



RADIATION-PROTECTED SGEMP-Resistant Wire

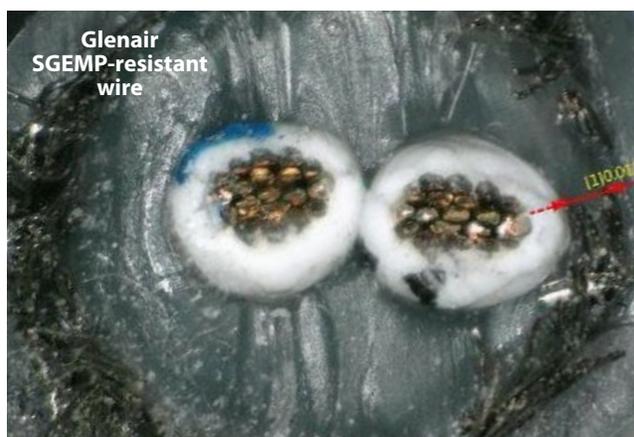
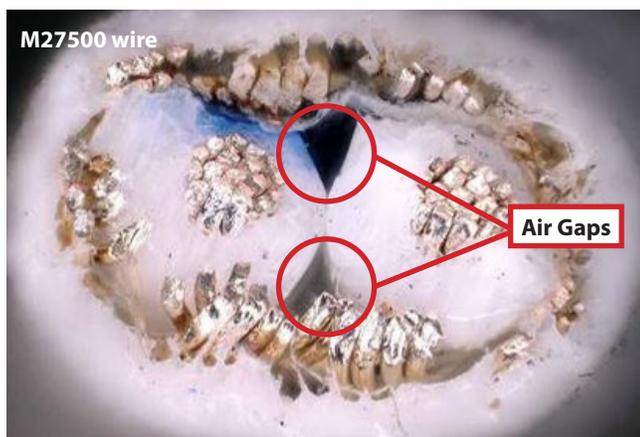
No air gaps • Duraelectric “low-Z”
filler material • ArmorLite shielding

Radiation shielding and hardening is crucial for satellites, missile defense, and avionic systems. A System-Generated ElectroMagnetic Pulse (SGEMP) event is a transient radiation effect produced in an exposure to a nuclear burst that can be devastating to space assets. Low-energy X-rays from the nuclear burst are absorbed, liberating free electrons which create transient electronic currents that deposit in electronic devices, causing data loss, interruption, or physical damage from electrical overstress.

Glenair SGEMP-Resistant Wire is filled with Duraelectric EMP low-Z material to eliminate all air gaps in the wire and shield, providing protection from neutrons. A protective layer of lightweight ArmorLite high-Z braided material shields the wire from secondary gamma radiation and electrons. Available as singles, pairs, triples, and quads, as well as controlled-impedance pairs and Cat6A optimized cable, Glenair SGEMP-Resistant Wire is a critical component in protecting mission-critical satellite, missile, and avionic systems from damaging radiation.

- Duraelectric EMP low-Z filling material for neutron shielding
- ArmorLite high-Z braid shields secondary gamma radiation and electrons
- No air gaps between wires or shield
- Minimizes charge induced in wires during high-radiation SGEMP events
- 30X lower induced charge than standard M27500 wire per MBS test

CLOSE-UP CROSS-SECTION COMPARISON OF 22 AWG TWISTED, SHIELDED PAIRS



M27500 wire (left) cross-section shows numerous air gaps. Glenair SGEMP resistant wire (right), with Duraelectric EMP low-Z filling material has no air gaps. ArmorLite braided shielding with minimum 95% coverage protects against secondary gamma radiation and electrons

