.7	9	88	3.15	G
1000	19.2	9.7	8-7	111	2.35	J
1500	23.4	11.9	7-6	126	2.05	L
2000	28.8	14.6	6-5	143	1.65	M

DOUBLE-LAYER BRAID GROUND STRAP

Size Code	CSA (KCMIL)	CSA (mm ²)	Ref. AWG Equivalent*	Current Rating (Amps)**	Nom. Resistance mOhm/m	Max. Lug Code
125	6.0	3.0	13-12	54	6.35	B
203	15.6	8.0	9-8	98	2.50	D
250	19.2	9.8	8-7	111	2.15	E
437	21.6	11.0	7	120	1.80	F
500	26.4	13.4	6	136	1.60	G
1000	38.4	19.4	5-4	171	1.20	J
1500	46.8	23.8	4-3	193	1.05	L
2000	57.6	29.2	3-2	220	0.85	M

NOTES

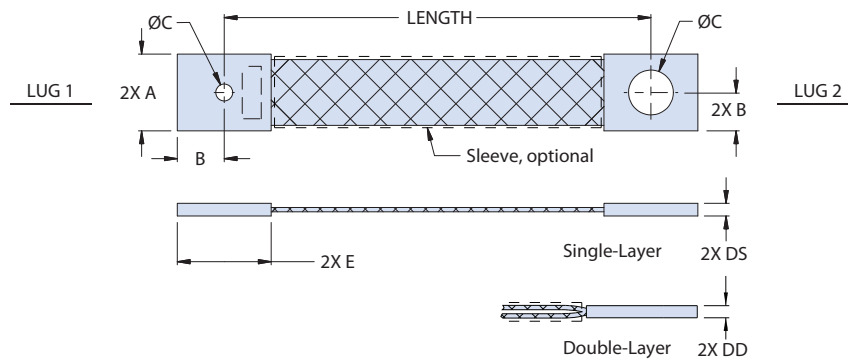
- * AWG Eqiv. based on total cross sectional area of braid conductors, not electrical performance.
- ** Current rating given for information only and is not a requirement. Values shown are for uninsulated wire in free air, based on ambient of 30°C and max temperature of 90°C. Values should be derated 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

LOW-RESISTANCE, FLEXIBLE A-A-59569 Ground and Bond Straps



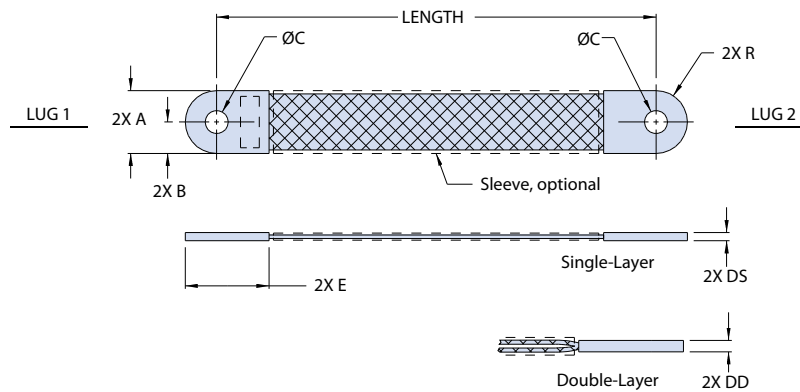
107-103 Nickel-Plated Copper Braid Square Lugs / Radiused Lugs

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
125	.240	6.10	.120	3.05	.060	1.52	.075	1.91	.240	6.10
203	.330	8.38	.165	4.19	.070	1.78	.090	2.29	.330	8.38
250	.410	10.41	.205	5.21	.090	2.29	.120	3.05	.410	10.41
437	.530	13.46	.265	6.73	.085	2.16	.110	2.79	.530	13.46
500	.600	15.24	.300	7.62	.085	2.16	.110	2.79	.600	15.24
1000	.830	21.08	.415	10.54	.100	2.54	.130	3.30	.830	21.08
1500	1.000	25.40	.500	12.70	.100	2.54	.130	3.30	1.000	25.40
2000	1.180	29.97	.590	14.99	.100	2.54	.130	3.30	1.180	29.97

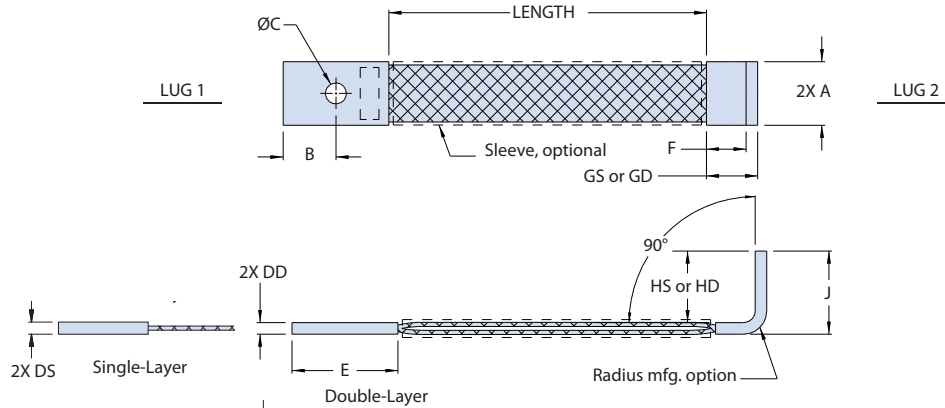
RD - RADIUSED LUG DIMENSIONS



Size Code	A		B		DS (Single-Layer)		DD (Double-Layer)		E		R	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
125	.240	6.10	.120	3.05	.060	1.52	.075	1.91	.630	16.00	.120	3.05
203	.330	8.38	.165	4.19	.070	1.78	.090	2.29	.630	16.00	.165	4.19
250	.410	10.41	.205	5.21	.090	2.29	.120	3.05	.750	19.05	.205	5.21
437	.530	13.46	.265	6.73	.085	2.16	.110	2.79	.750	19.05	.265	6.73
500	.600	15.24	.300	7.62	.085	2.16	.110	2.79	.850	21.59	.300	7.62
1000	.830	21.08	.415	10.54	.100	2.54	.130	3.30	1.100	27.94	.415	10.54
1500	1.000	25.40	.500	12.70	.100	2.54	.130	3.30	1.250	31.75	.500	12.70
2000	1.180	29.97	.590	14.99	.100	2.54	.130	3.30	1.400	35.56	.590	14.99

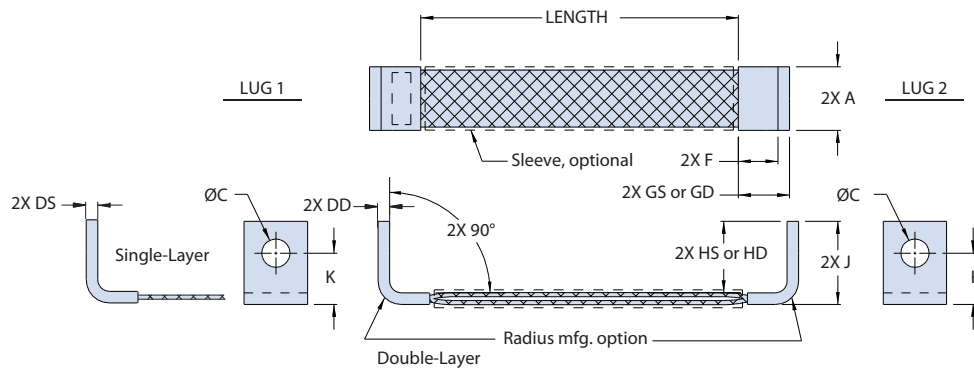
107-103 Nickel-Plated Copper Braid Single / Double Right-Angle Lugs

RA - RIGHT-ANGLE LUG DIMENSIONS



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
125	.240	6.10	.313	7.95	.060	1.52	.075	1.91	.630	16.00	.375	9.53	.435	11.05	.450	11.43	.590	14.99	.580	14.73	.650	16.51	.500	12.70
203	.330	8.38	.313	7.95	.070	1.78	.090	2.29	.630	16.00	.375	9.53	.445	11.30	.465	11.81	.630	16.00	.610	15.49	.700	17.78	.500	12.70
250	.410	10.41	.375	9.53	.090	2.29	.120	3.05	.750	19.05	.375	9.53	.465	11.81	.495	12.57	.660	16.76	.630	16.00	.750	19.05	.500	12.70
437	.530	13.46	.375	9.53	.085	2.16	.110	2.79	.750	19.05	.375	9.53	.460	11.68	.485	12.32	.820	20.83	.790	20.07	.900	22.86	.625	15.88
500	.600	15.24	.425	10.80	.085	2.16	.110	2.79	.850	21.59	.375	9.53	.460	11.68	.485	12.32	.920	23.37	.890	22.61	1.000	25.40	.625	15.88
1000	.830	21.08	.550	13.97	.100	2.54	.130	3.30	1.100	27.94	.500	12.70	.600	15.24	.630	16.00	1.050	26.67	1.020	25.91	1.150	29.21	.750	19.05
1500	1.000	25.40	.625	15.88	.100	2.54	.130	3.30	1.250	31.75	.500	12.70	.600	15.24	.630	16.00	1.150	29.21	1.120	28.45	1.250	31.75	.750	19.05
2000	1.180	29.97	.700	17.78	.100	2.54	.130	3.30	1.400	35.56	.500	12.70	.600	15.24	.630	16.00	1.250	31.75	1.220	30.99	1.350	34.29	.750	19.05

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

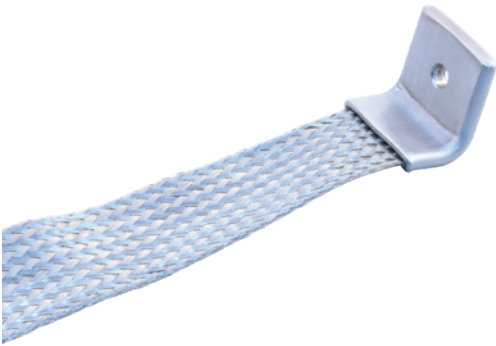


Size Code	A		DS		DD		F Ref.		GS Ref. (Single-Layer)		GD Ref. (Double-Layer)		HS Ref. (Single-Layer)		HD Ref. (Double-Layer)		J		K Ref.	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
125	.240	6.10	.060	1.52	.075	1.91	.375	9.53	.435	11.05	.450	11.43	.590	14.99	.580	14.73	.650	16.51	.500	12.70
203	.330	8.38	.070	1.78	.090	2.29	.375	9.53	.445	11.30	.465	11.81	.630	16.00	.610	15.49	.700	17.78	.500	12.70
250	.410	10.41	.090	2.29	.120	3.05	.375	9.53	.465	11.81	.495	12.57	.660	16.76	.630	16.00	.750	19.05	.500	12.70
437	.530	13.46	.085	2.16	.110	2.79	.375	9.53	.460	11.68	.485	12.32	.820	20.83	.790	20.07	.900	22.86	.625	15.88
500	.600	15.24	.085	2.16	.110	2.79	.375	9.53	.460	11.68	.485	12.32	.920	23.37	.890	22.61	1.000	25.40	.625	15.88
1000	.830	21.08	.100	2.54	.130	3.30	.500	12.70	.600	15.24	.630	16.00	1.050	26.67	1.020	25.91	1.150	29.21	.750	19.05
1500	1.000	25.40	.100	2.54	.130	3.30	.500	12.70	.600	15.24	.630	16.00	1.150	29.21	1.120	28.45	1.250	31.75	.750	19.05
2000	1.180	29.97	.100	2.54	.130	3.30	.500	12.70	.600	15.24	.630	16.00	1.250	31.75	1.220	30.99	1.350	34.29	.750	19.05

LOW-RESISTANCE, FLEXIBLE A-A-59569 Ground and Bond Straps



107-104 Stainless Steel Braid Configurable Crimp Lugs, Optional Insulation



HOW TO ORDER								
Sample Part Number	107-104	S	-RD	-2000	A	E	-6	S
Product Series	Stainless steel 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	125 – 2000, See Dimensions Tables							
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	In inches							
Insulation Sleeving	S = Black sleeving over braid C = Clear sleeving over braid Omit = No sleeving							

GROUND STRAP FEATURES

- Soft-drawn stainless steel braid
- High-temperature tolerant to 260°C
- 1000 hours salt spray corrosion resistant
- EMI frequency effective from 10KHz to 1 GHz
- 225 lbs. pull strength (.500 dia. braid)
- Lightweight, durable, configurable crimp lugs: square, radiused, straight, single- and double-right-angle versions
- Available black or clear sleeving over braid

MATERIAL/FINISH

- Braid - 36 AWG stainless steel per ASTM A580
- Lugs - stainless steel / passivate per AMS2700
- Sleeving - per M23053 or equivalent

LUG HOLE SIZE CODES		
Hole Size Code	Ø C	Stud Size (Ref.)
X	.000	No Lug Hole
Z	.090/.098 (2.29/2.49)	#2
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 BRAID GROUND STRAP						
Size Code	CSA (KCMIL)	CSA (mm²)	Ref. AWG Equivalent*	Current Rating (Amps)**	Nom. Resistance mOhm/m	Max. Lug Code
125	3.0	1.5	16–15	6	573.00	B
203	7.8	4.0	12–11	12	225.00	D
250	9.6	4.9	11–10	14	187.00	E
437	10.8	5.5	10	15	163.00	F
500	13.2	6.7	9	17	138.00	G
1000	19.2	9.7	8–7	21	104.00	J
1500	23.4	11.9	7–6	24	90.00	L
2000	28.8	14.6	6–5	28	74.00	M

DOUBLE-LAYER BRAID GROUND STRAP						
Size Code	CSA (KCMIL)	CSA (mm²)	Ref. AWG Equivalent*	Current Rating (Amps)**	Nom. Resistance mOhm/m	Max. Lug Code
125	6.0	3.0	13–12	10	286.50	B
203	15.6	8.0	9–8	19	112.50	D
250	19.2	9.8	8–7	21	93.50	E
437	21.6	11.0	7	23	81.50	F
500	26.4	13.4	6	26	69.00	G
1000	38.4	19.4	5–4	33	52.00	J
1500	46.8	23.8	4–3	37	45.00	L
2000	57.6	29.2	3–2	43	37.00	M

NOTES

- * AWG Eqiv. 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

**107-104 Stainless Steel 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
125	.240	6.10	.120	3.05	.060	1.52	.075	1.91	.240	6.10
203	.330	8.38	.165	4.19	.070	1.78	.090	2.29	.330	8.38
250	.410	10.41	.205	5.21	.090	2.29	.120	3.05	.410	10.41
437	.530	13.46	.265	6.73	.085	2.16	.110	2.79	.530	13.46
500	.600	15.24	.300	7.62	.085	2.16	.110	2.79	.600	15.24
1000	.830	21.08	.415	10.54	.100	2.54	.130	3.30	.830	21.08
1500	1.000	25.40	.500	12.70	.100	2.54	.130	3.30	1.000	25.40
2000	1.180	29.97	.590	14.99	.100	2.54	.130	3.30	1.180	29.97

