

TurboFlex® Copper Core, Duraelectric™ D Insulation, 1000 VAC
• 961-065 Imperial

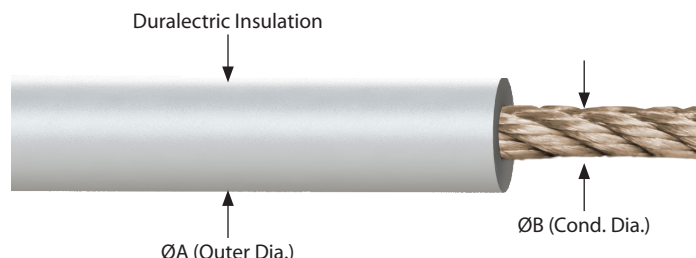
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How to Order TurboFlex®				
Sample Part Number	961-065	-N	-D	-2
Basic No.	TurboFlex with Duraelectric D Insulation (.035" – .100")			
Conductor Material	-N = Nickel/Copper (-65°C – 200°C)			
Wire Size (See Table I)	T, R, S, A, B, C, D, E, F, G, H, I, J, K, L			
Duraelectric D 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 (per NEC Table 310.19)
					Nickel Copper	Nickel Copper
T	20	42-36	1050	.037 (.94)	10.7178	16
R	16	7 X 15/36	2625	.063 (1.60)	4.5510	40
S	14	7 X 24/36	4200	.080 (2.03)	2.8450	59
A	12	7 X 37/36	6475	.099 (2.51)	1.8450	78
B	10	7 X 59/36	10325	.126 (3.20)	1.1570	107
C	8	7 X 95/36	16625	.159 (4.04)	.7188	142
D	6	7 X 150/36	26250	.200 (5.08)	.4551	205
E	4	7 X 7 X 34/36	41650	.271 (6.88)	.2979	278
F	2	7 X 7 X 54/36	66150	.342 (8.69)	.1876	381
G	1/0	7 X 7 X 86/36	105350	.431 (10.95)	.1178	532
H	2/0	7 X 7 X 108/36	132300	.483 (12.27)	.0938	591
I	3/0	19 X 7 X 51/36	169575	.547 (13.89)	.0738	708
J	4/0	19 X 7 X 64/36	212800	.613 (15.57)	.0588	830
K	250 MCM	19 X 7 X 75/36	249375	.663 (16.84)	.0502	910
L	450 MCM	19 X 7 X 135/36	448875	.890 (22.61)	.0278	1320

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: Duraelectric D 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", wire gauge, part number, CAGE 06324, 1000VAC, 200°C.
- Insulation thickness tolerance is ±.005 for .035" thickness, and ±10% for all other sizes.

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961-065 Wire Weight and Outer Diameter			
AWG Code	Weight lbs/1000 ft. (nom.)	Ø A in. (mm)	Insulation wall thickness in. (mm)
T	8.1	.107 (2.72)	.035 (.89)
R	15.2	.133 (3.38)	
S	21.5	.150 (3.81)	
A	30.3	.169 (4.29)	
B	50.8	.196 (4.98)	
C	82.6	.259 (6.58)	.050 (1.27)
D	119.7	.330 (8.38)	.065 (1.65)
E	185.1	.401 (10.19)	
F	278.6	.472 (11.99)	
G	446.8	.601 (15.27)	.085 (2.16)
H	548.4	.653 (16.59)	
I	693.1	.717 (18.21)	
J	854.7	.783 (19.89)	
K	1014.3	.863 (21.92)	.100 (2.54)
L	1754.2	1.090 (27.69)	

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
181 – 200	-----
201 – 225	-----

961-065 TurboFlex environmental performance	
Temperature rating	Duraelectric D: -65°C to 200°C
Halogen free	per IEC 60614-1
Accelerated weathering and simulated solar radiation at ground level	per IEC 60068-2-5; 56 Days exposure, suitable for greater than 50 years of service in direct sunlight
Flame resistant	per IEC 60614-1
Flame resistant	per UL 1685, section 12 (FT4/IEEE120), vertical-tray fire-propagation and smoke release test
Flame resistant	per FAR 25.853 (A) amendment 25-116, appendix F part I (A) (1) (i), 60 second vertical burn test
Limiting oxygen index	45 per ISO 4589-2:1999
Low smoke	per NES 711, smoke density of 11.75
Smoke density	class F1 per NF F 16-101 IAW DIN EN 60695-2-11:2011
Low smoke toxicity	per NES 713, tested value of 1.9
Fungus rating	0 per MIL-STD-810g method 508.5, Does not support fungal growth
Tear Strength	ASTM D624, die B, 150 pounds per inch minimum on Insulation material
Low outgassing	per ASTM e595 after post curing, TML .06%, CVM .006%, WVR .02%
Resistant to fluids	per MIL-STD-810F, method 504: JP-8 per MIL-DTL-83133 (NATO type 34) MIL-H-5606 hydraulic fluid MIL-PRF-23699 lubricating oil MIL-C-85570 cleaner TT-I-735 Isopropyl alcohol AMS 1432 potassium acetate deicing/anti-icing fluid MIL-C-87252 coolant Amerex AFF fire extinguishing foam