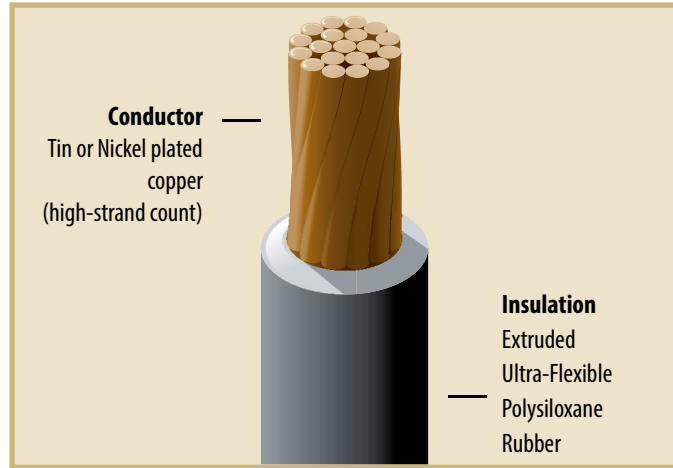


SurpreFlex™ Ultra-Flexible Power Distribution

AD961 Series

APPLICATION

SurpreFlex™ cables are designed specifically for Armored Vehicle applications where ultra-flexibility, cold weather durability, and chemical resistance are required.



The standard insulation color is black, but can be made with other colors (See Table II)

CONDUCTOR

Soft annealed Tin or Nickel plated copper, high-strand count as listed in the below table.

Insulation

Extruded Ultra-Flexible Polysiloxane Rubber

TYPICAL PROPERTIES

- Blocking:** 260°C
- Heat Aging:** 260°C for 7 hours
- Cold Bend:** -60°C
- Tensile Strength:** 1000 psi min
- Covering Elongation:** 300% min
- Flammability:** 30s (max) 3" (max); No flaming of tissue paper
- Fluid Immersion:** In accordance to MIL-STD-810G
- Adhesion:** Compatible with adhesives per MIL-A-46146, Group 1 or 2, Type 1
- Halogen Content:** Halogen-Free
- Shrinkage:** .125" max @ 260°C
- Smoke:** 260°C
- Spark Test:** 10,000 Vrms
- RoHS Compliant:** Yes

AD961-2 SurpreFlex .093" nom. wall, 3500VAC		AD961-2	D	N	-0
Base Number	AD961-2				
AWG Size	D, E, F, G, H, I, J, K, L (See Table I)				
Plating	T = Tin Plated (150°C) N = Nickel Plated (260°C)				
Color	See Table II				

AD961-3 SurpreFlex .062" nom. wall, 3000VAC		AD961-3	A	T	-0
Base Number	AD961-3				
AWG Size	A, B, C, D, E, F (See Table I)				
Plating	T = Tin Plated (150°C) N = Nickel Plated (260°C)				
Color	See Table II				

Code	AWG Size	Strand Count	Conductor Diameter	Resistance @ 20°C (Ω/kft)		Ampacity (AMPS) @ 40°C Ambient		Cable Weight lbs/1000 ft (nom.)		Cable Diameter Inch (nom.)	
				Inch (nom.)	Tin	Nickel	Tin	Nickel	AD961-2	AD961-3	AD961-2
A	12	259	.099	1.86	1.85	68	78	-	40	-	.233
B	10	413	.126	1.17	1.16	90	107	-	56	-	.250
C	8	665	.159	.725	.719	124	142	-	81	-	.283
D	6	1050	.200	.460	.455	165	205	138	118	.386	.324
E	4	1666	.271	.300	.298	220	278	207	183	.457	.395
F	2	2646	.342	.190	.188	293	381	305	276	.528	.466
G	1/0	4214	.431	.119	.118	399	532	456	-	.617	-
H	2/0	5292	.483	.095	.094	467	591	558	-	.649	-
I	3/0	6783	.547	.075	.074	546	708	704	-	.733	-
J	4/0	8512	.613	.060	.059	629	830	867	-	.799	-
K	250 MCM	9975	.663	.048	.048	705	910	1003	-	.849	-
L	450 MCM	17955	.890	.026	.027	1020	1320	1740	-	1.076	-

0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Blue
7	Violet
8	Gray
9	White
Consult factory for specific Fed Std colors	

NOTES:

1. Bend Radius is 3x outer diameter
2. Cable will be marked with "Marmon Aerospace & Defense", AWG Size, Part Number, CAGE Code 61123