RD - RADIUSED LUG DIMENSIONS

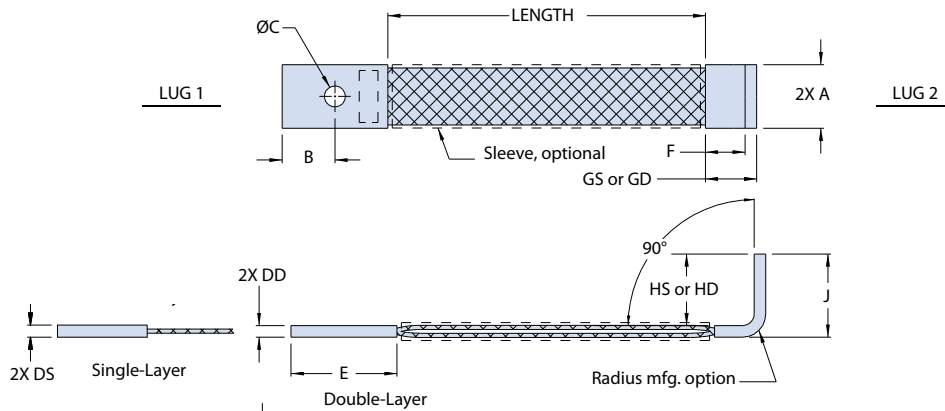
Size Code	A		B		DS (Single-Layer)		DD (Double-Layer)		E		R	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
125	.240	6.10	.120	3.05	.060	1.52	.075	1.91	.630	16.00	.120	3.05
203	.330	8.38	.165	4.19	.070	1.78	.090	2.29	.630	16.00	.165	4.19
250	.410	10.41	.205	5.21	.090	2.29	.120	3.05	.750	19.05	.205	5.21
437	.530	13.46	.265	6.73	.085	2.16	.110	2.79	.750	19.05	.265	6.73
500	.600	15.24	.300	7.62	.085	2.16	.110	2.79	.850	21.59	.300	7.62
1000	.830	21.08	.415	10.54	.100	2.54	.130	3.30	1.100	27.94	.415	10.54
1500	1.000	25.40	.500	12.70	.100	2.54	.130	3.30	1.250	31.75	.500	12.70
2000	1.180	29.97	.590	14.99	.100	2.54	.130	3.30	1.400	35.56	.590	14.99

LOW-RESISTANCE, FLEXIBLE A-A-59569 Ground and Bond Straps



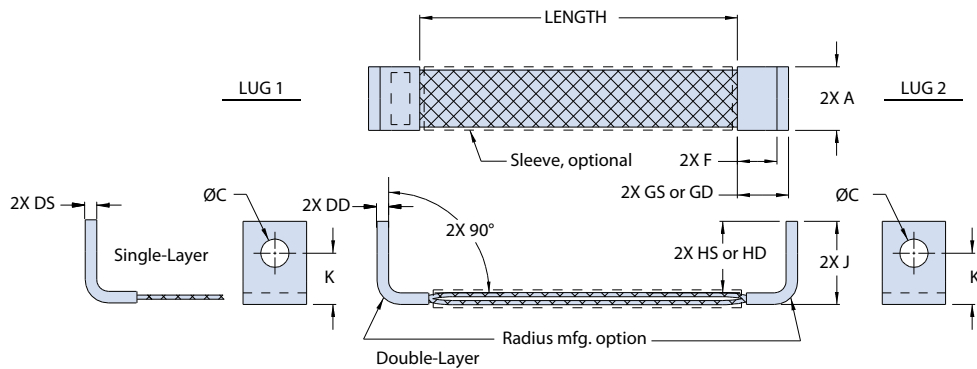
107-104 Stainless Steel Braid Single / Double Right-Angle Lugs

RA - RIGHT-ANGLE LUG DIMENSIONS



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
125	.240	6.10	.313	7.95	.060	1.52	.075	1.91	.630	16.00	.375	9.53	.435	11.05	.450	11.43	.590	14.99	.580	14.73	.650	16.51	.500	12.70
203	.330	8.38	.313	7.95	.070	1.78	.090	2.29	.630	16.00	.375	9.53	.445	11.30	.465	11.81	.630	16.00	.610	15.49	.700	17.78	.500	12.70
250	.410	10.41	.375	9.53	.090	2.29	.120	3.05	.750	19.05	.375	9.53	.465	11.81	.495	12.57	.660	16.76	.630	16.00	.750	19.05	.500	12.70
437	.530	13.46	.375	9.53	.085	2.16	.110	2.79	.750	19.05	.375	9.53	.460	11.68	.485	12.32	.820	20.83	.790	20.07	.900	22.86	.625	15.88
500	.600	15.24	.425	10.80	.085	2.16	.110	2.79	.850	21.59	.375	9.53	.460	11.68	.485	12.32	.920	23.37	.890	22.61	1.000	25.40	.625	15.88
1000	.830	21.08	.550	13.97	.100	2.54	.130	3.30	1.100	27.94	.500	12.70	.600	15.24	.630	16.00	1.050	26.67	1.020	25.91	1.150	29.21	.750	19.05
1500	1.000	25.40	.625	15.88	.100	2.54	.130	3.30	1.250	31.75	.500	12.70	.600	15.24	.630	16.00	1.150	29.21	1.120	28.45	1.250	31.75	.750	19.05
2000	1.180	29.97	.700	17.78	.100	2.54	.130	3.30	1.400	35.56	.500	12.70	.600	15.24	.630	16.00	1.250	31.75	1.220	30.99	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
125	.240	6.10	.060	1.52	.075	1.91	.375	9.53	.435	11.05	.450	11.43	.590	14.99	.580	14.73	.650	16.51	.500	12.70
203	.330	8.38	.070	1.78	.090	2.29	.375	9.53	.445	11.30	.465	11.81	.630	16.00	.610	15.49	.700	17.78	.500	12.70
250	.410	10.41	.090	2.29	.120	3.05	.375	9.53	.465	11.81	.495	12.57	.660	16.76	.630	16.00	.750	19.05	.500	12.70
437	.530	13.46	.085	2.16	.110	2.79	.375	9.53	.460	11.68	.485	12.32	.820	20.83	.790	20.07	.900	22.86	.625	15.88
500	.600	15.24	.085	2.16	.110	2.79	.375	9.53	.460	11.68	.485	12.32	.920	23.37	.890	22.61	1.000	25.40	.625	15.88
1000	.830	21.08	.100	2.54	.130	3.30	.500	12.70	.600	15.24	.630	16.00	1.050	26.67	1.020	25.91	1.150	29.21	.750	19.05
1500	1.000	25.40	.100	2.54	.130	3.30	.500	12.70	.600	15.24	.630	16.00	1.150	29.21	1.120	28.45	1.250	31.75	.750	19.05
2000	1.180	29.97	.100	2.54	.130	3.30	.500	12.70	.600	15.24	.630	16.00	1.250	31.75	1.220	30.99	1.350	34.29	.750	19.05

CRES 316 Wire Rope with Mounting Holes Mil-qualified for shipboard electrical bonding applications



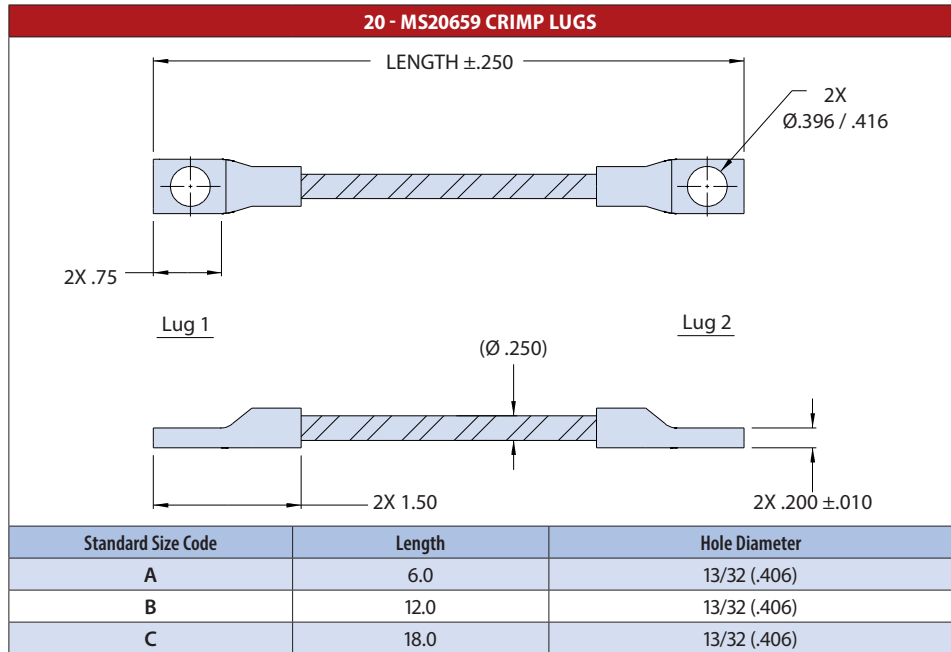
HOW TO ORDER				
Sample Part Number	M24749	-I	-N	-L
Product Series	MIL-DTL-24749 Type I Bond Strap			
Bond Strap Type	I = CRES 316 wire rope			
Standard Size Code	See Table N = For Nonstandard Sizes			
Length	Only for Nonstandard			

GROUND STRAP FEATURES

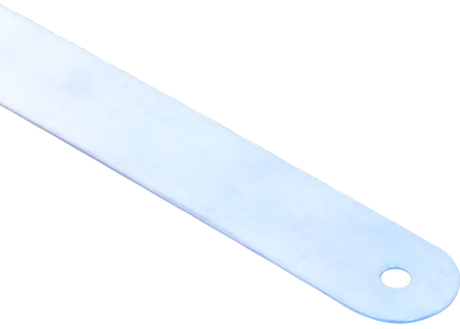
- Meets the rigorous specifications of MIL-DTL-24749 type I bonding straps
- Intended for bonding items in weather-exposed areas where corrosion is a concern.
- For more options see Glenair Part Number 107-511.

MATERIAL

- Lugs - 316L stainless steel per ASTM A312 / A312M
- Wire - 316 stainless steel, annealed, .250 in. diameter



Flat CRES 316 Strip with Mounting Holes
Mil-qualified for shipboard electrical bonding applications



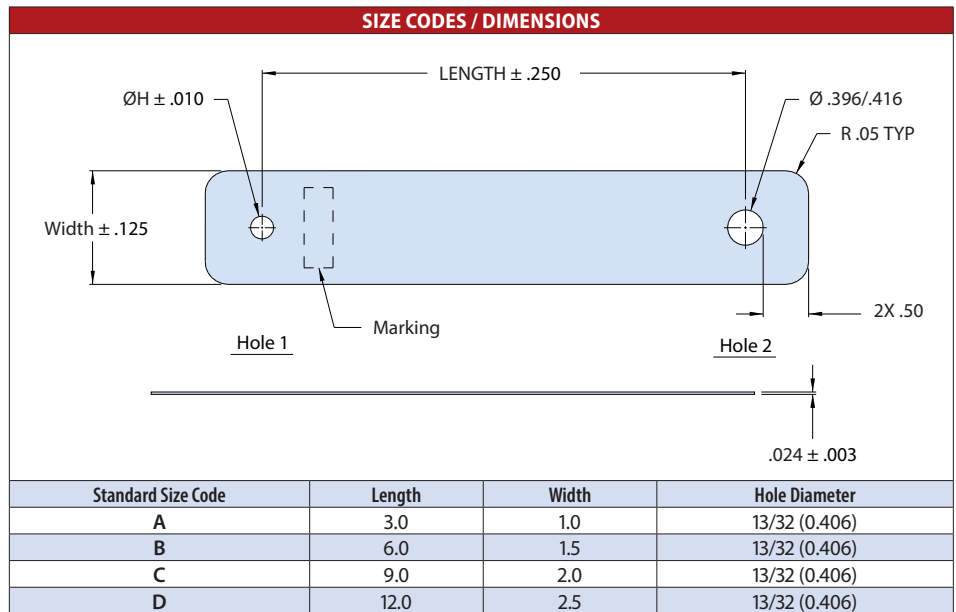
HOW TO ORDER						
Sample Part Number	M24749	-II	-N	-L	-W	-H
Product Series	MIL-DTL-24749 Type II Bond Strip					
Bond Strap Type	II = Flat CRES 316 strip					
Standard Size Code	See Table N = For Nonstandard Sizes					
Length	Only for Nonstandard					
Width	Only for Nonstandard					
Hole Diameter	Only for Nonstandard					

GROUND STRIP FEATURES

- Meets the rigorous specifications of MIL-DTL-24749 type II bonding strips
- Intended for lower-impedance bonding items in weather-exposed areas where corrosion is a concern.
- The length-to-width ratio for type II bond straps shall not exceed 5 to 1.
- For more options see Glenair Part Number 107-502.

MATERIAL/FINISH

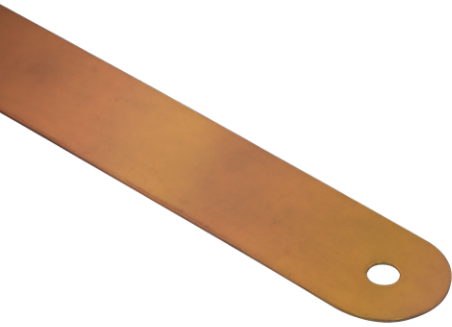
- Strip - 316 stainless steel per ASTM A240 or A666/N.A.



