



# TINNED COPPER 0.6KV OR 1KV/2KV PHOTOVOLTAIC CABLE

## APPLICATIONS

SOLAR CABLE IS DESIGNED FOR PHOTOVOLTAIC SYSTEMS, COMPLIANT WITH UL 4703, UL 2556, UL 1581, UL 854, ROHS. IT IS APPROVED FOR LARGE-SCALE SOLAR PLANTS, ROOFTOP INSTALLATIONS, AND FLOATING SOLAR STATIONS IN HARSH INDOOR AND OUTDOOR ENVIRONMENTS, INCLUDING EXTREME WEATHER CONDITIONS. THE CABLE ENSURES STABLE PERFORMANCE, REDUCING FAILURE RATES AND OPERATIONAL COSTS OVER ITS LONG SERVICE LIFE. THIS CABLE IS IDEAL FOR DURABLE, HIGH-PERFORMANCE SOLAR INSTALLATIONS REQUIRING RELIABILITY UNDER EXTREME CONDITIONS.

## CONSTRUCTION

- **CONDUCTOR:** TINNED COPPER SOFT CONDUCTOR PER UL 4703
- **INSULATION:** LSZH ELECTRON-BEAM CROSS-LINKED POLYOLEFIN COPOLYMER (125°C)
- **OUTER SHEATH:** LSZH ELECTRON-BEAM CROSS-LINKED POLYOLEFIN COPOLYMER (125°C)
- **COLOR OPTIONS:** BLACK/RED

## CONSTRUCTION IDENTIFICATION

**SINGLE CONDUCTOR:** BLACK OR RED

**VOLTAGE RATING:** 600V OR 1000V/2000V

## STANDARDS

THESE CABLES ARE MANUFACTURED AND TESTED TO MEET OR EXCEED THE FOLLOWING STANDARDS:

- UL 4703 - PHOTOVOLTAIC CABLE
- UL 2556 - FIRE-RESISTANT
- UL 1581 - VW-1 FLAME TEST
- UL 854 - LOW TEMPERATURE & STABILITY

## FEATURES

- UV, OZONE, AND HYDROLYSIS-RESISTANT
- HIGH-TEMPERATURE TOLERANCE (UP TO 125°C)
- LOW-TEMPERATURE FLEXIBILITY (-40°C TO +90°C)
- SERVICE LIFE ≥ 25 YEARS
- BENDING RADIUS: FIXED >4D, OCCASIONALLY MOVED >5D
- FLAME-RETARDANT, OIL-RESISTANT



# TINNED COPPER 0.6KV OR 1KV/2KV PHOTOVOLTAIC CABLE

## DC600V

| Specification (Awg) | Conductor Construction (n x mm) | insulation Normal Thickness (mm) | Sheath Normal Thickness (mm) | Outer Diameter (mm) | Max DC Resistance of Conductor at 20°C (Ω/km) | Current Carrying Capacity (A) |
|---------------------|---------------------------------|----------------------------------|------------------------------|---------------------|-----------------------------------------------|-------------------------------|
| <b>1x14AWG</b>      | <b>41x0.254</b>                 | <b>0.76</b>                      | <b>0.76</b>                  | <b>4.93</b>         | <b>9.15</b>                                   | <b>41</b>                     |
| <b>1x12AWG</b>      | <b>65x0.254</b>                 | <b>0.76</b>                      | <b>0.76</b>                  | <b>5.4</b>          | <b>5.75</b>                                   | <b>55</b>                     |
| <b>1x10AWG</b>      | <b>104x0.254</b>                | <b>0.76</b>                      | <b>0.76</b>                  | <b>6.32</b>         | <b>3.55</b>                                   | <b>70</b>                     |
| <b>1x8AWG</b>       | <b>41x0.51</b>                  | <b>1.14</b>                      | <b>0.76</b>                  | <b>7.57</b>         | <b>2.23</b>                                   | <b>98</b>                     |
| <b>1x6AWG</b>       | <b>65x0.51</b>                  | <b>1.14</b>                      | <b>1.14</b>                  | <b>9.3</b>          | <b>1.41</b>                                   | <b>132</b>                    |
| <b>1x4AWG</b>       | <b>299x0.3</b>                  | <b>1.14</b>                      | <b>1.14</b>                  | <b>11.15</b>        | <b>0.882</b>                                  | <b>176</b>                    |
| <b>1x2AWG</b>       | <b>475x0.3</b>                  | <b>1.14</b>                      | <b>1.14</b>                  | <b>12.92</b>        | <b>0.555</b>                                  | <b>218</b>                    |
| <b>1x1AWG</b>       | <b>600x0.3</b>                  | <b>1.4</b>                       | <b>1.52</b>                  | <b>15.31</b>        | <b>0.44</b>                                   | <b>280</b>                    |

## DC1000V/2000V

| Specification (Awg) | Conductor Construction (n x mm) | insulation Normal Thickness (mm) | Sheath Normal Thickness (mm) | Outer Diameter (mm) | Max DC Resistance of Conductor at 20°C (Ω/km) | Current Carrying Capacity (A) |
|---------------------|---------------------------------|----------------------------------|------------------------------|---------------------|-----------------------------------------------|-------------------------------|
| <b>1x14AWG</b>      | <b>41x0.254</b>                 | <b>1.14</b>                      | <b>0.76</b>                  | <b>5.69</b>         | <b>9.15</b>                                   | <b>41</b>                     |
| <b>1x12AWG</b>      | <b>65x0.254</b>                 | <b>1.14</b>                      | <b>0.76</b>                  | <b>6.16</b>         | <b>5.75</b>                                   | <b>55</b>                     |
| <b>1x10AWG</b>      | <b>104x0.254</b>                | <b>1.14</b>                      | <b>0.76</b>                  | <b>7.1</b>          | <b>3.55</b>                                   | <b>70</b>                     |
| <b>1x8AWG</b>       | <b>41x0.51</b>                  | <b>1.39</b>                      | <b>0.76</b>                  | <b>8.07</b>         | <b>2.23</b>                                   | <b>98</b>                     |
| <b>1x6AWG</b>       | <b>65x0.51</b>                  | <b>1.39</b>                      | <b>1.14</b>                  | <b>9.8</b>          | <b>1.41</b>                                   | <b>132</b>                    |
| <b>1x4AWG</b>       | <b>299x0.3</b>                  | <b>1.39</b>                      | <b>1.14</b>                  | <b>11.65</b>        | <b>0.882</b>                                  | <b>176</b>                    |
| <b>1x2AWG</b>       | <b>475x0.3</b>                  | <b>1.39</b>                      | <b>1.14</b>                  | <b>13.42</b>        | <b>0.555</b>                                  | <b>218</b>                    |
| <b>1x1AWG</b>       | <b>600x0.3</b>                  | <b>1.62</b>                      | <b>1.52</b>                  | <b>15.81</b>        | <b>0.44</b>                                   | <b>280</b>                    |

\*Double core PV cable available for other certifications, not for UL certification.

\*Other certifications available: TÜV - CPR, IEC, CE, and RETIE.