

ULTRA-FLEXIBLE TurboFlex Rugged Power Cable



TurboFlex® Copper Core, Duralectric™ K Insulation,
1000-3000 VAC, -110°C – +200°C • 961-033

FEATURES

- TurboFlex with Duralectric K insulation for low-temperature tolerance and gamma radiation resistance
- Ultra Low Temp Flexibility to -110°C (163 Kelvin)
- Bend Radius is 3X the outer diameter
- Perfect for spacecraft, satellites, nuclear environments

HOW TO ORDER TURBOFLEX®

Sample Part Number				
		961-033	-T	-A
Basic No.	TurboFlex with Duralectric K Insulation			
Conductor Material	-T = Tin/Copper (-110° - 150°C) -N = Nickel/Copper (-110° - 200°C)			
Wire Size (See Table I)	T, R, S, A, B, C, D, E, F, G			
Duralectric L Insulation Color	See Table II			

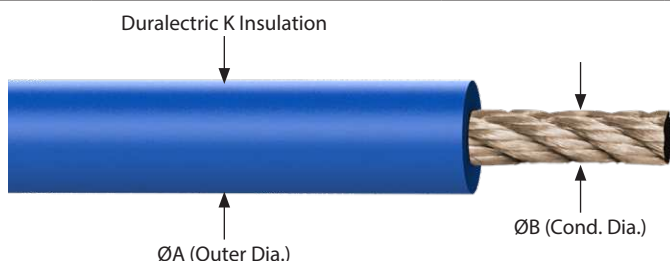


Table I: TurboFlex Wire Size, Dimensions, DC Resistance and Ampacity Ratings

AWG Code	AWG	Strand / Count / AWG	Cir Mil (nom)	Ø B in. (mm)	DC Resistance @ 20°C (Ohms / 1000 ft.)			Ampacity (Amps) 40°C Ambient	
					Nickel Copper	Tin Copper	Silver Copper	Nickel/Silver Copper	Tin Copper
T	20	42/36	1050	.037 (0.94)	10.7178	10.7538	10.0747	10-25	10-20
R	16	7 X 15/36	2625	.063 (1.60)	4.5510	4.5930	4.2780	15-35	15-30
S	14	7 X 24/36	4200	.080 (2.03)	2.8450	2.8710	2.6740	20-50	20-45
A	12	7 X 37/36	6475	.099 (2.51)	1.8450	1.8620	1.7340	30-70	30-60
B	10	7 X 59/36	10325	.126 (3.20)	1.1570	1.1680	1.0880	40-90	40-75
C	8	7 X 95/36	16625	.159 (4.04)	.7188	.7252	.6755	55-135	55-115
D	6	7 X 150/36	26250	.200 (5.08)	.4551	.4593	.4278	75-185	75-155
E	4	7 X 7 X 34/36	41650	.271 (6.88)	.2979	.3006	.2800	105-250	105-215
F	2	7 X 7 X 54/36	66150	.342 (8.69)	.1876	.1893	.1763	145-345	145-290
G	1/0	7 X 7 X 86/36	105350	.431 (10.95)	.1178	.1188	.1107	195-465	195-395

Maximum ampacities are based on temperature rise to limits of the materials used in cable construction, based on single cable bundle in free air and at sea level pressure. Consult Glenair for more information.

961-033 Wire Weight and Outer Diameter

AWG Code	Weight lbs/1000 ft. (nom.)	Ø A in. (mm)	Insulation wall thickness in. (mm) and VAC
T	5.00	.069 (1.75)	.016 (0.41)
R	11.10	.095 (2.41)	1000 VAC
S	20.70	.144 (3.66)	.032 (0.81) 2000 VAC
A	29.40	.163 (4.14)	
B	43.90	.190 (4.83)	
C	66.90	.223 (5.66)	
D	101.40	.264 (6.71)	
E	162.40	.335 (8.51)	.062 (1.57) 3000 VAC
F	275.90	.466 (11.84)	
G	422.00	.555 (14.10)	

Ambient Temperature Correction Factors

Ambient Temp (°C)	For ambient temperatures other than 40°C (104°F), multiply the ampacity by the appropriate factor below
41 – 50	0.97
51 – 60	0.94
61 – 70	0.90
71 – 80	0.87
81 – 90	0.83
91 – 100	0.79
101 – 120	0.71
121 – 140	0.61
141 – 160	0.50
161 – 180	0.35

Table II: Duralectric K Insulation Color

Weatherproof, halogen free, flame resistant	
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Kelly Green
6	Blue
7	Violet
8	Gray
9	White

Consult factory for other specific colors

NOTES

- Bend radius is 3X the outer diameter
- Cable will be marked with "GLENAIR TURBOFLEX K", wire gauge, part number, CAGE 06324.
- Insulation thickness tolerance is ± 0.002 for .016" thickness, ± 0.005 for .032" thickness, $\pm 10\%$ for .125" thickness