MIL-SPEC M24749 Type III Bond Strips



Flat Copper Strip with Mounting Holes Mil-qualified for shipboard electrical bonding applications



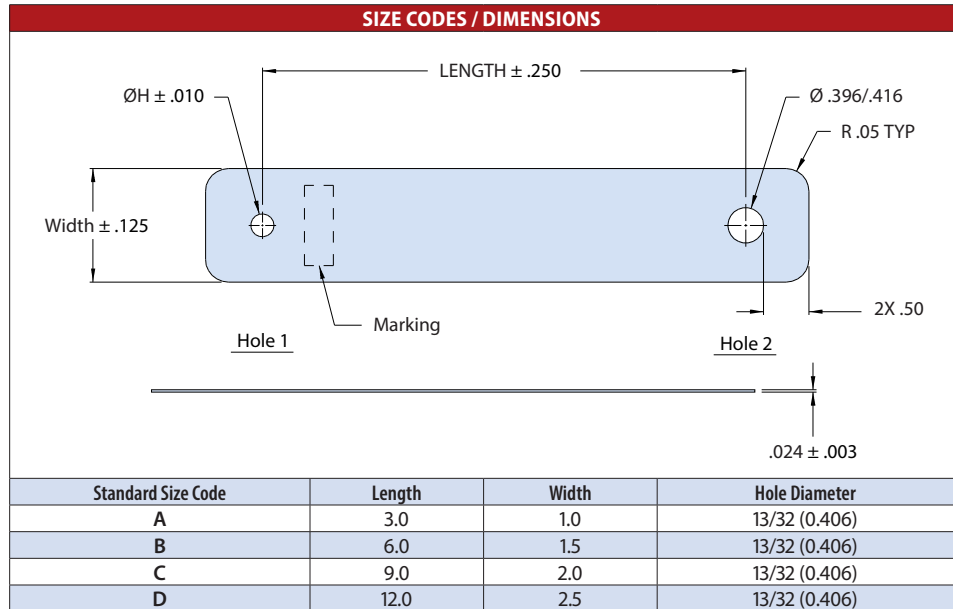
HOW TO ORDER						
Sample Part Number	M24749	-III	-N	-L	-W	-H
Product Series	MIL-DTL-24749 Type III Bond Strip					
Bond Strap Type	III = Flat Copper strip					
Standard Size Code	See Table N = For Nonstandard Sizes					
Length	Only for Nonstandard					
Width	Only for Nonstandard					
Hole Diameter	Only for Nonstandard					

GROUND STRIP FEATURES

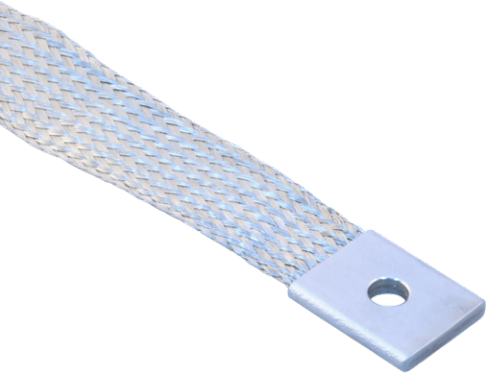
- Meets the rigorous specifications of MIL-DTL-24749 Type III bonding strips
- Intended use for bonding items in non-weather exposed areas.
- The length-to-width ratio for Type II bond strips shall not exceed 5 to 1.
- For more options see Glenair Part Number 107-503.

MATERIAL/FINISH

- Strip - Copper C11000 per ASTM B152/N.A.



Flat CRES 316L/Nickel 200 Braid with Mounting Holes Mil-qualified for shipboard electrical bonding applications



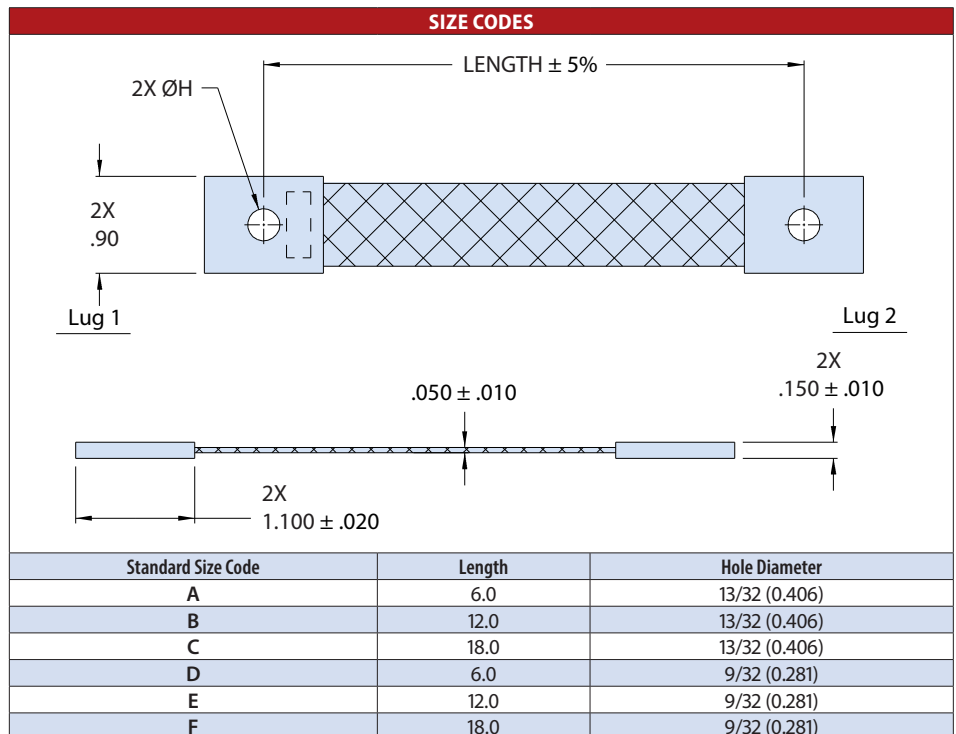
HOW TO ORDER					
Sample Part Number	M24749	-IV	-N	-L	-H
Product Series	MIL-DTL-24749 Type IV Ground Strap				
Bond Strap Type	IV = Flat CRES 316L/Nickel 200 Braid				
Standard Size Code	See Table N = For Nonstandard Sizes				
Length	Only for Nonstandard				
Hole Diameter	Only for Nonstandard .281 or .406				

GROUND STRAP FEATURES

- Meets the rigorous specifications of MIL-DTL-24749 Type IV grounding straps.
- Intended use for bonding items in non-weather exposed areas where corrosion is a concern. Type IV is also for use below deck across sound dampening devices, in grounding or bonding of 1/4-inch stud-mounted equipment, or in grounding or bonding of portable electrical equipment.
- For more options see Glenair Part Number 107-500 or 107-504.

MATERIAL/FINISH

- Lugs: 316L stainless steel per ASTM A269/N.A.
- Braid: 36 AWG, 316L stainless steel (50%)-200 nickel (50%)/N.A.

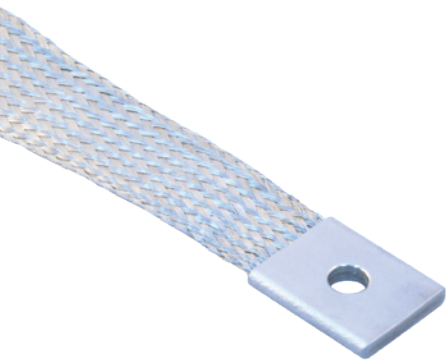


“BETTER THAN MIL-SPEC”

M24749-IV Type Configurable Ground Straps



107-500 Stainless Steel/Nickel Braid M24749 Type IV Style with configurable options



HOW TO ORDER							
Sample Part Number	107-500	S	-RD	-2000	A	E	-6 S
Product Series	Stainless steel/nickel 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	125 – 2000, See Dimensions Tables						
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	In inches						
Insulation Sleeving	S = Black sleeving over braid C = Clear sleeving over braid Omit = No sleeving						

LUG HOLE SIZE CODES

Hole Size Code	Ø C	Stud Size (Ref.)
X	.000	No Lug Hole
Z	.090/.098 (2.29/2.49)	#2
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 BRAID GROUND STRAP

Size Code	CSA (KCMIL)	CSA (mm ²)	Ref. AWG Equivalent	Nom. Resistance mOhm/m	Max. Lug Code
125	3.0	1.5	16–15	131.00	B
203	7.8	4.0	12–11	52.00	D
250	9.6	4.9	11–10	43.00	E
437	10.8	5.5	10	37.00	F
500	13.2	6.7	9	31.00	G
1000	19.2	9.7	8–7	23.00	J
1500	23.4	11.9	7–6	20.50	L
2000	28.8	14.6	6–5	14.00	M

DOUBLE-LAYER BRAID GROUND STRAP

Size Code	CSA (KCMIL)	CSA (mm ²)	Ref. AWG Equivalent	Nom. Resistance mOhm/m	Max. Lug Code
125	6.0	3.0	13–12	65.50	B
203	15.6	8.0	9–8	26.00	D
250	19.2	9.8	8–7	21.50	E
437	21.6	11.0	7	18.50	F
500	26.4	13.4	6	15.50	G
1000	38.4	19.4	5–4	11.50	J
1500	46.8	23.8	4–3	10.50	L
2000	57.6	29.2	3–2	7.00	M

GROUND STRAP FEATURES

- Meets the rigorous specifications of MIL-DTL-24749 Rev. C with width, length, and lug configuration options beyond standard mil-spec straps
- Tested to survive 1000 hours salt spray
- Unique Stainless Steel/Nickel hybrid braid
- Lightweight, durable, configurable crimp lugs: square, radiused, straight, single- and double-right-angle versions
- Available black or clear sleeving over braid

MATERIAL/FINISH

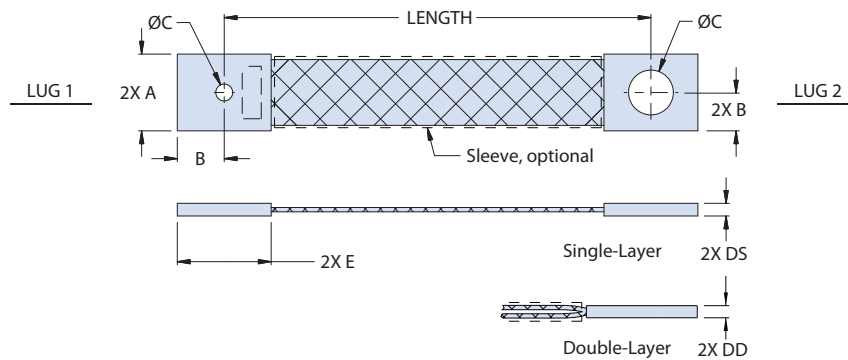
- Braid - 36 AWG stainless steel 50% / nickel 200 50%
- Lugs - stainless steel / passivate per AMS2700
- Sleeving - per M23053 or equivalent

NOTES

- Ground strap IAW MIL-DTL-24749 Type IV with all options, except strap allows for nonstandard strap form, widths, lengths, and hole sizes.
- 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 5 inches, or ± 5% for lengths > than 5”.
- Consult Glenair for Ground Straps with larger cross-sectional area and braid gauge

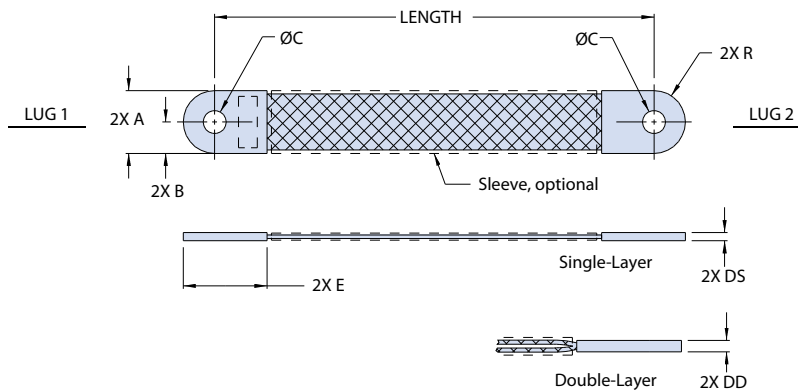
107-500 Stainless Steel Braid, M24749 Type IV Style Square Lugs / Radiused Lugs

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
125	.240	6.10	.120	3.05	.060	1.52	.075	1.91	.240	6.10
203	.330	8.38	.165	4.19	.070	1.78	.090	2.29	.330	8.38
250	.410	10.41	.205	5.21	.090	2.29	.120	3.05	.410	10.41
437	.530	13.46	.265	6.73	.085	2.16	.110	2.79	.530	13.46
500	.600	15.24	.300	7.62	.085	2.16	.110	2.79	.600	15.24
1000	.830	21.08	.415	10.54	.100	2.54	.130	3.30	.830	21.08
1500	1.000	25.40	.500	12.70	.100	2.54	.130	3.30	1.000	25.40
2000	1.180	29.97	.590	14.99	.100	2.54	.130	3.30	1.180	29.97

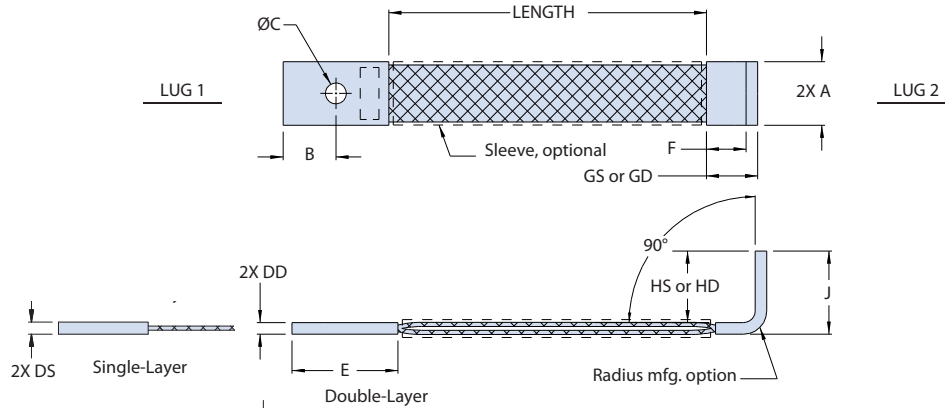
RD - RADIUSED LUG DIMENSIONS



Size Code	A		B		DS (Single-Layer)		DD (Double-Layer)		E		R	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
125	.240	6.10	.120	3.05	.060	1.52	.075	1.91	.630	16.00	.120	3.05
203	.330	8.38	.165	4.19	.070	1.78	.090	2.29	.630	16.00	.165	4.19
250	.410	10.41	.205	5.21	.090	2.29	.120	3.05	.750	19.05	.205	5.21
437	.530	13.46	.265	6.73	.085	2.16	.110	2.79	.750	19.05	.265	6.73
500	.600	15.24	.300	7.62	.085	2.16	.110	2.79	.850	21.59	.300	7.62
1000	.830	21.08	.415	10.54	.100	2.54	.130	3.30	1.100	27.94	.415	10.54
1500	1.000	25.40	.500	12.70	.100	2.54	.130	3.30	1.250	31.75	.500	12.70
2000	1.180	29.97	.590	14.99	.100	2.54	.130	3.30	1.400	35.56	.590	14.99

