



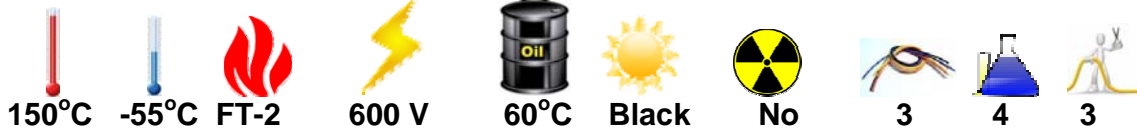
**Irradiation Cross-Linked Polymeric Insulation**

# EXAR<sup>®</sup> 150LT

## UL 3321/3271

CSA: CL 1503/1251  
**150°C 600 Volts**

Exar<sup>®</sup> 150 LT is a cost effective alternative of an irradiated cross-linked polymeric insulation with UL and CSA ratings for 150°C and 600 volts. Our wire possesses excellent mechanical and electrical properties. Exar<sup>®</sup> is known for its unparalleled thermal stability, toughness and abrasion resistance. It is compatible with all magnet wire and most varnishes. Irradiation cross-linking assures this insulation will not melt or flow at soldering temperatures. Exar<sup>®</sup> 150 LT processes very well on automated high speed cut and strip equipment.



| Part Number | Standard Conductors<br>Tin Copper | Nom. Dia of Conductor |       | Insulation Thickness |      | Nom. OD |       | Finished Weight (lbs/mft) | Ampacity |
|-------------|-----------------------------------|-----------------------|-------|----------------------|------|---------|-------|---------------------------|----------|
|             |                                   | in.                   | mm.   | in.                  | mm.  | in.     | mm.   |                           |          |
| 25-09022    | 22 (19/34)                        | .031                  | .79   | .030                 | .76  | .095    | 2.41  | 5.81                      | 14       |
| 25-09020    | 20 (19/32)                        | .038                  | .97   | .030                 | .76  | .103    | 2.61  | 7.57                      | 18       |
| 25-08018    | 18 (7/.0152)                      | .045                  | 1.14  | .030                 | .76  | .105    | 2.67  | 9.00                      | 24       |
| 25-09018    | 18 (19/.0092)                     | .045                  | 1.14  | .030                 | .76  | .105    | 2.67  | 9.00                      | 24       |
| 25-09016    | 16 (26/30)                        | .058                  | 1.47  | .030                 | .76  | .122    | 3.09  | 11.90                     | 31       |
| 25-09014    | 14 (41/30)                        | .073                  | 1.85  | .030                 | .76  | .136    | 3.45  | 19.00                     | 46       |
| 25-09012    | 12 (65/30)                        | .093                  | 2.36  | .030                 | .76  | .150    | 3.81  | 27.10                     | 60       |
| 25-09010    | 10 (65/28)                        | .111                  | 2.82  | .030                 | .76  | .172    | 4.37  | 40.5                      | 80       |
| 25-09008    | 8 (84/27)                         | .147                  | 3.73  | .045                 | 1.14 | .238    | 6.04  | 69.20                     | 106      |
| 25-09006    | 6 (84/25)                         | .183                  | 4.65  | .060                 | 1.52 | .305    | 7.75  | 111.50                    | 155      |
| 25-09004    | 4 (133/25)                        | .263                  | 6.68  | .060                 | 1.52 | .385    | 9.78  | 163.90                    | 190      |
| 25-09002    | 2 (259/26)                        | .323                  | 8.20  | .060                 | 1.52 | .445    | 11.30 | 240.40                    | 232      |
| 25-09001    | 1 (259/25)                        | .372                  | 9.44  | .060                 | 1.52 | .492    | 12.50 | 315.30                    | 293      |
| 25-09090    | 1/0 (259/24)                      | .424                  | 10.77 | .080                 | 2.03 | .588    | 14.99 | 421.20                    | 339      |
| 25-09000    | 2/0 (259/23)                      | .465                  | 11.81 | .080                 | 2.03 | .629    | 15.98 | 507.20                    | 390      |
| 25-09029    | 3/0 (259/22)                      | .520                  | 13.21 | .080                 | 2.03 | .684    | 17.37 | 627.90                    | 451      |
| 25-09040    | 4/0 (259/21)                      | .586                  | 14.80 | .080                 | 2.03 | .750    | 19.05 | 776.80                    | 529      |

\*Ampacity 150°C rated single-insulated conductor in free air at 40°C ambient air temperature



**Manufacturing Locations:**  
 Colchester, Vermont  
 El Paso, TX  
 Leeds, Massachusetts



Irradiation Cross-Linked Polymeric Insulation

# EXAR<sup>®</sup> 150LT

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### CSA: CL 1503/1251

### 150°C 600 Volts

| PROPERTIES                           | EXAR <sup>®</sup> 150LT |                 |
|--------------------------------------|-------------------------|-----------------|
| <b>Approvals / Listings:</b>         |                         |                 |
| UL                                   | STYLE UL3321/3271       |                 |
| CSA                                  | AWM CL1251, CL1503      |                 |
| <b>Physical: *</b>                   |                         |                 |
| Temperature Rating                   | 125/150 °C              |                 |
| Voltage Rating (Vrms)                | 600V                    |                 |
| Scrape Abrasion Resistance           | 150 cycles              |                 |
| Shore "A" Hardness                   | 86                      |                 |
| Shore "D" Hardness                   | 40                      |                 |
| Cold Bend - 4h @ -55°C               | Passes                  |                 |
| Bend Radius                          | 3 X Overall Diameter    |                 |
| <b>Tensile Strength: *</b>           |                         |                 |
| Unaged                               | 2600 PSI                |                 |
| Retention after 7 days @ 180 °C      | Passes (90%)            |                 |
| <b>Elongation: *</b>                 |                         |                 |
| Unaged                               | 350%                    |                 |
| Retention after 7 days @ 180 °C      | 90%                     |                 |
| <b>Flame Test: *</b>                 |                         |                 |
| UL 758 and FT2 Horizontal Burn       | Passes                  |                 |
| <b>Chemical Resistance</b>           |                         |                 |
| Acetone                              | swell@23°C**            | 5-10%           |
| Acid - H2SO4 S.G. 1.260 5%           | swell@23°C**            | <5%             |
| Engine Oil – ASTM D-471 IRM-902      | swell@50°C**            | <5%             |
| Benzene                              | swell@23°C/24h          | Not Recommended |
| Epoxy                                | swell@23°C/24h          | <5%             |
| Gasoline – ASTM D-471 Fuel C         | swell@23°C**            | <5%             |
| Methanol                             | swell@23°C/24h          | <5%             |
| Toluene                              | swell@23°C/24h          | Not Recommended |
| Xylene                               | swell@23°C/24h          | Not Recommended |
| <b>Electrical: *</b>                 |                         |                 |
| Dielectric Constant                  |                         | 3.01            |
| Dielectric breakdown strength (Vrms) |                         | 23,000          |
| <b>Oxygen Index:</b>                 |                         | 26              |

\* Properties are tested to UL 758 and UL 1581.

\*\* Percent swell SAE J-1128 TXL

We cannot anticipate all conditions under which this information and our products or the products of other manufacturers in combination with our products may be used. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product combination for their own purpose. Unless otherwise agreed in writing, we sell the products without warranty, and buyers and users assume all responsibility and liability for loss and damage arising from the handling and use of our products whether used alone or in combination with other products.

### Sales Offices:

