

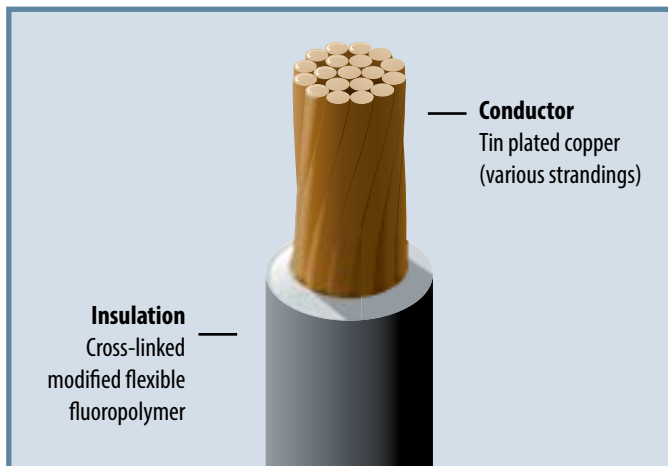
# Surprenant A-D2<sup>®</sup>

## Radiation Cross-Linked Modified Flexible Fluoropolymer - 600V, 150°C

### APPLICATION

This irradiated flexible fluoropolymer insulated wire is formulated for high temperature applications where mechanical durability and flexibility are required.

Single conductor data shown below. Please contact our sales department for other configurations.



### CONDUCTOR

Soft annealed tin plated copper, stranded as listed below.

### INSULATION

Extruded layer of irradiation cross-linked modified flexible fluoropolymer.

### ADDITIONAL REQUIREMENTS

- BLOCKING:** 150 ± 3°C FOR 24 HOURS
- CONCENTRICITY:** 70% min.
- CROSS-LINK PROOF TEST:** 300 ± 3°C
- FLAMMABILITY:** VW-1
- INSULATION ELONGATION:** 75% min.
- INSULATION TENSILE:** 3500 lbf/in<sup>2</sup> min.
- INSULATION RESISTANCE:** 500 MEG-OHMS FOR 1000 FT. min.
- LIFE CYCLE:** 200 ± 3°C FOR 500 HOURS
- LOW TEMPERATURE - COLD BEND:** -65 ± 3°C
- SECANT MODULAS:** 50,000 lbf/in<sup>2</sup>
- SHRINKAGE:** 150 ± 3°C FOR 6 HOURS
- SMOKE TEST:** 200 ± 3°C, NO VISIBLE SMOKE
- THERMAL SHOCK:** 150 ± 3°C - .125 in. max.
- VOLTAGE WITHSTAND TEST:** 2500 Volts (rms)

| Part Number     | Conductor |                 |                |               | Conductor Resistance @20°C |      | Nom. Diameter |      | Weight  |       |
|-----------------|-----------|-----------------|----------------|---------------|----------------------------|------|---------------|------|---------|-------|
|                 | Size      |                 | Strand-<br>ing | Mate-<br>rial | Ω/kft                      | Ω/km | Inch          | mm   | lbs/kft | kg/km |
|                 | AWG       | mm <sup>2</sup> |                |               |                            |      |               |      |         |       |
| A-D2-2619TC-X   | 26        | .15             | 19/38          | TC            | 41.3                       | 136  | .031          | .79  | 1.4     | 2.08  |
| A-D2-2419TC-X   | 24        | .24             | 19/36          |               | 26.2                       | 86.0 | .036          | .91  | 2.0     | 2.98  |
| A-D2-24105TC-X  | 24        | .24             | 105/44         |               | 28.2                       | 92.5 | .037          | .94  | 2.1     | 3.12  |
| A-D2-2219TC-X   | 22        | .38             | 19/34          |               | 16.2                       | 53.2 | .042          | 1.07 | 2.8     | 4.17  |
| A-D2-2265TC-X   | 22        | .38             | 65/40          |               | 18.8                       | 61.7 | .043          | 1.09 | 2.9     | 4.32  |
| A-D2-2019TC-X   | 20        | .62             | 19/32          |               | 9.88                       | 32.4 | .051          | 1.3  | 4.4     | 6.55  |
| A-D2-20105TC-X  | 20        | .62             | 105/40         |               | 11.7                       | 38.4 | .053          | 1.34 | 4.3     | 6.40  |
| A-D2-1819TC-X   | 18        | .96             | 19/30          |               | 6.23                       | 20.4 | .061          | 1.55 | 6.7     | 9.97  |
| A-D2-18168TC-X  | 18        | .96             | 168/40         |               | 7.14                       | 23.4 | .064          | 1.63 | 6.8     | 10.1  |
| A-D2-1619TC-X   | 16        | 1.23            | 19/29          |               | 4.81                       | 15.8 | .068          | 1.73 | 8.5     | 12.7  |
| A-D2-16259TC-X  | 16        | 1.23            | 259/40         |               | 4.53                       | 14.9 | .079          | 2.01 | 10.2    | 15.2  |
| A-D2-14665TC-X  | 14        | 1.94            | 665/42         |               | 2.96                       | 9.71 | .099          | 2.51 | 16.5    | 24.6  |
| A-D2-12665TC-X  | 12        | 3.08            | 665/40         |               | 1.89                       | 6.20 | .121          | 3.07 | 24.8    | 36.9  |
| A-D2-10665TC-X  | 10        | 4.74            | 665/38         |               | 1.12                       | 3.67 | .157          | 3.99 | 42.2    | 62.8  |
| A-D2-08665TC-X  | 8         | 8.61            | 665/36         |               | .714                       | 2.34 | .195          | 4.95 | 66.3    | 98.6  |
| A-D2-061045TC-X | 6         | 13.6            | 1045/36        |               | .490                       | 1.61 | .236          | 5.99 | 102     | 152   |

X = color. See page 67 for color designator.

The above part numbers represent the more popular constructions. However, other designs are available upon request.

All products are manufactured to meet RoHS compliance. For exceptions, please contact our sales department.

