

SERIES 103

AmberStrand® Conductive Composite Braid

The Smart Way to Reduce Launch and Flight Weights in Aerospace Systems

For many applications, the cable shield is the most important element in controlling EMI. Unfortunately, metal shielding—especially when applied in multiple layers—can be extremely heavy. The opportunity to provide robust EMI shielding at a fraction of the weight is the principal advantage of composite thermoplastic EMI/RFI braid made from AmberStrand® material. Transfer impedance test reports demonstrate the effectiveness of the material compared to conventional metal solutions. So get smart! Reduce weight and save money with AmberStrand®

- *Reduce Shielding Weight Up To 80% and More*
- *Composite Thermoplastic Base Material (PBO)*
- *Numerous Military Aerospace OEM Qualifications*
- *Electrically Conductive Surface Plating*
- *Superior High Frequency Shielding in High Temperature Applications*
- *Comparable Shielding Performance to 38 AWG Tubular Copper Braid*
- *Corrosion-Free*

AmberStrand® Composite Braid Weight Saving Analysis Comparison

100% and 75% Metal Clad AmberStrand® Weight vs. Tin-Coated Copper						
Braid Diameter	AmberStrand® 100% 103-026	Tinned Copper 100-001	% Weight Savings/ Foot	AmberStrand® 75/25 NiCu% 103-027	Tinned Copper 100-001	% Weight Savings/Foot
.062	.6	1.9	68%	.9	1.9	52%
.125	1.0	4.8	79%	1.5	4.8	68%
.250	1.8	16.1	88%	2.4	16.1	85%
.375	2.3	18.5	87%	3.9	18.5	79%
.500	3.7	22.3	83%	5.4	22.3	76%
.625	4.4	27.7	84%	6.4	27.7	77%
.750	5.2	34.3	85%	7.2	34.3	79%
1.000	8.0	35.0	77%	11.0	35.0	69%

With weight saving bounties valued at \$1000 a pound and more, AmberStrand® is the smartest and most cost-effective way to reduce aircraft all-up and launch weights. Replacing standard metal braid with AmberStrand® is like buying dollar bills for 50 cents. 100 Feet of 5/8" AmberStrand® Vs. Tinned Copper Shield Saves 5+ Pounds.

100% Metal Clad AmberStrand® Weight vs. Tin/Copper					
Size	Diameter	AmberStrand® Lbs. per cft	36 AWG Cu Lbs. per cft	Lbs. Difference	% Lighter
002	.062	.1322	.40	.2678	67.5%
004	.125	.2205	1.03	.8095	78.6%
008	.250	.3968	3.45	3.053	88.5%
012	.375	.5071	3.95	3.443	87.1%
016	.500	.8175	4.77	3.954	82.9%
020	.625	.9700	5.94	4.970	83.6%
024	.750	1.146	7.30	5.154	84.4%
032	1.000	1.7637	7.50	5.736	76.4%