

# Shanghai Unicorn Cable

High-temperature wire manufacturer, Kunshan factory

## Lead Wire Temperature Ladder: 90°C to 1,000°C

Rating = maximum continuous conductor temperature. Find the hottest point of the run (ambient plus the wire's own heating), then pick a rung at or above it, with headroom.

| Rating  | Insulation                  | Product                                     | Part number         |
|---------|-----------------------------|---------------------------------------------|---------------------|
| 90°C    | Rubber / neoprene           | Crane Pendant Control Cable                 | SW-PENDANT-12C-100  |
| 105°C   | PVC                         | Type JX Compensating Lead Wire              | SW-JX-24-1000       |
|         | PVC                         | Type KX Compensating Lead Wire              | SW-KX-24-1000       |
|         | PVC                         | Type TX Compensating Lead Wire              | SW-TX-24-1000       |
| 150°C   | Silicone rubber             | Silicone Wire UL AWM 3132                   | SW-UL3132-16-500    |
|         | Silicone + fiberglass braid | Fiberglass Silicone Wire UL3068             | SW-UL3068-14-500    |
|         | Silicone + fiberglass braid | Fiberglass Silicone Wire UL3069             | SW-UL3069-16-500    |
| 180°C   | Silicone rubber             | Multiple Cores Cable YGZ Heavy Duty         | SW-YGZ-14-4C-500    |
|         | Silicone rubber             | Multiple Cores Cable YGZP Silicone          | SW-YGZP-16-3C-500   |
|         | Silicone rubber             | Silicone Rubber Wire AGG Type               | SW-AGG-20-500       |
|         | Silicone rubber             | Silicone Wire JG Type Flexible              | SW-JG-18-500        |
|         | Silicone rubber             | Silicone Wire JHGX 1140V High Voltage       | SW-JHGX-16-1140V    |
|         | Silicone + fiberglass braid | Silicone Wire JGG Fiberglass Braided        | SW-JGG-18-500       |
| 200°C   | Silicone rubber             | Silicone Rubber Wire AGR Type               | SW-AGR-18-500       |
|         | Silicone rubber             | Silicone Wire UL AWM 3135                   | SW-UL3135-14-500    |
|         | Silicone rubber             | Silicone Wire UL3512 Fine Gauge             | SW-UL3512-22-500    |
|         | Silicone + fiberglass braid | Fiberglass Silicone Wire AGRP Type          | SW-AGRP-16-500      |
|         | Silicone + fiberglass braid | Fiberglass Silicone Wire UL AWM 3122        | SW-AWM3122-20-500   |
|         | Silicone + fiberglass braid | Fiberglass Silicone Wire UL AWM 3133        | SW-AWM3133-18-500   |
|         | FEP                         | Fluorine Plastic Hook-Up Wire UL1901        | SW-UL1901-20-500    |
|         | FEP                         | Fluorine Plastic Wire FF46-1 Type           | SW-FF46-1-18-500    |
|         | FEP                         | Fluorine Plastic Wire FF46-2 Type           | SW-FF46-2-16-500    |
|         | FEP                         | Multiple Cores Cable FF/FFRP-3              | SW-FFRP3-20-3C-500  |
|         | FEP                         | Multiple Cores Cable KFF/KFFRP-3 Shielded   | SW-KFFRP3-18-4C-500 |
| 250°C   | Silicone + fiberglass braid | Fiberglass Braided Silicone Wire IEC 60245  | SW-60245-18-500     |
|         | PTFE                        | PTFE Wire AF250 High Temperature            | SW-AF250-18-500     |
|         | PTFE                        | PTFE Wire AFR250 Flexible High Temperature  | SW-AFR250-18-500    |
| 500°C   | Mica tape + fiberglass      | Fire Resistant Mica Wire GN500              | SW-GN500-18-500     |
| 550°C   | Mica tape + fiberglass      | Fire Resistant Mica Wire GN800              | SW-GN800-16-500     |
| 650°C   | Mica tape + fiberglass      | Fire Resistant Mica Wire GN1000             | SW-GN1000-14-500    |
| 1,000°C | Mica, nickel conductor      | Pure Nickel Mica Wire - Resistant to 1000°C | SW-NIMICA-1000C     |

Ratings from each product's datasheet. Full guide: <https://www.shanghaiunicorcable.com/blog/lead-wire-temperature-ladder> · Quotes: <https://www.shanghaiunicorcable.com/quote>