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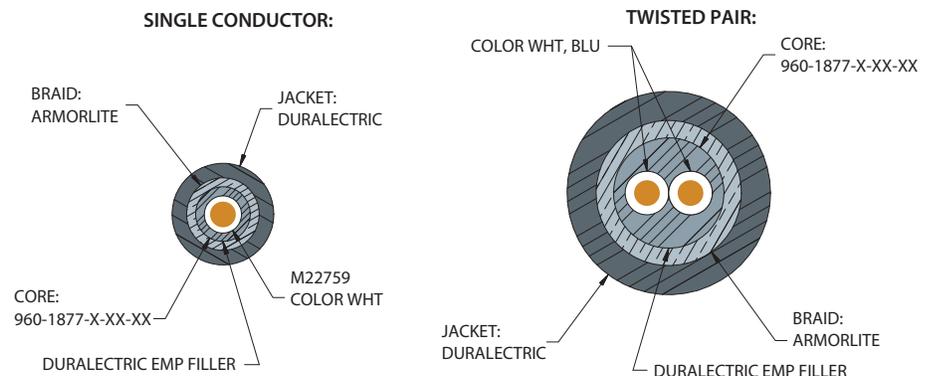


No air gaps • Duralectric filler • ArmorLite shielding
Wire configurations / How to order

SGEMP-RESISTANT WIRE, SINGLE-CONDUCTOR OR TWISTED-PAIR • 960-2770

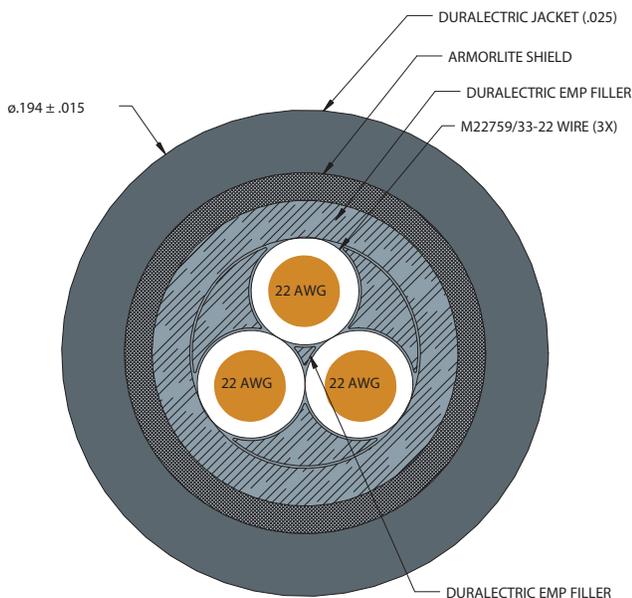
Table II: Duralectric™ D Jacket Color		
Weatherproof, halogen free, flame resistant, functional to 260°C		
0	Black	Fed-Std-595C #17038
1	Brown	[TBD]
2	Red	Fed-Std-595C #11120
3	Orange	Fed-Std-595C #12300
4	Yellow	Fed-Std-595C #13591
5	Kelly Green	Fed-Std-595C #14193
6	Blue	Fed-Std-595C #15125
7	Violet	Fed-Std-595C #17142
8	Gray	Fed-Std-595C #26270
9	White	Fed-Std-595C #17875
OG	Dark Olive Green	Fed-Std-595C #34094
DT	Desert Tan	Fed-Std-595C #33446

How To Order SGEMP-Resistant Wire					
Sample Part Number	960-2770	-2	-33	-26	-9
Basic Part No.	SGEMP-Resistant Wire				
No. of Conductors	-1 = single-conductor -2 = twisted-pair				
Wire Type	33 = RP M22759/33-X etched				
Wire Gauge (AWG)	20, 22, 24, 26, 28, 30				
Duralectric Jacket Color	See Table II				



SGEMP-RESISTANT WIRE, 3-CONDUCTOR TWISTED • 960-2731

How To Order SGEMP-Resistant Wire	
Sample Part Number	960-2731
Basic Part No.	SGEMP-Resistant Wire, 3-conductor



SGEMP-RESISTANT WIRE, 4-CONDUCTOR TWISTED • 960-2738

How To Order SGEMP-Resistant Wire	
Sample Part Number	960-2738
Basic Part No.	SGEMP-Resistant Wire, 3-conductor

