

# ULTROL® 60+ SIS Switchboard Wire

## Class B



Class 1E Nuclear

600 V, 90°C, VW-1, UL Type SIS and Type SIS/XHHW-2/RW90



SAFETY  
RELATED



RADIATION-  
RESISTANT



FLAME-  
RETARDANT



MOISTURE  
RESISTANT



UV/SUNLIGHT-  
RESISTANT



CROSS-  
LINKED



CUT-  
THROUGH



-40°C  
COLD  
BEND

## Product Construction



### 1. Conductor:

- 18 AWG thru 1000 kcmil tinned annealed copper per ASTM B33; Class B stranding per ASTM B8

### 2. Insulation:

- Flame-retardant, heat-, moisture-, sunlight- and radiation-resistant, thermoset ULTROL® 60+ Cross-linked Polyethylene (FR-XLPE)
- Color code: Gray

### Print:

- For 18 AWG & 16 AWG:  
PRYSMIAN (WC) ULTROL® 60+ 1/C XXAWG COPPER FR-XLPE TYPE SIS 600V 90C VW-1 NUCLEAR DAY/MONTH/YEAR
- For 14 AWG thru 4/0 AWG:  
PRYSMIAN (WC) ULTROL® 60+ 1/C XXAWG COPPER FR-XLPE (UL) TYPE SIS/XHHW-2 600V 90C -40°C VW-1 NUCLEAR DAY/MONTH/YEAR
- **Note - Sizes 1/0AWG & larger include: TRACEABILITY NUMBER SEQUENTIAL FOOTAGE**
- For 250 kcmil thru 1000 kcmil:  
PRYSMIAN (WC) ULTROL® 60+ 1/C XXXKCMIL COPPER FR-XLPE (UL) TYPE XHHW-2 600V 90C -40°C VW-1 NUCLEAR DAY/MONTH/YEAR TRACEABILITY NUMBER SEQUENTIAL FOOTAGE

### Options:

- Conductor stranding
- ISO Metric conductor
- Colored insulation

### Applications:

- ULTROL® 60+ SIS is a 600 V single conductor, thermoset insulated wire for use in Safety or Non-Safety Related switchboard and internal control panel wiring
- For use in Safety Related lead wire assemblies interconnecting pressure transmitters, switches, and sensors to control equipment where flame retardancy and radiation resistance is critical

### Features:

- Rated at 90°C wet or dry
- Fully traceable
- Qualified for 60-year service life
- Gamma and beta radiation resistant (up to 350 megarads)
- Submergence operability
- Long-term thermal endurance and superior electricals
- Excellent mechanical cut-through properties
- Long-term moisture and radiation stability
- Free stripping for ease of termination
- Meets cold bend and impact test at -40°C

### Industry Compliances:

- Class 1E Qualified in accordance with IEEE 323-1974/2003 and IEEE 383-1974/2003/2015
- ICEA S-95-658
- UL 44 SIS/XHHW-2/RW90

### Flame Test Compliances:

- IEEE 383:1974
- IEEE 383:2003
- ICEA T-29-520
- IEEE 1202/FT4-1991, Aged & Unaged
- VW-1

### Other:

- Quality assurance program in accordance with NRC 10CFR50 Appendix B
- ANSI N45.2
- ASME NQA-1
- NIAC
- NUPIC

### Packaging:

- Material to be shipped on non-returnable wooden reels



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| Catalog Number | Cond. Size (AWG/kcmil) | Cond. Strand | Minimum Avg. Insulation Thickness |      | Nominal Cable O.D. |       | Copper Weight |       | Net Weight |       |
|----------------|------------------------|--------------|-----------------------------------|------|--------------------|-------|---------------|-------|------------|-------|
|                |                        |              | Inches                            | mm   | Inches             | mm    | Lbs/1000 Ft   | kg/km | Lb/1000 Ft | kg/km |
| 10060.18.1     | 18                     | 7/.0152      | 0.030                             | 0.76 | 0.108              | 2.74  | 5             | 7     | 10         | 15    |
| 10060.16.1     | 16                     | 7/.0192      | 0.030                             | 0.76 | 0.118              | 2.99  | 8             | 12    | 14         | 21    |
| 10060.14.1     | 14                     | 7/.0242      | 0.030                             | 0.76 | 0.133              | 3.37  | 13            | 19    | 20         | 30    |
| 10060.12.1     | 12                     | 7/.0305      | 0.030                             | 0.76 | 0.152              | 3.86  | 20            | 30    | 28         | 42    |
| 10060.10.1     | 10                     | 7/.0374      | 0.030                             | 0.76 | 0.175              | 4.44  | 30            | 45    | 40         | 60    |
| 10060.8.1      | 8                      | 7/.0473      | 0.045                             | 1.14 | 0.236              | 5.99  | 48            | 71    | 68         | 101   |
| 10060.6.1      | 6                      | 7/.0612      | 0.045                             | 1.14 | 0.273              | 6.93  | 81            | 121   | 104        | 155   |
| 10060.4.1      | 4                      | 7/.0755      | 0.045                             | 1.14 | 0.319              | 8.10  | 123           | 183   | 152        | 226   |
| 10060.2.1      | 2                      | 7/.0974      | 0.045                             | 1.14 | 0.379              | 9.62  | 205           | 305   | 242        | 360   |
| 10060.1.1      | 1                      | 19/.0664     | 0.055                             | 1.40 | 0.437              | 11.10 | 258           | 384   | 305        | 453   |
| 10060.1/0.1    | 1/0                    | 19/.0731     | 0.055                             | 1.40 | 0.476              | 12.10 | 314           | 467   | 367        | 546   |
| 10060.2/0.1    | 2/0                    | 19/.0820     | 0.055                             | 1.40 | 0.516              | 13.10 | 395           | 587   | 454        | 675   |
| 10060.3/0.1    | 3/0                    | 19/.0940     | 0.055                             | 1.40 | 0.567              | 14.40 | 502           | 747   | 569        | 847   |
| 10060.4/0.1    | 4/0                    | 19/.1039     | 0.055                             | 1.40 | 0.621              | 15.80 | 634           | 943   | 709        | 1055  |
| 10060.250.1    | 250                    | 37/.0822     | 0.065                             | 1.65 | 0.695              | 17.60 | 772           | 1149  | 865        | 1287  |
| 10060.350.1    | 350                    | 37/.0973     | 0.065                             | 1.65 | 0.798              | 20.20 | 1081          | 1609  | 1192       | 1773  |
| 10060.500.1    | 500                    | 37/.1162     | 0.065                             | 1.65 | 0.927              | 23.50 | 1544          | 2297  | 1678       | 2497  |
| 10060.750.1    | 750                    | 61/.1109     | 0.080                             | 2.03 | 1.137              | 28.80 | 2316          | 3446  | 2507       | 3731  |
| 10060.1000.1   | 1000                   | 61/.1280     | 0.080                             | 2.03 | 1.287              | 32.60 | 3088          | 4595  | 3311       | 4927  |

Dimensions and weights are nominal; subject to industry tolerances.

