ULTRA-FLEXIBLE

TurboFlex Rugged Power Cable

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

FEATURES

- Glenair microfilament braided shield (ArmorLite™ or AmberStrand) provides lightweight grounding.
- Black Duralectric 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" Duralectric 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 Duralectric D Jacket Color	See Table II				

Table I: TurboFlex Wire Size, Dimensions

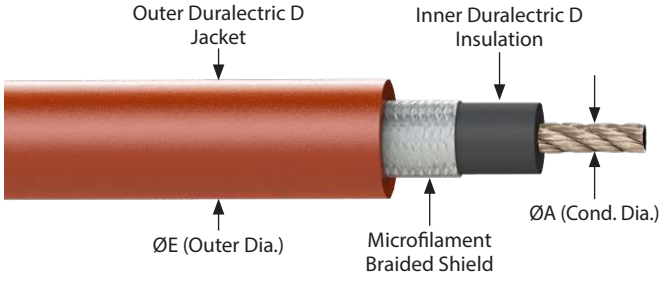
AWG Code	AWG	Strand / Count / AWG	Cir Mil (nom)	Ø A in. (mm)	"B" Insulation Wall Thickness in. (mm)	"C" Shield Thickness in. (mm)	"D" Outer Jacket Wall Thickness in. (mm)	Ø E in. (mm)
R	16	7 X 15/36	2625	.063 (1.60)	.062 (1.57)	.008 (0.20)	.062 (1.57)	.327 (8.31)
S	14	7 X 24/36	4200	.080 (2.03)				.344 (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: Duralectric™ 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/Silver Copper	Tin Copper
R	4.5510	4.5930	4.2780	15-35	15-30
S	2.8450	2.8710	2.6740	20-50	20-45
A	1.8450	1.8620	1.7340	30-70	30-60
B	1.1570	1.1680	1.0880	40-90	40-75
C	.7188	.7252	.6755	55-135	55-115
D	.4551	.4593	.4278	75-185	75-155
E	.2979	.3006	.2800	105-250	105-215
F	.1876	.1893	.1763	145-345	145-290
G	.1178	.1188	.1107	195-465	195-395
H	.0938	.0946	.0882	225-540	225-460
I	.0738	.0745	.0694	260-640	260-540
J	.0588	.0594	.0553	310-755	310-640
K	.0502	.0507	.0472	315-760	315-645
M	.0355	.0359	.0334	380-910	380-775
L	.0279	.0282	.0262	440-1040	440-890

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
181 – 200	–––
201 – 255	–––