TurboFlex® Copper, Triple-Layer Duralectric™ D/C (HPHV) Insulation, ArmorLite Shield, and Duralectric™ L Jacket • 961-113 Imperial

HIGH-VOLTAGE / HIGH-POWER

FEATURES

- High-voltage / high-power configuration: Triple-layer primary insulation construction (Duralectric C, Duralectric D, Duralectric C) for high voltage stress control with ArmorLite shield and Duralectric Light outer jacket for optimal power-to-weight ratio
- Peel-off outer Duralectric C semiconductive layer for highly consistent and reliable tool-free terminations
- Partial Discharge Inception Voltage (PDIV, > 5 pC) = 4.4 kVAC
- Partial Discharge Extinction Voltage (PDEV, < 5 pC) = 3.8 kVAC
- For PDIV/EV altitude and bend radius derating, see GT-22-274

How to Order TurboFlex®					
Sample Part Number	**961–113**	**–N**	**–G**	**–5**	**P**
Basic No.	**TurboFlex** with Duralectric D/C Insulation and L Jacket				
Conductor / Braided Shield Material	**-S** = Silver/Copper (-65° - 200°C) **-N** = Nickel/Copper (-65° - 200°C)				
Wire Size (See Table I)	**C**, **D**, **E**, **F**, **G**, **H**, **I**, **J**				
Duralectric L Jacket Color (inner and outer)	See Table II				
Peel-Off Semiconductive Layer	**P** = with peel-off semiconductive layer				

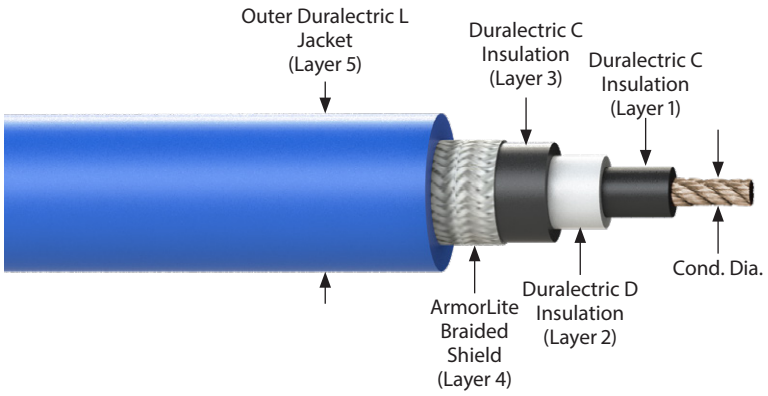

Table II: Duralectric™ Jacket Color	
Weatherproof, halogen free, flame resistant	
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Kelly Green
6	Blue
7	Violet
8	Gray
9	White
OG	Dark Olive Green
DT	Desert Tan
Consult factory for other specific colors	

TurboFlex 961-113 Layer Construction	
Layer	**Material / Plating**
Conductor	TurboFlex copper conductor plated per P/N development
1	Conductive silicone, black (.025" thick)
2	Duralectric, color per P/N development (.025" thick)
3	Conductive silicone, black (.030" Thick)
4	ArmorLite shield, plating per P/N development. 95% coverage
5	Duralectric Light, color per P/N development (.060" thick)

NOTES

1. Cable will be marked with "GLENAIR TURBOFLEX", wire gauge, part number, CAGE 06324.
2. Bend radius is 6X the outer diameter, see GT-22-274 for deratings
3. Overall diameter (Layer 5) tolerance is ±.020" (.51)

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Table I: TurboFlex Wire Size and Dimensions

AWG Code	AWG	Strand / Count / AWG	Cir Mil (nom)	Weight lbs/1000 ft. (nom.)	Conductor Ø in. (mm)	Layer 1 Ø (nom) in. (mm)	Layer 2 Ø (nom) in. (mm)	Layer 3 Ø (nom) in. (mm)	Layer 4 Ø (nom) in. (mm)	Layer 5 Ø (nom) in. (mm)
C	8	7 X 95/36	16625	144.20	.159 (4.04)	.209 (5.31)	.259 (6.58)	.319 (8.10)	.335 (8.51)	.455 (11.56)
D	6	7 X 150/36	26250	188.25	.200 (5.08)	.250 (6.35)	.300 (7.62)	.360 (9.14)	.376 (9.55)	.496 (12.60)
E	4	7 X 7 X 34/36	41650	266.31	.271 (6.88)	.321 (8.15)	.371 (9.42)	.431 (10.95)	.447 (11.35)	.567 (14.40)
F	2	7 X 7 X 54/36	66150	367.47	.342 (8.69)	.392 (9.96)	.442 (11.23)	.502 (12.75)	.518 (13.16)	.638 (16.21)
G	1/0	7 X 7 X 86/36	105350	522.88	.431 (10.95)	.481 (12.22)	.531 (13.49)	.591 (15.01)	.607 (15.42)	.727 (18.47)
H	2/0	7 X 7 X 108/36	132300	626.40	.483 (12.27)	.533 (13.54)	.583 (14.81)	.643 (16.33)	.659 (16.74)	.779 (19.79)
I	3/0	19 X 7 X 51/36	169575	774.66	.547 (13.89)	.597 (15.16)	.647 (16.43)	.707 (17.96)	.723 (18.36)	.843 (21.41)
J	4/0	19 X 7 X 64/36	212800	963.84	.613 (15.57)	.663 (16.84)	.713 (18.11)	.773 (19.63)	.789 (20.04)	.909 (23.09)

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
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

*Based on NEC Table 310.19
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.

Electrical Specifications

Property	Typical Result	Test Method
Partial Discharge Initiation Voltage (PDIV) at 5 pC	4.4 kVAC	EN3475-307
Partial Discharge Extinction Voltage (PDEV) at 5 pC	3.8 kVAC	EN3475-307
Spark (Impulse)	10 kV	ASTM D3032