

TurboFlex® Copper, Dual-Layer Duraelectric™ D Insulation/Jacket, Microfilament Braided Shield, 3000 VAC • 961-153 Imperial

MICROFILAMENT BRAIDED • COPPER CORE

FEATURES

- Glenair microfilament braided shield (ArmorLite™ or AmberStrand) provides lightweight grounding.
- Black Duraelectric D insulation to protect the conductor, surrounded with a lightweight microfilament braided shield, with an outer jacket for overall cable protection.

How to Order TurboFlex®					
Sample Part Number	961-153	-T	-AM	-A	-2
Basic No.	TurboFlex with .062" Duraelectric D Insulation / Jacket				
Conductor Material	-T = Tin/Copper (-65° - 150°C) -S = Silver/Copper (-65° - 200°C) -N = Nickel/Copper (-65° - 200°C)				
Braided Shield Material	-AM = AmberStrand -AR = ArmorLite -CF = ArmorLite CF				
Wire Size (See Table I)	R, S, A, B, C, D, E, F, G, H, I, J, K, M, L				
Outer Duraelectric D Jacket Color	See Table II				

Table I: TurboFlex Wire Size, Dimensions

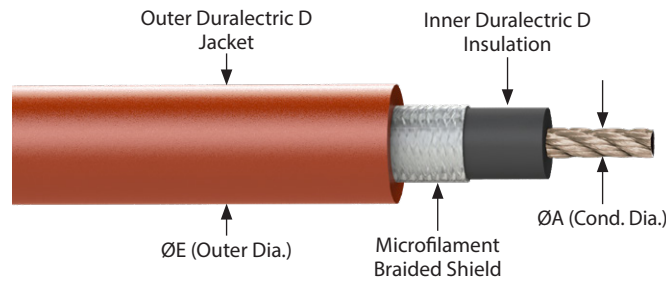
AWG Code	AWG	Strand / Count / AWG	Cir Mil (nom)	Ø A in. (mm)	"B" Insulation Wall Thickness in. (mm)	"C" Shield Thickness in. (mm)	"D" Outer Jacket Wall Thickness in. (mm)	Ø E in. (mm)
R	16	7 X 15/36	2625	.063 (1.60)	.062 (1.57)	.008 (0.20)	.062 (1.57)	.327 (8.31)
S	14	7 X 24/36	4200	.080 (2.03)				.344 (8.74)
A	12	7 X 37/36	6475	.099 (2.51)				.363 (9.22)
B	10	7 X 59/36	10325	.126 (3.20)				.390 (9.91)
C	8	7 X 95/36	16625	.159 (4.04)				.423 (10.74)
D	6	7 X 150/36	26250	.200 (5.08)				.464 (11.79)
E	4	7 X 7 X 34/36	41650	.271 (6.88)				.535 (13.59)
F	2	7 X 7 X 54/36	66150	.342 (8.69)				.606 (15.39)
G	1/0	7 X 7 X 86/36	105350	.431 (10.95)				.695 (17.65)
H	2/0	7 X 7 X 108/36	132300	.483 (12.27)				.747 (18.97)
I	3/0	19 X 7 X 51/36	169575	.547 (13.89)				.811 (20.60)
J	4/0	19 X 7 X 64/36	212800	.613 (15.57)				.877 (22.28)
K	250 MCM	19 X 7 X 75/36	249375	.663 (16.84)				.927 (23.55)
M	350 MCM	19 X 7 X 106/36	352450	.789 (20.04)				1.053 (26.75)
L	450 MCM	19 X 7 X 135/36	448875	.890 (22.61)	1.154 (29.31)			

Temperature Ratings in °C are dependent on selected conductor and shield material

Shield Material	Conductor Material		
	Tin (-65°/+150°)	Silver (-65°/+200°)	Nickel (-65°/+200°)
AmberStrand (-80°/+220°)	-65° / +150°	-65° / +200°	-65° / +220°
ArmorLite (-80°/+260°)	-65° / +150°	-65° / +200°	-65° / +200°
ArmorLite CF (-80°/+400°)	-65° / +150°	-65° / +200°	-65° / +200°

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

1. Bend radius is 4X the outer diameter
2. Cable will be marked with "GLENAIR TURBOFLEX", wire gauge, part number, CAGE 06324.
3. Jacket thickness tolerance is ±10%
4. 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	
	Nickel Copper	Tin Copper	Silver Copper	Nickel Copper	Tin/Silver Copper
R	4.5510	4.5930	4.2780	40	36
S	2.8450	2.8710	2.6740	59	54
A	1.8450	1.8620	1.7340	78	68
B	1.1570	1.1680	1.0880	107	90
C	.7188	.7252	.6755	142	124
D	.4551	.4593	.4278	205	165
E	.2979	.3006	.2800	278	220
F	.1876	.1893	.1763	381	293
G	.1178	.1188	.1107	532	399
H	.0938	.0946	.0882	591	467
I	.0738	.0745	.0694	708	546
J	.0588	.0594	.0553	830	629
K	.0502	.0507	.0472	910	705
M	.0355	.0359	.0334	1140	880
L	.0279	.0282	.0262	1320	1020

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
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	----

For ambient temperatures other than 40°C (104°F), multiply the allowable ampacities from the table above by the appropriate factor below

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