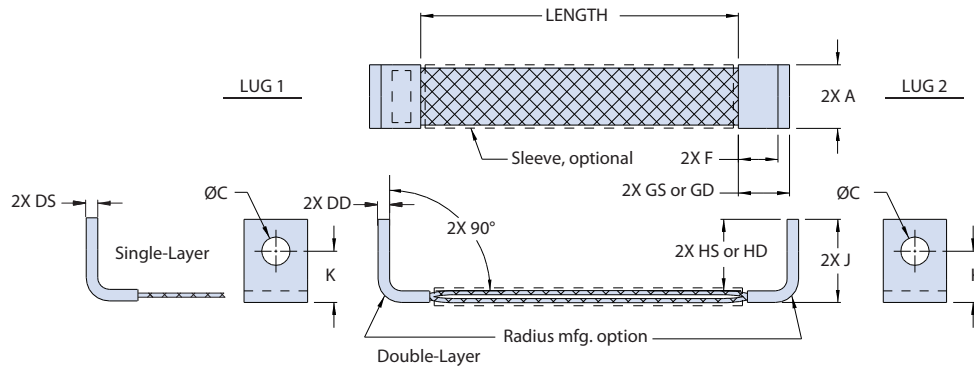
107-500 Stainless Steel Braid, M24749 Type IV style Single / Double Right-Angle Lugs

RA - RIGHT-ANGLE LUG DIMENSIONS



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
125	.240	6.10	.313	7.95	.060	1.52	.075	1.91	.630	16.00	.375	9.53	.435	11.05	.450	11.43	.590	14.99	.580	14.73	.650	16.51	.500	12.70
203	.330	8.38	.313	7.95	.070	1.78	.090	2.29	.630	16.00	.375	9.53	.445	11.30	.465	11.81	.630	16.00	.610	15.49	.700	17.78	.500	12.70
250	.410	10.41	.375	9.53	.090	2.29	.120	3.05	.750	19.05	.375	9.53	.465	11.81	.495	12.57	.660	16.76	.630	16.00	.750	19.05	.500	12.70
437	.530	13.46	.375	9.53	.085	2.16	.110	2.79	.750	19.05	.375	9.53	.460	11.68	.485	12.32	.820	20.83	.790	20.07	.900	22.86	.625	15.88
500	.600	15.24	.425	10.80	.085	2.16	.110	2.79	.850	21.59	.375	9.53	.460	11.68	.485	12.32	.920	23.37	.890	22.61	1.000	25.40	.625	15.88
1000	.830	21.08	.550	13.97	.100	2.54	.130	3.30	1.100	27.94	.500	12.70	.600	15.24	.630	16.00	1.050	26.67	1.020	25.91	1.150	29.21	.750	19.05
1500	1.000	25.40	.625	15.88	.100	2.54	.130	3.30	1.250	31.75	.500	12.70	.600	15.24	.630	16.00	1.150	29.21	1.120	28.45	1.250	31.75	.750	19.05
2000	1.180	29.97	.700	17.78	.100	2.54	.130	3.30	1.400	35.56	.500	12.70	.600	15.24	.630	16.00	1.250	31.75	1.220	30.99	1.350	34.29	.750	19.05

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



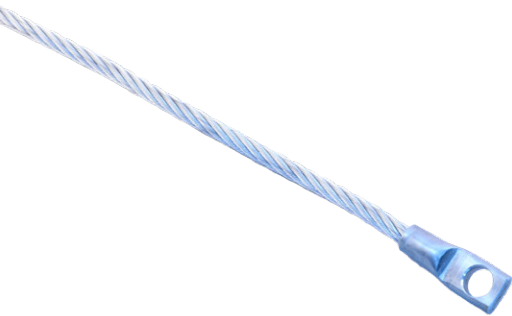
Size Code	A		DS		DD		F Ref.		GS Ref. (Single-Layer)		GD Ref. (Double-Layer)		HS Ref. (Single-Layer)		HD Ref. (Double-Layer)		J		K Ref.	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
125	.240	6.10	.060	1.52	.075	1.91	.375	9.53	.435	11.05	.450	11.43	.590	14.99	.580	14.73	.650	16.51	.500	12.70
203	.330	8.38	.070	1.78	.090	2.29	.375	9.53	.445	11.30	.465	11.81	.630	16.00	.610	15.49	.700	17.78	.500	12.70
250	.410	10.41	.090	2.29	.120	3.05	.375	9.53	.465	11.81	.495	12.57	.660	16.76	.630	16.00	.750	19.05	.500	12.70
437	.530	13.46	.085	2.16	.110	2.79	.375	9.53	.460	11.68	.485	12.32	.820	20.83	.790	20.07	.900	22.86	.625	15.88
500	.600	15.24	.085	2.16	.110	2.79	.375	9.53	.460	11.68	.485	12.32	.920	23.37	.890	22.61	1.000	25.40	.625	15.88
1000	.830	21.08	.100	2.54	.130	3.30	.500	12.70	.600	15.24	.630	16.00	1.050	26.67	1.020	25.91	1.150	29.21	.750	19.05
1500	1.000	25.40	.100	2.54	.130	3.30	.500	12.70	.600	15.24	.630	16.00	1.150	29.21	1.120	28.45	1.250	31.75	.750	19.05
2000	1.180	29.97	.100	2.54	.130	3.30	.500	12.70	.600	15.24	.630	16.00	1.250	31.75	1.220	30.99	1.350	34.29	.750	19.05

"BETTER THAN MIL-SPEC"

M24749-I Type Configurable Ground Straps



107-511 Stainless Steel Wire Rope, M24749 Type I style with lug hole and length options



HOW TO ORDER					
Sample Part Number	107-511	-12	D	G	S
Product Series	Nonstandard wire rope ground strap				
Length	In Inches				
Lug 1 Hole Code	See Table I				
Lug 2 Hole Code	See Table I				
Insulation Code	S = M23053/5, Black Sleaving Omit = no sleaving C = M23053/18, Clear Sleaving				

GROUND STRAP FEATURES

- Meets the rigorous specifications of MIL-DTL-24749 type I with length and lug configuration options beyond standard mil-spec straps.
- Materials in accordance with MIL-DTL-24749 or equivalent, unless specified.
- Lug holes in accordance with AS7928.
- Bosses and bolts ordered separately, see 107-505
- Lug hole sizes may differ from each other depending on the part number development.
- Smaller lug hole diameter specified in "Lug 1" location in the part number.
- Length tolerance: $\pm .250$ inches (6.35 mm) up to 5 inches, or $\pm 5\%$ for lengths > than 5".

MATERIAL/FINISH

- Lugs: 316L stainless steel/passivate per AMS2700.
- Braid: 36 AWG, 316L stainless steel (50%)-nickel 200 (50%)

SIZE CODES		
Lug 1 and 2 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

“BETTER THAN MIL-SPEC”

Ultra-Flexible TurboFlex® Ground Strap



107-111 TurboFlex Rope-Lay Wire Rope Grounding Strap



HOW TO ORDER								
Sample Part Number	107-111	T	-E	-SR	-A	E	-8	D2
Product Series	TurboFlex Ground Strap							
TurboFlex Material	See Table							
Wire Size	Table IV-VII							
Ground Strap Style	SR = Strain Relief Lugs FRD = Flat Radiused Lugs 20 = MS20659 Lugs 25 = MS25036 Lugs TCT = TurboFlex Crimp Terminal Lugs							
Lug 1 Hole Code	See Table							
Lug 2 Hole Code	See Table							
Length	In Inches							
Jacket Material Code	See Table Omit = no jacket							

GROUND STRAP FEATURES

- Lug hole table in accordance with AS7928.
- Bend radius is 3X the O.D.

MATERIAL/FINISH

- Lugs - See table. Mil-Spec lugs Copper/tin plate per B545
- Conductor - Copper/tin, silver, or nickel plated, See table
- Jacket/ Sleeve - See table

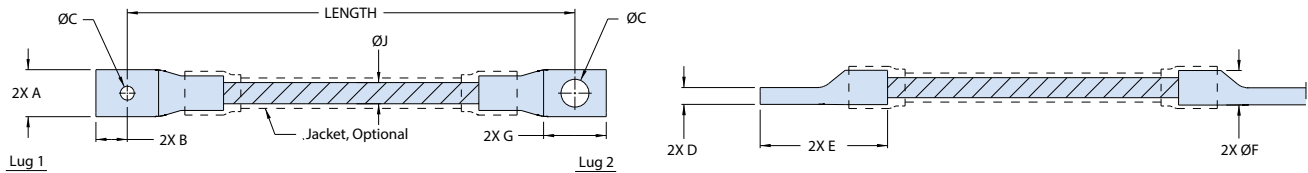
LUG HOLE SIZE CODES		
Lug 1 & 2 Hole Code	Ø C	Stud Size (Ref.)
X	.000	No Lug Hole
A	.114/.122 (2.90/3.10)	#4
B	.142/.152 (3.61/3.86)	#6
C	.168/.178 (4.27/4.52)	#8
D	.193/.203 (4.90/5.16)	#10
E	.260/.275 (6.60/6.99)	1/4
F	.323/.338 (8.20/8.59)	5/16
G	.385/.400 (9.78/10.16)	3/8
H	.448/.463 (11.38/11.76)	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
N	.895/.910 (22.73/ 23.11)	7/8

JACKET AND SLEEVE MATERIAL CODE	
SYM	Insulation Material/Description
D0	High Performance Elastomer, Duraelectric Black
D1	High Performance Elastomer, Duraelectric Brown
D2	High Performance Elastomer, Duraelectric Red
D3	High Performance Elastomer, Duraelectric Orange
D4	High Performance Elastomer, Duraelectric Yellow
D5	High Performance Elastomer, Duraelectric Green
D6	High Performance Elastomer, Duraelectric Blue
D7	High Performance Elastomer, Duraelectric Violet
D8	High Performance Elastomer, Duraelectric Gray
D9	High Performance Elastomer, Duraelectric White
DDT	High Performance Elastomer, Duraelectric Desert Tan
DOG	High Performance Elastomer, Duraelectric Dark Olive Green
F	Fire / Caustic Chemical-Resistant Elastomer, Duraelectric F Blue

TURBOFLEX WIRE AND LUG MATERIAL	
SYM	Wire Material/Plating
T	Copper / Tin Plated
S	Copper / Silver Plated
N	Copper / Nickel Plated

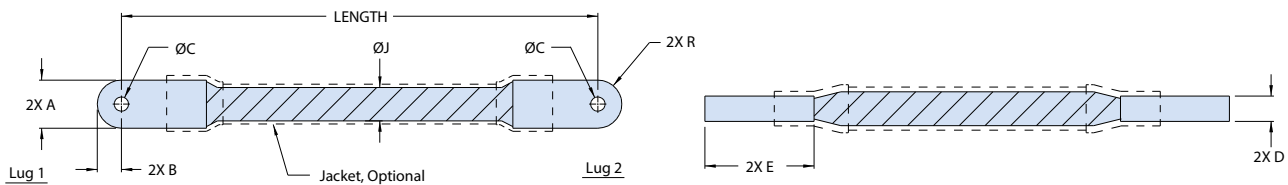
107-111 TurboFlex Wire Rope Grounding Strap

SR - STRAIN RELIEF LUGS



Wire Size	AWG	CSA (KCMIL)	CSA (mm ²)	Nominal Resistance (mΩ/m)	A ±.05		B		D ±.05		E		F (REF)		G		Ø J		Max Lug Code (AS7928)
					In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	
R	16	2.6	1.3	15.07	.19	4.83	.095	2.41	.050	1.27	.75	19.05	.120	3.05	.375	9.52	.063	1.60	A
A	12	6.5	3.3	6.11	.25	6.35	.125	3.18	.075	1.65	.87	22.10	.165	4.19	.450	11.43	.099	2.51	B
B	10	10.3	5.2	3.83	.30	7.62	.150	3.81	.075	1.90	1.00	25.40	.195	4.95	.550	13.97	.126	3.20	C
C	8	16.6	8.4	2.38	.35	8.89	.175	4.44	.090	2.29	1.12	28.45	.235	5.97	.625	15.88	.159	4.04	D
D	6	26.2	13.3	1.51	.42	10.67	.210	5.33	.100	2.54	1.25	31.75	.275	6.99	.700	17.78	.200	5.08	E
E	4	41.6	21.1	0.99	.54	13.72	.270	6.86	.130	3.30	1.50	38.10	.360	9.14	.875	22.23	.271	6.88	F
F	2	66.1	33.5	0.62	.64	16.26	.320	8.13	.150	3.81	1.75	44.45	.425	10.80	1.000	25.40	.342	8.69	G
G	1/0	105.3	53.4	0.39	.79	20.07	.395	10.03	.220	5.59	2.00	50.80	.525	13.34	1.125	28.58	.431	10.95	J
H	2/0	132.3	67.0	0.31	.88	22.35	.440	11.18	.240	6.10	2.25	57.15	.580	14.73	1.250	31.75	.483	12.27	K
I	3/0	169.6	85.9	0.25	.99	25.15	.495	12.57	.270	6.86	2.50	63.50	.650	16.51	1.500	38.10	.547	13.89	L
J	4/0	212.8	107.8	0.20	1.08	27.43	.540	13.72	.290	7.37	2.75	69.85	.710	18.03	1.750	44.45	.613	15.57	M

FRD - FLAT RADIUSED LUGS



Wire Size	AWG	CSA (KCMIL)	CSA (mm ²)	Nominal Resistance (mΩ/m)	A		B		D ±.05		E		R		Ø J		Max Lug Code (AS7928)
					In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	
R	16	2.6	1.3	15.07	.19	4.83	.095	2.41	.055	1.40	.63	16.00	.095	2.41	.063	1.60	A
A	12	6.5	3.3	6.11	.25	6.35	.125	3.18	.075	1.90	.75	19.05	.125	3.18	.099	2.51	B
B	10	10.3	5.2	3.83	.30	7.62	.150	3.81	.085	2.16	.88	22.35	.150	3.81	.126	3.20	C
C	8	16.6	8.4	2.38	.35	8.89	.175	4.44	.105	2.67	1.00	25.40	.175	4.44	.159	4.04	D
D	6	26.2	13.3	1.51	.42	10.67	.210	5.33	.115	2.92	1.13	28.70	.210	5.33	.200	5.08	E
E	4	41.6	21.1	0.99	.54	13.72	.270	6.86	.150	3.81	1.25	31.75	.270	6.86	.271	6.88	F
F	2	66.1	33.5	0.62	.64	16.26	.320	8.13	.175	4.44	1.50	38.10	.320	8.13	.342	8.69	G
G	1/0	105.3	53.4	0.39	.79	20.07	.395	10.03	.215	5.46	1.75	44.45	.395	10.03	.431	10.95	J
H	2/0	132.3	67.0	0.31	.88	22.35	.440	11.18	.230	5.84	2.00	50.80	.440	11.18	.483	12.27	K
I	3/0	169.6	85.9	0.25	.99	25.15	.495	12.57	.255	6.48	2.25	57.15	.495	12.57	.547	13.89	L
J	4/0	212.8	107.8	0.20	1.08	27.43	.540	13.72	.280	7.11	2.50	63.50	.540	13.72	.613	15.57	M

