

# ULTRA-FLEXIBLE TurboFlex Rugged Power Cable



## TurboFlex® Copper Core, Dual Duraelectric™ D/F Insulation/Jacket, 1000 VAC 961-139

TURBOFLEX

### FEATURES

- TurboFlex with Duraelectric D insulation and Duraelectric F jacket for fire resistance and outstanding immersion performance in fuel and harsh fluids
- Resistant to jet fuels and oils and flexible to -65°C
- Suited for harsh environments that require low temp flex such as aircraft and ground vehicle fuel systems

### HOW TO ORDER TURBOFLEX®

| Sample Part Number              |                                                                                                          | 961-139 | -N | -A | -2 | -6 |
|---------------------------------|----------------------------------------------------------------------------------------------------------|---------|----|----|----|----|
| Basic No.                       | TurboFlex with Duraelectric D Insulation (.016") and Duraelectric F jacket (.016")                       |         |    |    |    |    |
| Conductor Material              | -T = Tin/Copper (-65° - 150°C)<br>-S = Silver/Copper (-65° - 200°C)<br>-N = Nickel/Copper (-65° - 200°C) |         |    |    |    |    |
| Wire Size (See Table I)         | T, R, S, A, B, C, D, E, F, G                                                                             |         |    |    |    |    |
| Duraelectric D Insulation Color | See Table II                                                                                             |         |    |    |    |    |
| Duraelectric F Jacket           | Blue color                                                                                               |         |    |    |    |    |

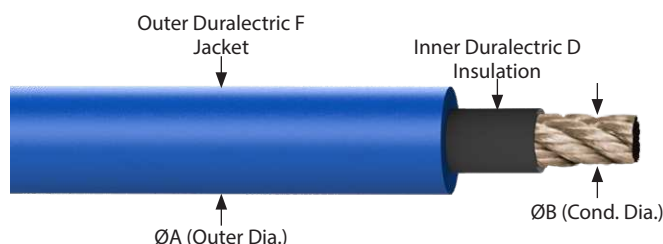


Table I: TurboFlex Wire Size, Dimensions, DC Resistance and Ampacity Ratings

| AWG Code | AWG | Strand / Count / AWG | Cir Mil (nom) | Ø B in. (mm) | DC Resistance @ 20°C (Ohms / 1000 ft.) |            |               | Ampacity (A mps) 40°C Ambient |            |
|----------|-----|----------------------|---------------|--------------|----------------------------------------|------------|---------------|-------------------------------|------------|
|          |     |                      |               |              | Nickel Copper                          | Tin Copper | Silver Copper | Nickel/Silver Copper          | Tin Copper |
| T        | 20  | 42/36                | 1050          | .037 (0.94)  | 10.7178                                | 10.7538    | 10.0747       | 10-25                         | 10-20      |
| R        | 16  | 7 X 15/36            | 2625          | .063 (1.60)  | 4.5510                                 | 4.5930     | 4.2780        | 15-35                         | 15-30      |
| S        | 14  | 7 X 24/36            | 4200          | .080 (2.03)  | 2.8450                                 | 2.8710     | 2.6740        | 20-50                         | 20-45      |
| A        | 12  | 7 X 37/36            | 6475          | .099 (2.51)  | 1.8450                                 | 1.8620     | 1.7340        | 30-70                         | 30-60      |
| B        | 10  | 7 X 59/36            | 10325         | .126 (3.20)  | 1.1570                                 | 1.1680     | 1.0880        | 40-90                         | 40-75      |
| C        | 8   | 7 X 95/36            | 16625         | .159 (4.04)  | .7188                                  | .7252      | .6755         | 55-135                        | 55-115     |
| D        | 6   | 7 X 150/36           | 26250         | .200 (5.08)  | .4551                                  | .4593      | .4278         | 75-185                        | 75-155     |
| E        | 4   | 7 X 7 X 34/36        | 41650         | .271 (6.88)  | .2979                                  | .3006      | .2800         | 105-250                       | 105-215    |
| F        | 2   | 7 X 7 X 54/36        | 66150         | .342 (8.69)  | .1876                                  | .1893      | .1763         | 145-345                       | 145-290    |
| G        | 1/0 | 7 X 7 X 86/36        | 105350        | .431 (10.95) | .1178                                  | .1188      | .1107         | 195-465                       | 195-395    |

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.

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   |             |

961-139 Wire Weight and Outer Diameter

| AWG Code | Weight lbs/1000 ft. (nom.) | Ø A in. (mm) | Total Jacket wall thickness in. (mm) |
|----------|----------------------------|--------------|--------------------------------------|
| T        | 7.90                       | .101 (2.57)  | .032 (0.81)                          |
| R        | 14.90                      | .127 (3.23)  |                                      |
| S        | 21.30                      | .144 (3.66)  |                                      |
| A        | 30.10                      | .163 (4.14)  |                                      |
| B        | 44.70                      | .190 (4.83)  |                                      |
| C        | 67.80                      | .223 (5.66)  |                                      |
| D        | 102.50                     | .264 (6.71)  |                                      |
| E        | 163.90                     | .335 (8.51)  |                                      |
| F        | 253.40                     | .406 (10.31) |                                      |
| G        | 394.90                     | .495 (12.57) |                                      |

### NOTES

- Bend radius is 3X the outer diameter
- Cable will be marked with "GLENAIR TURBOFLEX", wire gauge, part number, CAGE 06324
- Insulation thickness tolerance is ±.002 and outer jacket thickness tolerance is ±.005