



# Space Cable, 1A & 1B

## Cross-Linked ETFE

Type A: 600V, 200°C - Type B: 300V, 200°C

### APPLICATION

These lightweight, high and low temperature space cables utilize an insulation of cross-linked, modified ethylene tetrafluoroethylene Copolymer (ETFE). The insulation meets the NASA SP-R-002 General Specification Vacuum Stability Requirement of Polymeric Material for Spacecraft Application.

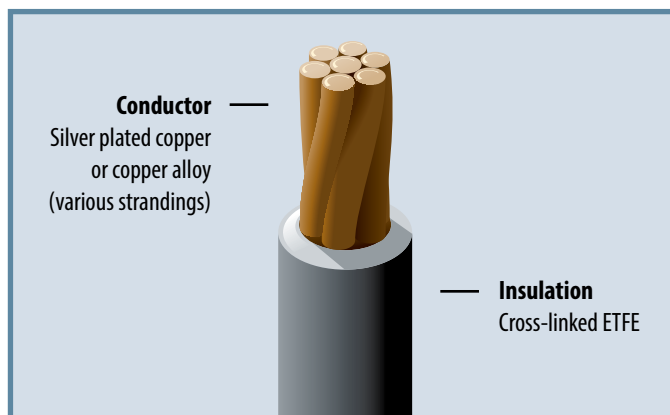
### CONDUCTOR

Silver plated copper or copper alloy.

### INSULATION

Cross-linked ETFE

Type A: Lightweight, Type B: Very Lightweight



### Part Numbering System

|            |                   |                |     |        |        |
|------------|-------------------|----------------|-----|--------|--------|
| 19050/     | 1                 | A              | 30  | U      | 00     |
| Cable Type | No. of Conductors | Component Type | AWG | Shield | Jacket |

| Part<br>Number   | Conductor |                 |                |               | Conductor<br>Resistance<br>@20°C |      | Max.<br>Diameter |      | Weight  |       |
|------------------|-----------|-----------------|----------------|---------------|----------------------------------|------|------------------|------|---------|-------|
|                  | Size      |                 | Strand-<br>ing | Mate-<br>rial |                                  |      |                  |      |         |       |
|                  | AWG       | mm <sup>2</sup> |                |               | Ω/kft                            | Ω/km | Inch             | mm   | lbs/kft | kg/km |
| Type A, 600V     |           |                 |                |               |                                  |      |                  |      |         |       |
| 19050/1A-30U00-X | 30        | .06             | 7              | SA            | 156                              | 512  | .026             | .66  | .66     | .98   |
| 19050/1A-28U00-X | 28        | .09             | 7              |               | 74.4                             | 244  | .029             | .74  | .91     | 1.35  |
| 19050/1A-26U00-X | 26        | .15             | 19             |               | 45.7                             | 150  | .034             | .86  | 1.4     | 2.08  |
| 19050/1A-24U00-X | 24        | .24             | 19             |               | 28.4                             | 93.2 | .039             | .99  | 2.0     | 2.98  |
| 19050/1A-22U00-X | 22        | .38             | 19             | SC            | 15.1                             | 49.5 | .045             | 1.14 | 2.8     | 4.17  |
| 19050/1A-20U00-X | 20        | .62             | 19             |               | 9.19                             | 30.2 | .052             | 1.32 | 4.3     | 6.40  |
| 19050/1A-18U00-X | 18        | .96             | 19             |               | 5.79                             | 19.0 | .062             | 1.57 | 6.5     | 9.67  |
| 19050/1A-16U00-X | 16        | 1.23            | 19             |               | 4.52                             | 14.8 | .070             | 1.78 | 8.3     | 12.4  |
| 19050/1A-14U00-X | 14        | 1.94            | 19             |               | 2.88                             | 9.45 | .088             | 2.24 | 13.0    | 19.3  |
| 19050/1A-12U00-X | 12        | 3.00            | 37             |               | 1.90                             | 6.23 | .103             | 2.62 | 19.7    | 29.3  |
| 19050/1A-10U00-X | 10        | 4.74            | 37             |               | 1.19                             | 3.90 | .136             | 3.45 | 32.4    | 48.2  |
| Type B, 300V     |           |                 |                |               |                                  |      |                  |      |         |       |
| 19050/1B-30U00-X | 30        | .06             | 7              | SA            | 156                              | 512  | .021             | .53  | .60     | .89   |
| 19050/1B-28U00-X | 28        | .09             | 7              |               | 74.4                             | 244  | .024             | .61  | .85     | 1.27  |
| 19050/1B-26U00-X | 26        | .15             | 19             |               | 45.7                             | 150  | .029             | .74  | 1.3     | 1.93  |
| 19050/1B-24U00-X | 24        | .24             | 19             |               | 28.4                             | 93.2 | .034             | .86  | 1.9     | 2.83  |
| 19050/1B-22U00-X | 22        | .38             | 19             | SC            | 15.1                             | 49.5 | .041             | 1.04 | 2.7     | 4.02  |
| 19050/1B-20U00-X | 20        | .62             | 19             |               | 9.19                             | 30.2 | .051             | 1.30 | 4.2     | 6.25  |
| 19050/1B-18U00-X | 18        | .96             | 19             |               | 5.79                             | 19.0 | .061             | 1.55 | 6.4     | 9.52  |
| 19050/1B-16U00-X | 16        | 1.23            | 19             |               | 4.52                             | 14.8 | .068             | 1.60 | 8.2     | 12.2  |
| 19050/1B-14U00-X | 14        | 1.94            | 19             |               | 2.88                             | 9.45 | .088             | 2.24 | 12.8    | 19.1  |
| 19050/1B-12U00-X | 12        | 3.00            | 37             |               | 1.90                             | 6.23 | .103             | 2.62 | 19.5    | 29.0  |
| 19050/1B-10U00-X | 10        | 4.74            | 37             |               | 1.19                             | 3.90 | .130             | 3.30 | 32.0    | 47.6  |

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.

### APPROVALS AND RATINGS

SCGMS 19050

Temperature Rating: -100°C to 200°C,  
600 volt, Type A; 300 volt, Type B.

