

ULTRA-FLEXIBLE TurboFlex Rugged Power Cable



TurboFlex® Aluminum Core, Dual-Layer Duraelectric™ D Jackets and Metallic Braided Shield, 3000 VAC • 961-145

FEATURES

- For weight savings: all the benefits of TurboFlex wire and Duraelectric D jacketing with lightweight aluminum core conductor
- Metallic braided shield provides grounding for high-power applications.
- Inner black Duraelectric D insulation to protect the conductor, surrounded with a metallic braided shield, with an outer jacket for overall cable protection.

HOW TO ORDER TURBOFLEX®

Sample Part Number		961-145	-A	-T	-A	-2
Basic No.	TurboFlex with .062" Duraelectric D Insulation / Jacketing					
Conductor Material	-A = Aluminum (-65 - 175°C)					
Braided Shield Material	-T = Tin/Copper (-65° - 150°C) -S = Silver/Copper (-65° - 200°C) -N = Nickel/Copper (-65° - 200°C)					
Wire Size (See Table I)	R, S, A, B, C, D, E, F, G, H, I, J, K, L					
Outer Duraelectric D Jacket Color	See Table II					

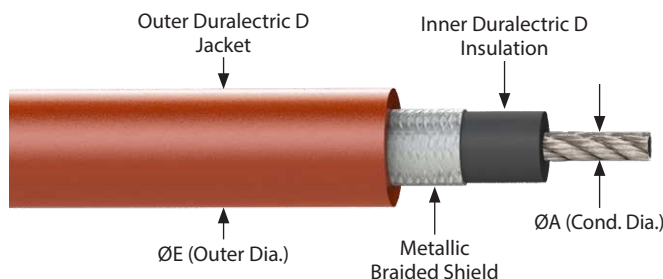
Table I: TurboFlex Wire Size, Dimensions

AWG Code	AWG	Strand / Count / AWG	Cir Mil (nom)	Ø A in. (mm)	"B" Insulation Wall Thickness in. (mm)	"C" Shield Thickness in. (mm)	"D" Outer Jacket Wall Thickness in. (mm)	Ø E in. (mm)
R	16	7 X 15/36	2625	.063 (1.60)	.062 (1.57)	.011 (0.28)	.062 (1.57)	.333 (8.46)
S	14	7 X 24/36	4200	.080 (2.03)				.350 (8.89)
A	12	7 X 37/36	6475	.099 (2.51)				.369 (9.37)
B	10	7 X 59/36	10325	.126 (3.20)				.396 (10.06)
C	8	7 X 95/36	16625	.159 (4.04)				.429 (10.90)
D	6	19 X 55/36	26125	.200 (5.08)				.470 (11.94)
E	4	7 X 7 X 34/36	41650	.271 (6.88)				.541 (13.74)
F	2	7 X 7 X 54/36	66150	.342 (8.69)				.612 (15.54)
G	1/0	7 X 7 X 86/36	105350	.431 (10.95)				.701 (17.81)
H	2/0	19 X 7 X 40/36	133000	.483 (12.27)				.753 (19.13)
I	3/0	19 X 7 X 51/36	169575	.547 (13.89)				.817 (20.75)
J	4/0	19 X 7 X 64/36	212800	.613 (15.57)				.883 (22.43)
K	250 MCM	19 X 7 X 75/36	249375	.663 (16.84)				.933 (23.70)
L	450 MCM	19 X 19 X 50/36	451250	.890 (22.61)				1.160 (29.46)

Table II: Duraelectric™ D Jacket 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 4X the outer diameter
- Cable will be marked with "GLENAIR TURBOFLEX", wire gauge, part number, CAGE 06324.
- Jacket thickness tolerance is $\pm 10\%$
- Braided shield has 90% optical coverage
- Consult factory for applications above 175°C, and available thermal endurance test reports

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TURBOFLEX

Table I: TurboFlex DC Resistance and Ampacity Ratings			
AWG Code	DC Resistance @ 20°C (Ohms / 1000 ft.)	Typical Ampacity (Amps)	Braided Shield Ampacity (Amps) 30°C Ambient
R	6.85	15-20	32
S	4.26	15-30	46
A	2.80	25-40	46
B	1.69	30-50	53
C	1.07	45-80	35
D	0.67	60-110	42
E	0.42	80-150	53
F	0.26	115-205	56
G	0.16	150-280	62
H	0.13	175-325	70
I	0.10	205-380	77
J	0.08	240-450	77
K	0.07	245-455	88
L	0.04	345-630	80

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.

Ampacity Ratings: Ambient Temperature Correction Factors	
Ambient Temp (°C)	For ambient temperatures other than 40°C (104°F), multiply the allowable ampacities from the table above 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