107-111 TurboFlex Wire Rope Grounding Strap

20 - MS20659 CRIMP LUGS							
Wire Size	AWG	CSA (KCMIL)	CSA (mm ²)	Nominal Resistance (mOhm/m)	Ø J		Available Lug Hole Codes (AS7928)
					In.	mm	
R	16	2.6	1.3	15.07	.063	1.60	B, D
A	12	6.5	3.3	6.11	.099	2.51	B, D, F, G
B	10	10.3	5.2	3.83	.126	3.20	B, D, F, G
C	8	16.6	8.4	2.38	.159	4.04	C, D, E, F, G
D	6	26.2	13.3	1.51	.200	5.08	D, E, F, G
E	4	41.6	21.1	0.99	.271	6.88	D, E, F, G
F	2	66.1	33.5	0.62	.342	8.69	D, E, F, G, H, J
G	1/0	105.3	53.4	0.39	.431	10.95	E, F, G, H, J
H	2/0	132.3	67.0	0.31	.483	12.27	E, F, G, H, J
I	3/0	169.6	85.9	0.25	.547	13.89	F, G, H, J
J	4/0	212.8	107.8	0.20	.613	15.57	F, G, H, J

25 - MS20659 CRIMP LUGS							
Wire Size	AWG	CSA (KCMIL)	CSA (mm ²)	Nominal Resistance (mOhm/m)	Ø J		Available Lug Hole Codes (AS7928)
					In.	mm	
R	16	2.6	1.3	15.07	.063	1.60	A, B, C, D, E, F, G, J
A	12	6.5	3.3	6.11	.099	2.51	B, C, D, E, F, G, J
B	10	10.3	5.2	3.83	.126	3.20	B, C, D, E, F, G, J
C	8	16.6	8.4	2.38	.159	4.04	D, E, F, G
D	6	26.2	13.3	1.51	.200	5.08	D, E, F, G
E	4	41.6	21.1	0.99	.271	6.88	E, F, G
F	2	66.1	33.5	0.62	.342	8.69	E, G, J
G	1/0	105.3	53.4	0.39	.431	10.95	E, G, J
H	2/0	132.3	67.0	0.31	.483	12.27	F, G, J
I	3/0	169.6	85.9	0.25	.547	13.89	G, J
J	4/0	212.8	107.8	0.20	.613	15.57	G, J

TCT - TURBOFLEX CRIMP TERMINAL LUGS							
Wire Size	AWG	CSA (KCMIL)	CSA (mm ²)	Nominal Resistance (mOhm/m)	Ø J		Max Lug Hole Codes (AS7928)
					In.	mm	
C	8	16.6	8.4	2.38	.159	4.04	E
E	4	41.6	21.1	0.99	.271	6.88	G
F	2	66.1	33.5	0.62	.342	8.69	H
G	1/0	105.3	53.4	0.39	.431	10.95	J
H	2/0	132.3	67.0	0.31	.483	12.27	K
I	3/0	169.6	85.9	0.25	.547	13.89	L
J	4/0	212.8	107.8	0.20	.613	15.57	M

“BETTER THAN MIL-SPEC”

M24749 Type II Type Configurable Bond Strips



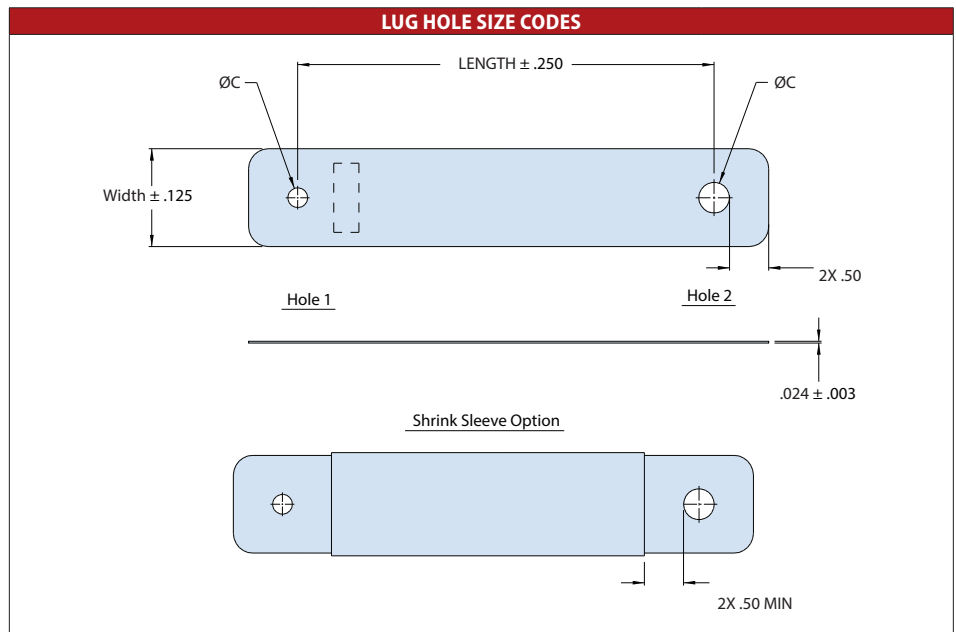
107-502 Commercial Equivalent Bonding Strip M24749 Type II Style with configurable options



HOW TO ORDER						
Sample Part Number	107-502	A	-2250	A	E	-10 S
Product Series	Commercial Equivalent Bonding Strips					
Material Code	A = 316 Stainless Steel/Passivate B = 316 Stainless Steel/Nickel Plated					
Width Code	In thousandths of an inch EX: 2250 = 2.250 0250 = 0.250					
Hole 1 Code	See Table					
Hole 2 Code	See Table					
Length	In Inches					
Insulation Code	S = M23053/5, Black Sleeving Omit = no sleeving C = M23053/18, Clear Sleeving					

GROUND STRIP FEATURES

- Meets the rigorous specifications of MIL-DTL-24749 Rev. C with material, width, length, and lug configuration options beyond standard mil-spec strips
- Materials in accordance with MIL-DTL-24749 or equivalent, unless otherwise specified.
- Lug holes in accordance with AS7928.
- The length-to-width ratio of bond strip shall not exceed 5 to 1.
- Hole sizes may differ from each other depending on part number development. Smaller hold diameter specified in "Hole 1" location in the part number.



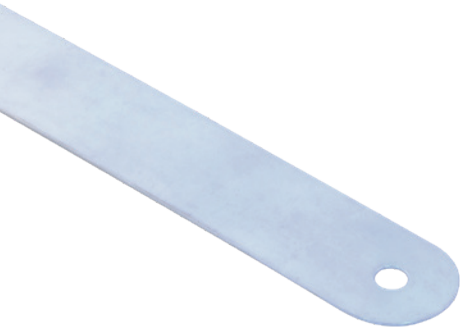
Lug 1 & 2 Hole Code	Ø C	Stud Size (Ref.)
X	.000	No Lug Hole
Z	.090/.098 (2.29/2.49)	#2
A	.114/.122 (2.90/3.10)	#4
B	.142/.152 (3.61/3.86)	#6
C	.168/.178 (4.27/4.52)	#8
D	.193/.203 (4.90/5.16)	#10
E	.260/.275 (6.60/6.99)	1/4
F	.323/.338 (8.20/8.59)	5/16
G	.385/.400 (9.78/10.16)	3/8
H	.448/.463 (11.38/11.76)	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
N	.895/.910 (22.73/ 23.11)	7/8

“BETTER THAN MIL-SPEC”

M24749 Type III Type Configurable Bond Strips



107-503 Commercial Equivalent Bonding Strip M24749 Type III Style with configurable options

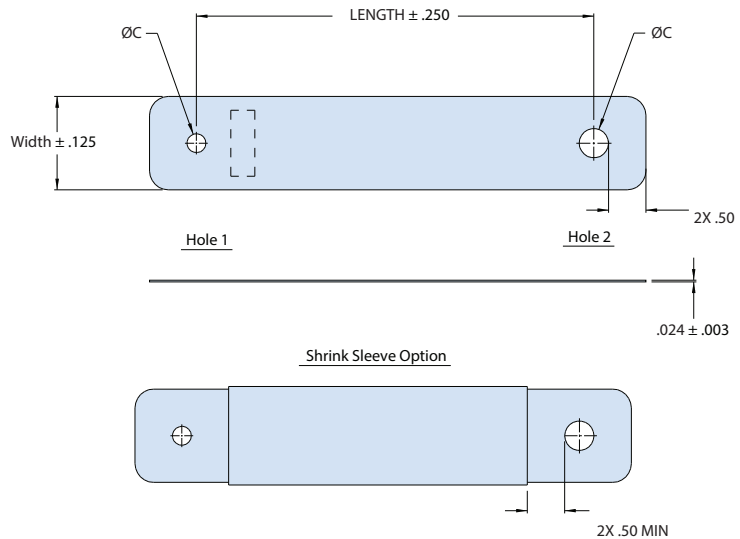


HOW TO ORDER						
Sample Part Number	107-503	A	-2250	A	E	-10 S
Product Series	Commercial Equivalent Bonding Strips					
Material Code	A = Copper/Tin Plated B = Copper/Silver Plated C = Copper/Nickel Plated D = Copper/Unplated					
Width Code	In thousandths of an inch EX: 2250 = 2.250 0250 = 0.250					
Hole 1 Code	See Table					
Hole 2 Code	See Table					
Length	In Inches					
Insulation Code	S = M23053/5, Black Sleevings Omit = no sleeving C = M23053/18, Clear Sleevings					

GROUND STRIP FEATURES

- Meets the rigorous specifications of MIL-DTL-24749 Rev. C with material, width, length, and lug configuration options beyond standard mil-spec strips
- Materials in accordance with MIL-DTL-24749 or equivalent, unless otherwise specified.
- Lug holes in accordance with AS7928.
- The length-to-width ratio of bond strip shall not exceed 5 to 1.
- Hole sizes may differ from each other depending on part number development. Smaller hold diameter specified in “Hole 1” location in the part number.

LUG HOLE SIZE CODES



Lug 1 & 2 Hole Code	Ø C	Stud Size (Ref.)
X	.000	No Lug Hole
Z	.090/.098 (2.29/2.49)	#2
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
N	.895/.910 (22.73/ 23.11)	7/8

“BETTER THAN MIL-SPEC”

M24749 Type IV Type Configurable Ground Straps



107-504 Commercial Equivalent Ground Strap M24749 Type IV Style with lug hole and length options



HOW TO ORDER					
Sample Part Number	107-504	-12	B	G	S
Product Series	Commercial Equivalent Ground Straps				
Length	In Inches				
Lug 1 Hole Code	See Table				
Lug 2 Hole Code	See Table				
Insulation Code	S = M23053/5, Black Sleaving Omit = no sleaving C = M23053/18, Clear Sleaving				

GROUND STRAP FEATURES

- Meets the rigorous specifications of MIL-DTL-24749 Rev. C with length and lug configuration options beyond standard mil-spec straps.
- Materials in accordance with MIL-DTL-24749 or equivalent, unless specified.
- Lug holes in accordance with AS7928.
- Lug hole sizes may differ from each other depending on the part number development.
- Smaller lug hole diameter specified in “Lug 1” location in the part number.

MATERIAL/FINISH

- Lugs: 316L stainless steel/passivate per AMS2700.
- Braid: 36 AWG, 316L stainless steel (50%)-nickel 200 (50%)

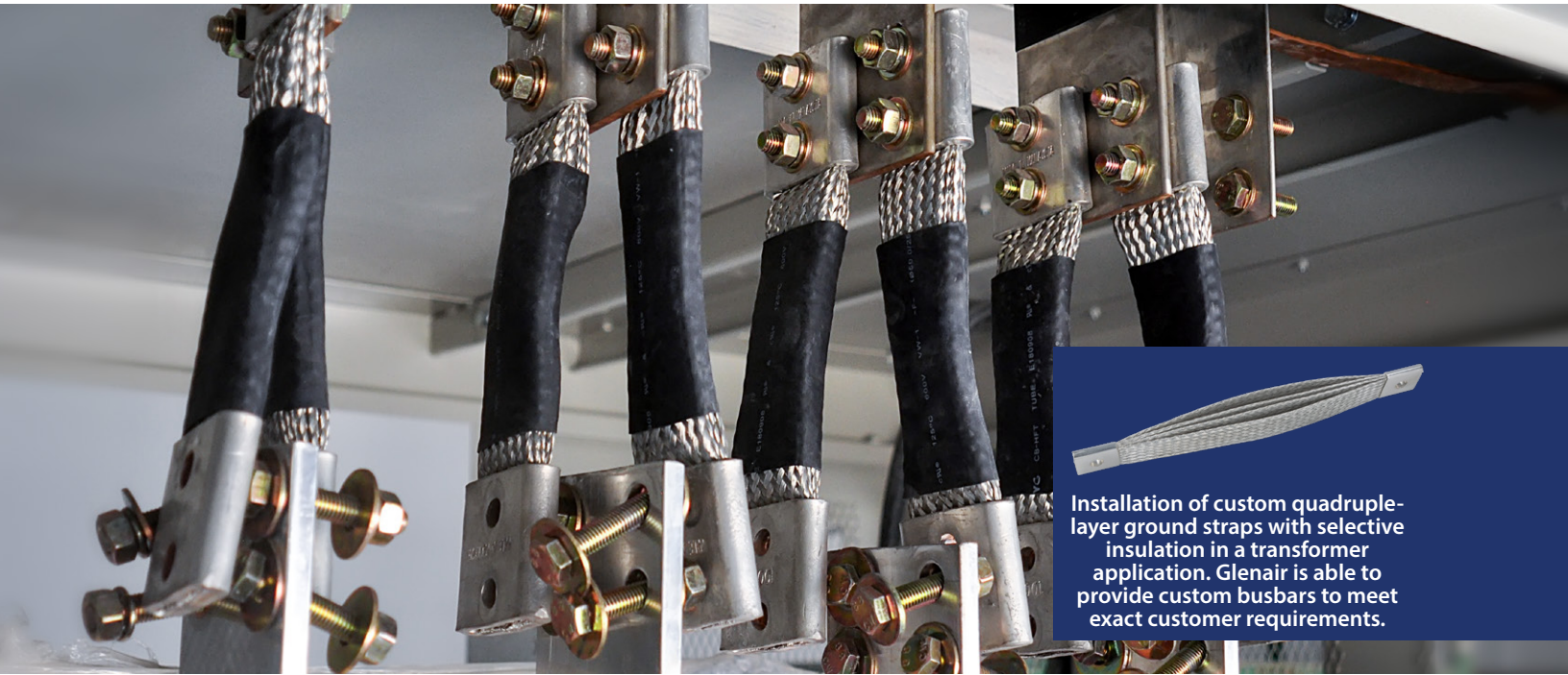
LUG HOLE SIZE CODES		
Lug 1 & 2 Hole Code	Ø C	Stud Size (Ref.)
X	.000	No Lug Hole
Z	.090/.098 (2.29/2.49)	#2
A	.114/.122 (2.90/3.10)	#4
B	.142/.152 (3.61/3.86)	#6
C	.168/.178 (4.27/4.52)	#8
D	.193/.203 (4.90/5.16)	#10
E	.260/.275 (6.60/6.99)	1/4
F	.323/.338 (8.20/8.59)	5/16
G	.385/.400 (9.78/10.16)	3/8
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

SERIES 107
FLEXIBLE
BRAIDED STRAPS
GROUNDS, BONDS,
AND BUSBARS

LOW-RESISTANCE, HIGH CONDUCTIVITY

Flexible Power Distribution Busbars

Multi-layer braided construction for mission-critical power distribution applications



Installation of custom quadruple-layer ground straps with selective insulation in a transformer application. Glenair is able to provide custom busbars to meet exact customer requirements.

