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

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**	**-2**
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			

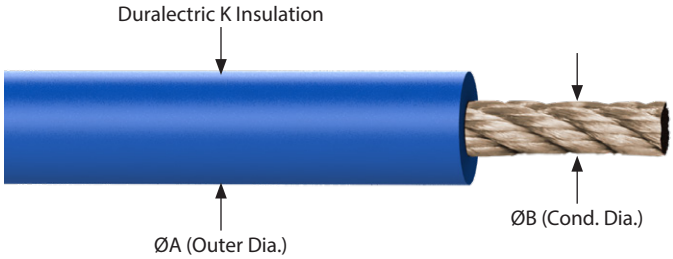

Table I: TurboFlex Wire Size, Dimensions, DC Resistance and Ampacity Ratings

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 Copper	Tin/Silver Copper
T	20	42/36	1050	.037 (0.94)	10.7178	10.7538	10.0747	16	14
R	16	7 X 15/36	2625	.063 (1.60)	4.5510	4.5930	4.2780	40	36
S	14	7 X 24/36	4200	.080 (2.03)	2.8450	2.8710	2.6740	59	54
A	12	7 X 37/36	6475	.099 (2.51)	1.8450	1.8620	1.7340	78	68
B	10	7 X 59/36	10325	.126 (3.20)	1.1570	1.1680	1.0880	107	90
C	8	7 X 95/36	16625	.159 (4.04)	.7188	.7252	.6755	142	124
D	6	7 X 150/36	26250	.200 (5.08)	.4551	.4593	.4278	205	165
E	4	7 X 7 X 34/36	41650	.271 (6.88)	.2979	.3006	.2800	278	220
F	2	7 X 7 X 54/36	66150	.342 (8.69)	.1876	.1893	.1763	381	293
G	1/0	7 X 7 X 86/36	105350	.431 (10.95)	.1178	.1188	.1107	532	399

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.

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

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) 1000 VAC
R	11.10	.095 (2.41)	
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)	
F	275.90	.466 (11.84)	.062 (1.57) 3000 VAC
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

NOTES

1. Bend radius is 3X the outer diameter
2. Cable will be marked with "GLENAIR TURBOFLEX K", wire gauge, part number, CAGE 06324.
3. Insulation thickness tolerance is ±.002 for .016" thickness, ±.005 for .032" thickness, ±10% for .125" thickness

© 2024 Glenair, Inc • 1211 Air Way, Glendale, CA 91201 • 818-247-6000 • www.glenair.com • U.S. CAGE code 06324 • TurboFlex® catalog
Dimensions in Inches (millimeters) are subject to change without notice.