

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

HIGH-POWER SHIELDED • ALUMINUM CORE

FEATURES

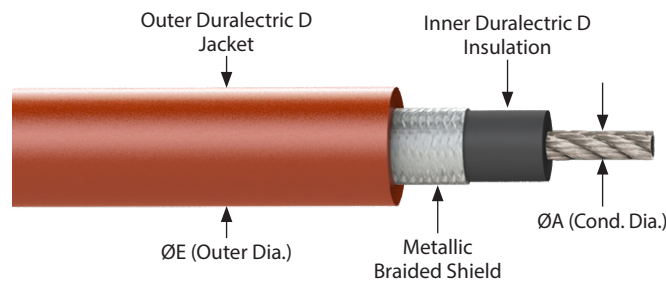
- For weight savings: all the benefits of TurboFlex wire and Duraelectric D jacketing with lightweight aluminum core conductor
- Metallic braided shield provides grounding for high-power applications.
- Inner black Duraelectric D insulation to protect the conductor, surrounded with a metallic braided 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 - 200°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 ±10%
- Braided shield has 90% optical coverage

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Table I: TurboFlex DC Resistance and Ampacity Ratings

AWG Code	DC Resistance @ 20°C (Ohms / 1000 ft.)	Ampacity (Amps) 40°C Ambient	Braided Shield Ampacity (Amps) 30°C Ambient
R	6.85	27	32
S	4.26	36	46
A	2.80	47	46
B	1.69	63	53
C	1.07	83	35
D	0.67	112	42
E	0.42	148	53
F	0.26	198	56
G	0.16	263	62
H	0.13	305	70
I	0.10	351	77
J	0.08	411	77
K	0.07	446	88
L	0.04	642	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)	Correction Factor
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
181 – 200	----
201 – 255	----

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