Insulated and uninsulated flexible busbars manufactured by Glenair using 30 AWG soft-drawn copper wire are used in a wide range of electrical applications including power distribution panels, switch gear, control panels, battery plants, and power feed line applications. Busbar designs are preferred for source-to-load applications such as in unmanned aerial vehicles, due to their inherent light weight and flexibility. In fact, uninsulated flexible busbars offer a more compact and lighter weight power management solution compared to conventional cables—with improved current-carrying capability—in applications where space and weight constraints are critical considerations.

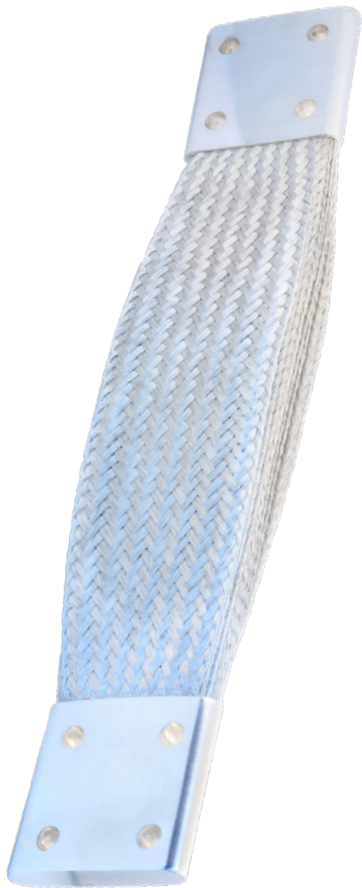
Busbars can provide better heat dissipation compared to jacketed cable, as there is no insulating material to impede the transfer of heat away from the conductors.

In addition, uninsulated busbars allow for easier visual inspection and maintenance compared to jacketed cable, as there are no insulating covers or barriers obstructing access to the conductors. This can simplify troubleshooting and servicing tasks, particularly in vehicle applications.

- **Single, double, triple, and quadruple layer configurations** for current ratings up to 615 Amps, and special 5–10 layer braided busbars with current ratings up to 1055 Amps
- **Flat braided form-factor** with improved current-carrying capability compared to round cables with the same cross-sectional area
- **30 AWG soft-drawn copper-core** with available plating options including tin, nickel, and silver
- **Stainless steel material busbars** for high heat dissipation applications
- **Heavy-duty, high-conductivity lugs** with single, double, and quadruple bolt hole patterns

LOW-RESISTANCE, HIGH CONDUCTIVITY Flexible Power Distribution Busbars

For Mission-Critical Power Distribution Applications



Multilayer flat form factor translates to significant improvements in current-carrying capacity and resistance compared to conventional cables.

The selection of flexible busbars for power distribution applications is based on several factors to ensure optimal performance, reliability, and safety. Here are some key considerations that influence the selection process:

Current Carrying Capacity: One of the primary factors in selecting flexible busbars is their current carrying capacity, which should match or exceed the maximum expected current requirements of the electrical system to ensure safe and efficient power distribution without overheating or voltage drops.

Voltage Rating: Flexible busbars must be rated for the voltage levels present in the electrical system. The voltage rating should exceed the maximum to which the busbars will be subjected to prevent electrical breakdown.

Material: Glenair flexible busbars are made from either copper or stainless steel (consult factory for aluminum busbars). The choice of material depends on factors such as conductivity, mechanical strength, weight, and corrosion resistance.

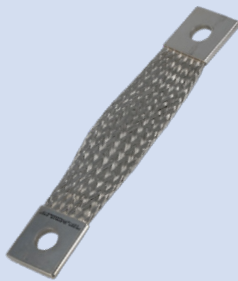
Flexibility: Flexibility is essential to accommodate bending, twisting, and routing within the confined spaces of electrical enclosures or vehicle fuselage. The busbars should be flexible enough to facilitate installation while maintaining their shape and mechanical stability.

Insulation: Depending on the application requirements, busbars may be insulated to protect against electrical shock hazards, prevent short circuits, and provide environmental protection.

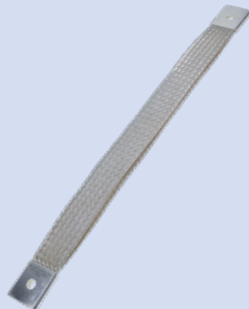
Environmental Conditions: The operating environment of the electrical system influences the selection of available plating. Factors such as temperature extremes, moisture, humidity, vibration, and exposure to chemicals or corrosive substances should be considered.

Standards Compliance: Flexible busbars should comply with relevant industry standards, codes, and regulations governing electrical distribution systems. Customer compliance with standards ensures that the busbars meet minimum safety and performance requirements for their intended applications

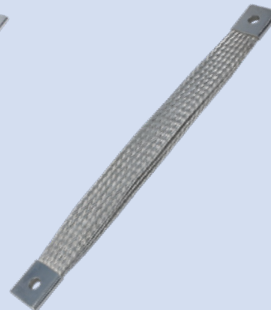
SELECTION GUIDE: FLEXIBLE POWER DISTRIBUTION BUSBARS



107-277
Single-layer busbar



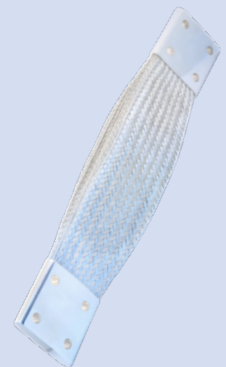
107-278
Double-layer busbar



107-435
Triple-layer busbar



107-436
Quadruple-layer busbar



107-110
5-10 layer busbar

107-277 Single-Layer Flexible Braided Busbar



HOW TO ORDER						
Sample Part Number	107-277	A	781	B	F	-6 S
Product Series	Busbar Ground Strap, Single Layer					
Material Code	A = Copper / Tin plated B = Copper / Silver plated C = Copper / Nickel plated D = Stainless Steel					
Size Code	781 – 3000, See Dimensions Tables					
Lug 1 Hole	A – Q, See Table. If two different sized lug holes are required, specify smaller lug hole in this location.					
Lug 2 Hole	A – Q, See Table					
Length	In inches					
Insulation Sleeving	S = Black sleeving over braid Omit = No sleeving					

LUG HOLE SIZE CODES		
Hole Size Code	Ø C	Stud Size (Ref.)
X	.000	No Lug Hole
Z	.090/.098 (2.29/2.49)	#2
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
N	.895/.910 (22.73/ 23.11)	7/8
P	.957/.972 (24.31/24.69)	15/16
Q	1.020/1.035 (25.91/26.29)	1

- MATERIAL/FINISH**
- Braid and Lugs - 30 AWG copper/tin, silver, or nickel plated; or 30 AWG stainless steel
 - Sleeving - per M23053 or equivalent

LUG HOLE SIZE CODES / DIMENSIONS													
Size Code	CSA (KCMIL)	CSA (mm ²)	Ref. AWG Equiv.	Current Rating (Amps)*	A (Ref)		B		D (Ref)		E		Max Lug Code
					In.	mm	In.	mm	In.	mm	In.	mm	
781	33.6	17.02	5	116	.87	22.10	.435	11.05	.16	4.06	.87	22.10	H
1125	43.2	21.89	4	140	1.00	25.40	.500	12.70	.17	4.32	1.00	25.40	K
1375	52.8	26.75	3	165	1.25	31.75	.625	15.88	.17	4.32	1.25	31.75	M
2000	67.2	34.05	2	190	1.50	38.10	.750	19.05	.17	4.32	1.50	38.10	M
2500	89.6	45.40	1	220	2.00	50.80	1.000	25.40	.17	4.32	2.00	50.80	Q
3000	102.4	51.89	0 (1/0)	260	2.50	63.50	1.250	31.75	.17	4.32	2.50	63.50	Q

- NOTES**
- * 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 5 inches, or ± 5% for lengths > than 5".
 - Ground Straps identified with Glenair name, P/N, and date code, space permitting

107-278 Double-Layer Flexible Braided Busbar



HOW TO ORDER						
Sample Part Number	107-278	A	781	B	F	-6 S
Product Series	Busbar Ground Strap, Double Layer					
Material Code	A = Copper / Tin plated B = Copper / Silver plated C = Copper / Nickel plated D = Stainless Steel					
Size Code	781 – 3000, See Dimensions Tables					
Lug 1 Hole	A – N, See Table. If two different sized lug holes are required, specify smaller lug hole in this location.					
Lug 2 Hole	A – N, See Table					
Length	Inches					
Insulation Sleeving	S = Black sleeving over braid Omit = No sleeving					

LUG HOLE SIZE CODES		
Hole Size Code	Ø C	Stud Size (Ref.)
Z	.090/.098 (2.29/2.49)	#2
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
N	.895/.910 (22.73/23.11)	7/8

LUG HOLE SIZE CODES / DIMENSIONS													
Size Code	CSA (KCMIL)	CSA (mm ²)	Ref. AWG Equiv.	Current Rating (Amps)*	A (Ref)		B		D (Ref)		E		Max Lug Code
					In.	mm	In.	mm	In.	mm	In.	mm	
781	67.2	34.0	2	190	.87	22.10	.435	11.05	.19	4.83	.87	22.10	H
1125	86.4	43.8	1	220	1.00	25.40	.500	12.70	.21	5.33	1.00	25.40	K
1375	105.6	53.5	1/0	260	1.25	31.75	.625	15.88	.21	5.33	1.25	31.75	M
2000	134.4	68.1	2/0	300	1.50	38.10	.750	19.05	.21	5.33	1.50	38.10	M
2500	179.2	90.8	3/0	350	2.00	50.80	1.000	25.40	.21	5.33	2.00	50.80	N
3000	204.8	181.6	4/0	405	2.50	63.50	1.250	31.75	.21	5.33	2.50	63.50	N

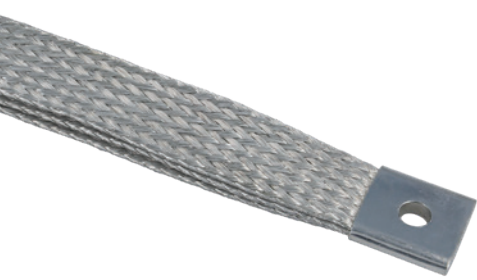
MATERIAL/FINISH

- Braid and Lugs - 30 AWG copper/tin, silver, or nickel plated; or 30 AWG stainless steel
- Sleeving - per M23053 or equivalent

NOTES

- * 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 5 inches, or ± 5% for lengths > than 5".
- Ground Straps identified with Glenair name, P/N, and date code, space permitting

107-435 Triple-Layer Flexible Braided Busbar



HOW TO ORDER							
Sample Part Number	107-435	A	781	B	F	-6	S
Product Series	Busbar Ground Strap, Triple Layer						
Material Code	A = Copper / Tin plated B = Copper / Silver plated C = Copper / Nickel plated D = Stainless Steel						
Size Code	781 – 3000, See Dimensions Tables						
Lug 1 Hole	A – Q, See Table. If two different sized lug holes are required, specify smaller lug hole in this location.						
Lug 2 Hole	A – Q, See Table						
Length	In inches						
Insulation Sleeving	S = Black sleeving over braid Omit = No sleeving						

LUG HOLE SIZE CODES		
Hole Size Code	Ø C	Stud Size (Ref.)
X	.000	No Lug Hole
Z	.090/.098 (2.29/2.49)	#2
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
N	.895/.910 (22.73/ 23.11)	7/8
P	.957/.972 (24.31/24.69)	15/16
Q	1.020/1.035 (25.91/26.29)	1

- MATERIAL/FINISH**
- Braid and Lugs - 30 AWG copper/tin, silver, or nickel plated; or 30 AWG stainless steel
 - Sleeving - per M23053 or equivalent

LUG HOLE SIZE CODES / DIMENSIONS													
Size Code	CSA (KCMIL)	CSA (mm²)	Ref. AWG Equiv.	Current Rating (Amps)*	A (Ref)		B		D (Ref)		E		Max Lug Code
					In.	mm	In.	mm	In.	mm	In.	mm	
781	100.8	51.06	0 (1/0)	260	.87	22.10	.435	11.05	.25	6.35	.87	22.10	H
1125	129.6	65.67	00 (2/0)	300	1.00	25.40	.500	12.70	.25	6.35	1.00	25.40	K
1375	158.4	80.25	000 (3/0)	350	1.25	31.75	.625	15.88	.25	6.35	1.25	31.75	M
2000	201.6	102.15	0000 (4/0)	405	1.50	38.10	.750	19.05	.25	6.35	1.50	38.10	M
2500	268.8	136.20	250 MCM	455	2.00	50.80	1.000	25.40	.25	6.35	2.00	50.80	Q
3000	307.2	155.67	300 MCM	500	2.50	63.50	1.250	31.75	.25	6.35	2.50	63.50	Q

- NOTES**
- ** 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 5 inches, or ± 5% for lengths > than 5".
 - Ground Straps identified with Glenair name, P/N, and date code, space permitting

HIGH-CURRENT 30 AWG CONSTRUCTION Flexible Braided Busbar



107-436 Quadruple-Layer Flexible Braided Busbar



HOW TO ORDER						
Sample Part Number	107-436	A	781	B	F	-6 S
Product Series	Busbar Ground Strap, Quadruple Layer					
Material Code	A = Copper / Tin plated B = Copper / Silver plated C = Copper / Nickel plated D = Stainless Steel					
Size Code	781 – 3000, See Dimensions Tables					
Lug 1 Hole	A – Q, See Table. If two different sized lug holes are required, specify smaller lug hole in this location.					
Lug 2 Hole	A – Q, See Table					
Length	Inches					
Insulation Sleeving	S = Black sleeving over braid Omit = No sleeving					

LUG HOLE SIZE CODES		
Hole Size Code	Ø C	Stud Size (Ref.)
X	.000	No Lug Hole
Z	.090/.098 (2.29/2.49)	#2
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
N	.895/.910 (22.73/ 23.11)	7/8
P	.957/.972 (24.31/24.69)	15/16
Q	1.020/1.035 (25.91/26.29)	1

