



## NU-FLEX HTS™

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### HEAT TREATED SATURATED FIBERGLASS SLEEVING

- Class “C” insulation rated at 240°C.
- UL VW-1 recognized insulation – UL File #E80713.
- Applicable Specifications:
  - ASTM D 350 / 372.
  - MIL-Y-1140H
  - NEMA TF-2
  - Ford ESE-M12G17-B
- Available Sizes: AWG #24 – 1 1/2”
- Packaging: Standard Spools, Bulk Spools, Cut to length.
- Standard Colors: Natural (tan) & Black. Other colors available are subject to factory quotation upon request.



NU-FLEX HTS is a tightly woven, flexible, continuous filament electrical grade 100% fiberglass braid that is heat treated to remove all organic matter and then saturated with an acrylic binder. This binds the fibers to provide excellent fray resistance in cutting and reduces possible skin irritation in handling. The acrylic binder can be dyed almost any color for color-coding purposes, but will degrade or bake out at operating temperatures above 200°C. NU-FLEX HTS provides thermal and space factor insulation at temperatures from -59°C up to 650°C and has a continuous operating temperature of 450°C. Fiberglass yarns conform to MIL-Y-1140H.

NU-FLEX HTS is available in both a standard wall construction HTS-520 (Jenisco AW751, Markel Hygrade Thermoflex 500) and a .032” heavy wall construction HTS-532 (Jenisco AW752, Markel Hygrade Thermoflex 500HW).

NU-FLEX HTS is used in high temperature, low voltage applications and wherever repeated flexing or temperature extremes prohibit the use of other materials. Its expandability and flexibility enables it to slip over irregular shapes and electrical connections to provide effective thermal, mechanical and electrical protection. Typical applications include: insulation of leads in carbon brushes, toasters, irons, coffee makers and other small heating appliances; thermal sensor leads; thermal and mechanical protection of automotive wire harnesses and insulated wires in domestic appliances and track, stage, and other lighting fixtures; outer coverings for hydraulic lines; double insulation for high reliability circuitry.

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NU-FLEX HTS is heat resistant, non-flammable and VW-1 flame retardant as recognized by UL in File #E80713. NU-FLEX HTS exhibits high tensile strength and high resistance to moisture, fungus and chemical attack.

| <b>NEMA Size</b> | <b>Nominal Diameter (inches)</b> | <b>Nominal Diameter (mm)</b> | <b>Sofanou Std. Wall Part No.</b> | <b>Minimum Diameter (inches)</b> | <b>Maximum Diameter (inches)</b> |
|------------------|----------------------------------|------------------------------|-----------------------------------|----------------------------------|----------------------------------|
| 24               | 0.024                            | 0.61                         | AW7510024X                        | 0.020                            | 0.027                            |
| 22               | 0.029                            | 0.74                         | AW7510022X                        | 0.025                            | 0.032                            |
| 20               | 0.036                            | 0.91                         | AW7510020X                        | 0.032                            | 0.039                            |
| 19               | 0.038                            | 0.96                         | AW7510019X                        | 0.036                            | 0.044                            |
| 18               | 0.044                            | 1.12                         | AW7510018X                        | 0.040                            | 0.049                            |
| 17               | 0.049                            | 1.24                         | AW7510017X                        | 0.045                            | 0.054                            |
| 16               | 0.056                            | 1.42                         | AW7510016X                        | 0.051                            | 0.061                            |
| 15               | 0.062                            | 1.57                         | AW7510015X                        | 0.057                            | 0.067                            |
| 14               | 0.069                            | 1.75                         | AW7510014X                        | 0.064                            | 0.074                            |
| 13               | 0.077                            | 1.96                         | AW7510013X                        | 0.072                            | 0.082                            |
| 12               | 0.086                            | 2.18                         | AW7510012X                        | 0.081                            | 0.091                            |
| 11               | 0.096                            | 2.44                         | AW7510011X                        | 0.091                            | 0.101                            |
| 10               | 0.107                            | 2.72                         | AW7510010X                        | 0.102                            | 0.112                            |
| 9                | 0.119                            | 3.02                         | AW7510009X                        | 0.114                            | 0.124                            |
| 8                | 0.135                            | 3.43                         | AW7510008X                        | 0.129                            | 0.141                            |
| 7                | 0.148                            | 3.76                         | AW7510007X                        | 0.144                            | 0.158                            |
| 6                | 0.166                            | 4.22                         | AW7510006X                        | 0.162                            | 0.178                            |
| 5                | 0.186                            | 4.72                         | AW7510005X                        | 0.182                            | 0.198                            |
| 4                | 0.208                            | 5.28                         | AW7510004X                        | 0.204                            | 0.224                            |
| 3                | 0.234                            | 5.94                         | AW7510003X                        | 0.229                            | 0.249                            |
| 2                | 0.263                            | 6.68                         | AW7510002X                        | 0.258                            | 0.278                            |
| 1                | 0.294                            | 7.47                         | AW7510001X                        | 0.289                            | 0.311                            |
| 5/16"            | 0.313                            | 7.95                         | AW7510312X                        | 0.313                            | 0.334                            |
| 0                | 0.330                            | 8.38                         | AW7510000X                        | 0.325                            | 0.347                            |
| 3/8"             | 0.387                            | 9.83                         | AW7510375X                        | 0.375                            | 0.399                            |
| 7/16"            | 0.450                            | 11.43                        | AW7510437X                        | 0.438                            | 0.462                            |
| 1/2"             | 0.512                            | 13.00                        | AW7510500X                        | 0.500                            | 0.524                            |
| 5/8"             | 0.640                            | 16.26                        | AW7510625X                        | 0.625                            | 0.655                            |
| 3/4"             | 0.768                            | 19.51                        | AW7510750X                        | 0.750                            | 0.786                            |
| 7/8"             | 0.893                            | 22.68                        | AW7510875X                        | 0.875                            | 0.991                            |
| 1"               | 1.018                            | 25.86                        | AW7511000X                        | 1.000                            | 1.036                            |
| 1 1/8"           | 1.143                            | 29.03                        | AW7511125X                        | 1.125                            | 1.161                            |

**Notes:** 1) For heavy wall, substitute AW752 for AW751 portion of the part number. AW752 available in sizes #16 – 3/8"  
 2) X in the part number listings designates color. B=Black, G=Green, N=Natural(Tan), R=Red, W=White, Y=Yellow.

|                                |   |
|--------------------------------|---|
| <b>Operating Range:</b>        | -59° C to 648° C  |
| <b>Dielectric Breakdown:</b>   | Grade C-3 insulation. No dielectric value guaranteed. Determined by space factor. |
| <b>Heat Age:</b>               | N/A   |
| <b>Dielectric constant:</b>    | N/A   |
| <b>Volume resistivity:</b>     | 10 <sup>14</sup> ohm-cm @ 72°F and 500 Volts DC                                   |
| <b>Dissipation factor:</b>     | N/A   |
| <b>Cut through resistance:</b> | Excellent   |
| <b>Oil resistance:</b>         | No swelling or disintegration   |
| <b>Fungus resistance:</b>      | Inert, requires no fungicide additives.   |
| <b>Rate of Burning:</b>        | Meets UL VW-1 flammability rating   |

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