LUG HOLE SIZE CODES / DIMENSIONS													
Size Code	CSA (KCMIL)	CSA (mm ²)	Ref. AWG Equiv.	Current Rating (Amps)*	A (Ref)		B		D (Ref)		E		Max Lug Code
781	134.4	68.08	00 (2/0)	300	.87	22.10	.435	11.05	.25	6.35	.87	22.10	H
1125	172.8	87.56	000 (3/0)	350	1.00	25.40	.500	12.70	.29	7.37	1.00	25.40	K
1375	211.2	107.00	0000 (4/0)	405	1.25	31.75	.625	15.88	.29	7.37	1.25	31.75	M
2000	268.8	136.20	250 MCM	455	1.50	38.10	.750	19.05	.29	7.37	1.50	38.10	M
2500	358.4	181.60	350 MCM	570	2.00	50.80	1.000	25.40	.29	7.37	2.00	50.80	Q
3000	409.6	207.56	400 MCM	615	2.50	63.50	1.250	31.75	.29	7.37	2.50	63.50	Q

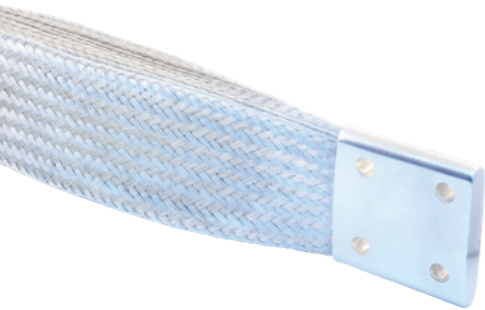
MATERIAL/FINISH

- Braid and Lugs - 30 AWG copper/ tin, silver, or nickel plated; or 30 AWG stainless steel
- Sleeving - per M23053 or equivalent

NOTES

- *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 5 inches, or ± 5% for lengths > than 5".
- Ground Straps identified with Glenair name, P/N, and date code, space permitting

107-110 Flexible Braided Busbar, 5–10 layers, 4-bolt mount



HOW TO ORDER							
Sample Part Number	107-110	T	500	G	M	-9	S
Product Series	Busbar Ground Strap, 5–10 layer, 4-bolt						
Material Code	T = Copper / Tin plated S = Copper / Silver plated N = Copper / Nickel plated						
Size Code	250 – 500, See Dimensions Tables						
Lug 1 Hole	X – M, See Table. If two different sized lug holes are required, specify smaller lug hole in this location.						
Lug 2 Hole	X – M, See Table						
Length	In inches						
Insulation Sleeving	S = Black sleeving over braid Omit = No sleeving						

LUG HOLE SIZE CODES		
Hole Size Code	Ø C	Stud Size (Ref.)
X	.000	No Lug Hole
Z	.090/.098 (2.29/2.49)	#2
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

LUG HOLE SIZE CODES / DIMENSIONS													
Size Code	Braid Layers	CSA (mm ²)	Ref. AWG Equiv.	Current Rating (Amps)*	A		B		D (Ref)		E		Max Lug Code
					In.±.05	mm±1.27	In.	mm	In.	mm	In.±.05	mm±1.27	
250	5	259.4	500 MCM	700	3.00	76.2	1.75	44.5	.40	10.2	3.00	76.2	M
300	6	311.3	600 MCM	780	3.00	76.2	1.75	44.5	.44	11.2	3.00	76.2	M
350	7	363.2	700 MCM	850	3.00	76.2	1.75	44.5	.48	12.2	3.00	76.2	M
400	8	415.1	800 MCM	920	3.00	76.2	1.75	44.5	.52	13.2	3.00	76.2	M
450	9	467.0	900 MCM	980	3.00	76.2	1.75	44.5	.56	14.2	3.00	76.2	M
500	10	518.9	1000 MCM	1055	3.00	76.2	1.75	44.5	.60	15.2	3.00	76.2	M

*Current rating for information only. Values are for insulated wire in free air and should be derated if in close contact with other components.

MATERIAL/FINISH

- Braid and Lugs - 30 AWG copper / tin, silver, or nickel plated; or 30 AWG stainless steel
- Sleeving - per M23053 or equivalent

NOTES

- Lug hole sizes may differ from each other. Smaller lug hole diameter specified in "Lug 1" location in the part number.
- Length tolerance: ± .250 inches (6.35 mm) up to 12 inches, or ± 2% for lengths > than 12".
- Ground Straps identified with Glenair name, P/N, and date code, space permitting

STANDARD-DUTY A-A-59569 Ground Straps



107-086 Nickel-Plated Copper Braided Strap for Submarine Applications

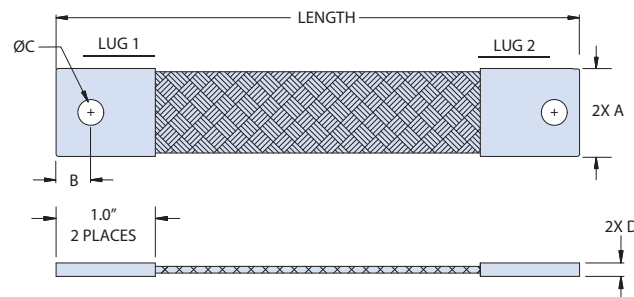


HOW TO ORDER			
Sample Part Number	107-086	-7	A C
Product Series	Nickel-plated copper ground strap for Submarine applications		
Length Code	3 – 36, See Dimensions Table		
Lug 1 Hole	A – G, See Table. If two different sized lug holes are required, specify smaller lug hole in this location.		
Lug 2 Hole	A – G, See Table		

GROUND STRAP FEATURES

- Materials and design in accordance with Commercial Item Description A-A-59569 for grounding bonds
- Low-profile nickel-plated copper lugs with configurable mounting hole size options
- Nickel-plated copper braid material conforms to ASTM B355

LUG HOLE SIZE CODES / DIMENSIONS



LUG HOLE SIZE CODES		
Hole Size Code	Ø C	Stud Size (Ref.)
A	.120/.128 (.305/.325)	#4
B	.147/.152 (.373/.386)	#6
C	.172/.180 (.437/.457)	#8
D	.199/.204 (5.05/5.18)	#10
E	.257/.266 (6.53/6.76)	1/4
F	.323/.328 (8.20/8.33)	5/16
G	.386/.391 (9.80/9.93)	3/8

Length Code	A ±.050		B ±.020		D ±.030		L ±.125		Max Lug Code
	In.	mm	In.	mm	In.	mm	In.	mm	
3	.640	16.26	.218	5.54	.150	3.81	3.000	76.20	D
4	.960	24.38	.312	7.92	.090	2.29	4.000	101.60	G
5	1.000	25.40	.312	7.92	.170	4.32	5.000	127.00	G
6	1.000	25.40	.312	7.92	.170	4.32	6.000	152.40	G
7	1.000	25.40	.312	7.92	.170	4.32	7.000	177.80	G
8	1.000	25.40	.500	12.70	.180	4.57	8.000	203.20	G
12	1.000	25.40	.500	12.70	.180	4.57	12.000	304.80	G
16	1.000	25.40	.500	12.70	.180	4.57	16.000	406.40	G
24	1.000	25.40	.500	12.70	.180	4.57	24.000	609.60	G
36	1.000	25.40	.500	12.70	.180	4.57	36.000	914.40	G

MATERIAL/FINISH

- Braid - copper / nickel plate IAW A-A-59569F
- Lugs - copper / nickel plate per AMS-QQ-N-290

NOTES

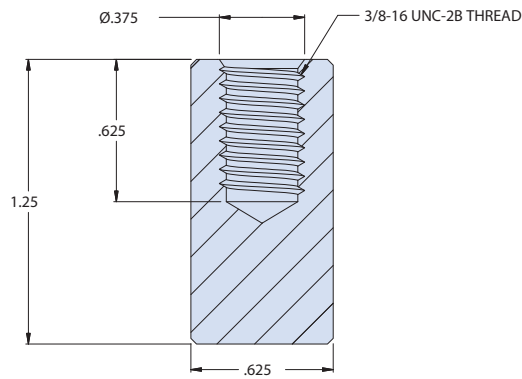
- Lug hole sizes may differ from each other. Smaller lug hole diameter specified in "Lug 1" location in the part number. (Not applicable for RA right-angle lug configurations). Lug holes IAW AS7928
- Ground Straps identified with Glenair name, P/N, and date code, space permitting

107-505 M24749 Type I Boss

SPECIFICATIONS

- Materials and design IAW MIL-DTL-242749
- Contact Glenair for other thread sizes and material options

BOSS: HOW TO ORDER		
Sample Part Number	107-505	-CR
Product Series	M24749 Type I Boss	
Material	CR = Stainless Steel 316/316L AL = Aluminum / CRES 316L	

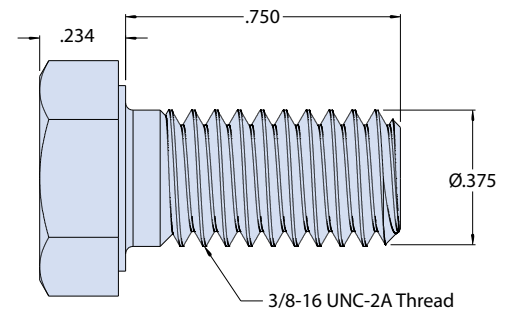
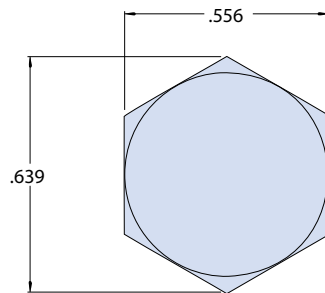


M1222 Bolt

SPECIFICATIONS

- Materials and design IAW MIL-DTL-1222

BOLT: HOW TO ORDER										
Sample Part Number	M1222	R	N	6	C	2	12	SD	N	N
Product Series	MIL-DTL-1222 Bolt									
Fastener Type	R = Hex Cap Screw									
Bearing Surface	N = Does Not Apply									
Nominal Diameter	in 1/16ths of an inch (e.g. 6 = .375")									
Thread Type	C = Coarse (UNC)									
Thread Class	2 = Class 2A									
Nominal Length	in 1/16ths of an inch (e.g. 12 = .75")									
Material Type	SD = Cold-Worked Grade 316									
Locking Element	N = No Locking Element									
Coating	N = No Coating									



851-005 Crimp Lugs

TURBOFLEX CRIMP TERMINAL LUGS



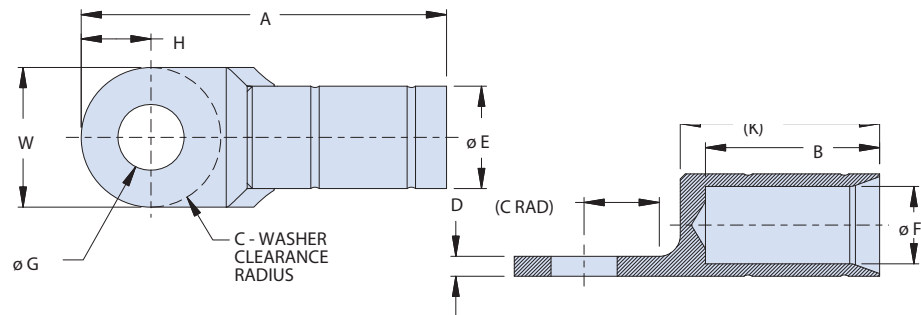
FEATURES

- Glenair 851 Series crimp terminal lugs are constructed from precision-machined high-conductivity copper alloy, purpose-built to fit TurboFlex high-flexibility power distribution cable
- Performance far exceeds commonly-used stamped and formed mil spec lugs

MATERIAL SPECIFICATIONS

Lug material: High-conductivity copper alloy
 Finish: Tin plate per ASTM B545 or Nickel plate per AMS2403, AMS 2404, or AMS2424

HOW TO ORDER					
Sample Part Number	851-005	C	164	-CUSN	-1
Basic Part Number	Crimp Terminal Lugs for TurboFlex cable				
AWG Code / Size	See Size Code table				
Nominal Stud Size Dash No.	See Dimensions table				
Material / Finish	CUSN = Copper / Tin (max. temperature 175°C) CUNI = Copper / Nickel (max. temperature 260°C)				
Autoshrink Option	Add dash no. to include Autoshrink (See Tables). Omit for lug only.				



COPPER TERMINAL CRIMP TOOL AND DIE SET				
Lug Size	AS5259/1	AS5259/4	AS5259/3	AS5259/5
	Crimping Head* Die Set	Crimping Head* Die Set	Crimping Tool Die Set	Crimping Tool Die Set
12-10	See note below**			
8	MS90485-8	M5259/7-001	MS90485-8	M5259/7-001
6	MS90485-6	M5259/7-002	MS90485-6	M5259/7-002
4	MS90485-4	M5259/7-003	MS90485-4	M5259/7-003
2	MS90485-2	M5259/7-004	MS90485-2	M5259/7-004
0	MS90485-01	M5259/7-006	MS90485-01	M5259/7-006
00	MS90485-02	M5259/7-007	MS90485-02	M5259/7-007
000	MS90485-03	N/A	N/A	N/A
0000	MS90485-04	N/A	N/A	N/A

*Requires Pump per AS5259/2.

Removal or cutting off of flash after crimping will result in exposed base metal. Glenair Autoshrink may be applied over the crimp barrel and wire, to environmentally protect exposed area. (see How to Order for Autoshrink option)

**Crimp size 12-10 lugs using tool M22520/38-01, cavity c, yellow (12 or 10awg wire).

AUTOSHRINK DASH NO.	
Code	Color
-0	Black
-1	Brown
-2	Red
-3	Orange
-4	Yellow
-5	Green
-6	Blue
-7	Violet
-8	Gray
-9	White

AUTOSHRINK BASE PART NUMBER		
Terminal Base	Base P/N (Ref.)	
12-10	12	777-035-0080-1
	10	777-035-0125-1
8	777-035-0156-1.5	
6	777-035-0156-1.5	
4	777-035-0250-2	
2	777-035-0250-2	
0	777-004-02-2	
00	777-004-02-2	
000	777-004-02-3	
0000	777-004-02-3	

SIZE CODE									
Terminal Size	12-10	8	6	4	2	0	00	000	0000
AWG Code	B	C	D	E	F	G	H	I	J

WIRE STRIP LENGTH									
Terminal Size	12-10	8	6	4	2	0	00	000	0000
Strip Length	.51 (12.95)	.70 (17.78)	.75 (19.05)	.87 (22.10)	1.03 (26.16)	1.09 (27.69)	1.21 (30.73)	1.42 (36.07)	1.62 (41.15)



851-005 Crimp Lugs

DIMENSIONS														
Stud Size Dash No.	Wire Size	Stud Size	A Max	B Min	C Min Rad	D		Ø E O.D.	Ø F I.D.	G		W & H*		[K]
						Max	Min			Max	Min	Max	Min	
190	12-10	10 [.190]	.991 (25.17)	.443 (11.25)	.172 (4.37)	.080 (2.03)	.060 (1.52)	.235 (5.97)	.145 (3.68) .135 (3.43)	.203 (5.16)	.193 (4.90)	.391 (9.93)	.365 (9.27)	[.52]
312	12-10	5/16 [.312]	1.184 (30.07)	.443 (11.25)	.296 (7.52)	.080 (2.03)	.060 (1.52)	.235 (5.97)	.145 (3.68) .135 (3.43)	.338 (8.59)	.323 (8.20)	.547 (13.89)	.485 (12.32)	(.52)
375	12-10	3/8 [.375]	1.241 (31.52)	.443 (11.25)	.328 (8.33)	.080 (2.03)	.060 (1.52)	.235 (5.97)	.145 (3.68) .135 (3.43)	.400 (10.16)	.385 (9.78)	.598 (15.19)	.536 (13.61)	(.52)
164	8	8 [.164]	1.284 (32.61)	.633 (16.08)	.234 (5.94)	.084 (2.13)	.064 (1.63)	.285 (7.24)	.183 (4.65) .173 (4.39)	.178 (4.52)	.168 (4.27)	.429 (10.90)	.386 (9.80)	[.72] (18.29)
190	8	10 [.190]	1.284 (32.61)	.633 (16.08)	.234 (5.94)	.084 (2.13)	.064 (1.63)	.285 (7.24)	.183 (4.65) .173 (4.39)	.203 (5.16)	.193 (4.90)	.429 (10.90)	.386 (9.80)	[.72] (18.29)
250	8	1/4 [.250]	1.340 (34.04)	.633 (16.08)	.265 (6.73)	.084 (2.13)	.064 (1.63)	.285 (7.24)	.183 (4.65) .173 (4.39)	.275 (6.99)	.260 (6.60)	.478 (12.14)	.435 (11.05)	[.72] (18.29)
375	8	3/8 (.375)	1.451 (36.86)	.633 (16.08)	.328 (8.33)	.084 (2.13)	.064 (1.63)	.285 (7.24)	.183 (4.65) .173 (4.39)	0.400 (10.16)	0.385 (9.78)	.590"	0.547 (13.89)	(.72")
250	6.	1/4 (0.250)	1.492 (37.90)	.680 (17.27)	.265 (6.73)	.084 (2.13)	.064 (1.63)	.347 (8.81)	.225 (5.72) .215 (5.46)	0.275 (6.99)	0.260 (6.60)	0.503 (12.78)	0.460 (11.68)	(.80")
375	6	3/8 (0.375)	1.615 (41.02)	.680 (17.27)	.328 (8.33)	.084 (2.13)	.064 (1.63)	.347 (8.81)	.225 (5.72) .215 (5.46)	0.400 (10.16)	0.385 (9.78)	0.623 (15.82)	0.580 (14.73)	(.80")
190	4	10 [.190]	1.715 (43.56)	.800 (20.32)	.276 (7.01)	.096 (2.44)	.076 (1.93)	.438 (11.13)	.297 (7.54) .287 (7.29)	.203 (5.16)	.193 (4.90)	.628 (15.95)	.580 (14.73)	[.95] (24.13)
250	4	1/4 [.250]	1.715 (43.56)	.800 (20.32)	.276 (7.01)	.096 (2.44)	.076 (1.93)	.438 (11.13)	.297 (7.54) .287 (7.29)	.275 (6.99)	.260 (6.60)	.628 (15.95)	.580 (14.73)	[.95] (24.13)
312	4	5/16 [.312]	1.760 (44.70)	.800 (20.32)	.308 (7.82)	.096 (2.44)	.076 (1.93)	.438 (11.13)	.297 (7.54) .287 (7.29)	.338 (8.59)	.323 (8.20)	.648 (16.46)	.605 (15.37)	[.95] (24.13)
375	4	3/8 [.375]	1.780 (45.21)	.800 (20.32)	.328 (8.33)	.096 (2.44)	.076 (1.93)	.438 (11.13)	.297 (7.54) .287 (7.29)	.400 (10.16)	.385 (9.78)	.648 (16.46)	.605 (15.37)	[.95] (24.13)
312	2	5/16 [.312]	2.002 (50.85)	.960 (24.38)	.343 (8.71)	.109 (2.77)	.089 (2.26)	.532 (13.51)	.371 (9.42) .361 (9.17)	.338 (8.59)	.323 (8.20)	.711 (18.06)	.668 (16.97)	[1.13] (28.70)

*H Max and Min dimensions shall be one half of the W Max and Min dimensions, respectively.

TURBOFLEX CRIMP TERMINAL LUGS



851-005 Crimp Lugs

DIMENSIONS (CONT.)														
Stud Size Dash No.	Wire Size	Stud Size	A Max	B Min	C Min Rad	D		Ø E.O.D.	Ø F.I.D.	G		W & H*		[K]
						Max	Min			Max	Min	Max	Min	
375	2	3/8 [.375]	2.002 (50.85)	.960 (24.38)	.343 (8.71)	.109 (2.77)	.089 (2.26)	.532 (13.51)	.371 (9.42) .361 (9.17)	.400 (10.16)	.385 (9.78)	.711 (18.06)	.668 (16.97)	[1.13] (28.70)
437	2	7/16 [.437]	2.153 (54.69)	.960 (24.38)	.453 (11.51)	.109 (2.77)	.089 (2.26)	.532 (13.51)	.371 (9.42) .361 (9.17)	.463 (11.76)	.448 (11.38)	.804 (20.42)	.740 (18.80)	[1.13] (28.70)
375	0	3/8 [.375]	2.207 (56.06)	1.018 (25.86)	.418 (10.62)	.125 (3.18)	.105 (2.67)	.615 (15.62)	.466 (11.84) .456 (11.58)	.400 (10.16)	.385 (9.78)	.853 (21.67)	.810 (20.57)	[1.19] (30.23)
437	0	7/16 [.437]	2.267 (57.58)	1.018 (25.86)	.453 (11.51)	.125 (3.18)	.105 (2.67)	.615 (15.62)	.466 (11.84) .456 (11.58)	.463 (11.76)	.448 (11.38)	.903 (22.94)	.860 (21.84)	[1.19] (30.23)
500	0	1/2 [.500]	2.267 (57.58)	1.018 (25.86)	.453 (11.51)	.125 (3.18)	.105 (2.67)	.615 (15.62)	.466 (11.84) .456 (11.58)	.525 (13.34)	.510 (12.95)	.903 (22.94)	.860 (21.84)	[1.19] (30.23)
375	00	3/8 [.375]	2.436 (61.87)	1.141 (28.98)	.473 (12.01)	.129 (3.28)	.109 (2.77)	.691 (17.55)	.523 (13.28) .513 (13.03)	.400 (10.16)	.385 (9.78)	.956 (24.28)	.913 (23.19)	[1.31] (33.27)
437	00	7/16 [.437]	2.436 (61.87)	1.141 (28.98)	.473 (12.01)	.129 (3.28)	.109 (2.77)	.691 (17.55)	.523 (13.28) .513 (13.03)	.463 (11.76)	.448 (11.38)	.956 (24.28)	.913 (23.19)	[1.31] (33.27)
500	00	1/2 [.500]	2.436 (61.87)	1.141 (28.98)	.473 (12.01)	.129 (3.28)	.109 (2.77)	.691 (17.55)	.523 (13.28) .513 (13.03)	.525 (13.34)	.510 (12.95)	.956 (24.28)	.913 (23.19)	[1.31] (33.27)
375	000	3/8 [.375]	2.752 (69.90)	1.348 (34.24)	.513 (13.03)	.140 (3.56)	.120 (3.05)	.775 (19.68)	.588 (14.94) .578 (14.68)	.400 (10.16)	.385 (9.78)	1.053 (26.75)	1.010 (25.65)	[1.54] (39.12)
437	000	7/16 [.437]	2.752 (69.90)	1.348 (34.24)	.513 (13.03)	.140 (3.56)	.120 (3.05)	.775 (19.68)	.588 (14.94) .578 (14.68)	.463 (11.76)	.448 (11.38)	1.053 (26.75)	1.010 (25.65)	[1.54] (39.12)
500	000	1/2 [.500]	2.752 (69.90)	1.348 (34.24)	.513 (13.03)	.140 (3.56)	.120 (3.05)	.775 (19.68)	.588 (14.94) .578 (14.68)	.525 (13.34)	.510 (12.95)	1.053 (26.75)	1.010 (25.65)	[1.54] (39.12)
375	0000	3/8 [.375]	3.053 (77.55)	1.547 (39.29)	.560 (14.22)	.150 (3.81)	.130 (3.30)	.865 (21.97)	.656 (16.66) .646 (16.41)	.400 (10.16)	.385 (9.78)	1.148 (29.16)	1.095 (27.81)	[1.75] (44.45)
437	0000	7/16 [.437]	3.053 (77.55)	1.547 (39.29)	.560 (14.22)	.150 (3.81)	.130 (3.30)	.865 (21.97)	.656 (16.66) .646 (16.41)	.463 (11.76)	.448 (11.38)	1.148 (29.16)	1.095 (27.81)	[1.75] (44.45)
500	0000	1/2 [.500]	3.053 (77.55)	1.547 (39.29)	.560 (14.22)	.150 (3.81)	.130 (3.30)	.865 (21.97)	.656 (16.66) .646 (16.41)	.525 (13.34)	.510 (12.95)	1.148 (29.16)	1.095 (27.81)	[1.75] (44.45)

*H Max and Min dimensions shall be one half of the W Max and Min dimensions, respectively.

ELECTRICAL POWER
PROPULSION SYSTEM
CONNECTORS,
CABLES, AND
ACCESSORIES

PWRLINE HV™

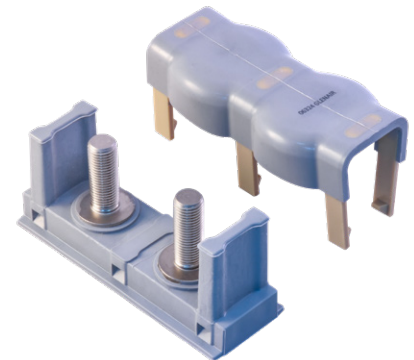
High-current power feeder system and current return network for composite fuselage eVTOL aircraft applications



Unique power feeder system eliminates power line routing and termination issues

For electrical eVTOL motor applications that require discrete routing of 3-phase and DC power lines, Glenair has developed the PwrLine HV. PwrLine HV replaces conventional terminal strips and terminal lugs with a solution that eliminates the issues associated with routing large gauge cables. The PwrLine HV uses a crimp contact system that can accommodate tolerancing variations that routinely occur with large cables. Routing power feeders through the 3-D spatial environment routinely creates installation and terminal lug orientation issues. PwrLine HV eliminates these problems with its unique rotatable pin/socket architecture and unique in-line insulation packaging.

PwrLine HV is a complete power feeder and current return network system that includes contacts, cables, holding fixtures, mountable connector packages, as well as high-voltage terminal blocks and lugs for reduction of partial discharge and corona. Lightweight, high-durability Duraelectric terminal blocks, hoods, and cable jackets deliver outstanding environmental and insulation performance.



PwrLine HV: a complete power feeder ecosystem with matched, compatible components

HIGH-CURRENT / HIGH-VOLTAGE PwrLine HV Power Feeder System



For aircraft electrical power distribution systems

PWRLINE HV POWER FEEDER SYSTEM COMPONENTS

- Resolves cable lug misalignment issues
- Eliminates twisted cable (rotational) problems during assembly
- Integrated / compatible power line feeder system used in combination with PowerLoad and other power distribution system connectors



PwrLine HV power feeder system uses Band-Master ATS® termination bands

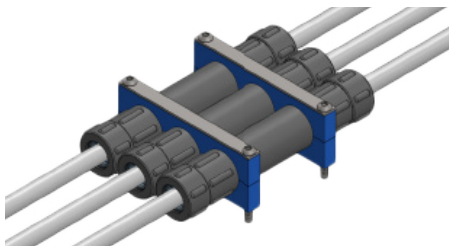


High-current power feeder contact and cable system

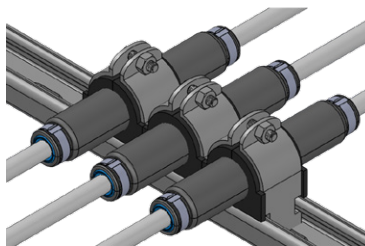
Mated contact pair inside self-vulcanizing Duraelectric insulator

Lightweight outer composite split shell with shield banding platforms

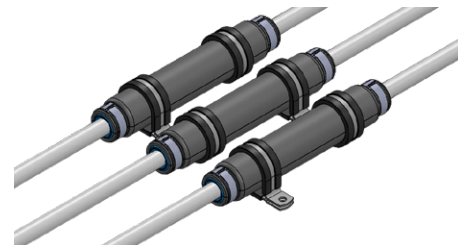
Assembled and ready for shield band termination with Band-Master ATS® bands



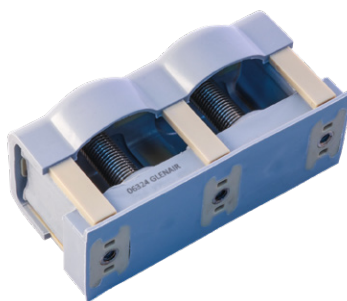
Schematic illustration with line block mounting hardware...



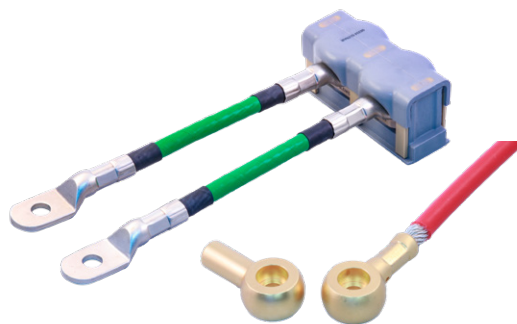
...strut clamp mounting hardware...



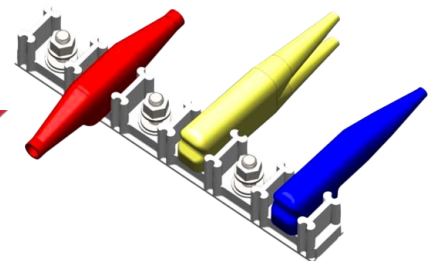
... and P-clamp mounting hardware



Multiple designs of high-voltage terminal blocks with accommodation for PwrLine HV lugs and/or standard lugs



Conventional and PwrLine HV terminal lugs



Color-coded terminal lug hoods made from high-performance Duraelectric material



**MISSION-CRITICAL
INTERCONNECT
SOLUTIONS**

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