



■ **Harmonized code designations are described below :**

Cable Code	Type of Conductor	Voltage Grade
H05V-U	Solid	300/500 V
H05V-K	Flexible	300/500 V
H07V-R	Stranded	450/750 V
H07V-K	Flexible	450/750 V

- Solid Conductors are as per Class 1, Stranded Conductors are as per Class 2 and Flexible Conductors are as per Class 5 according to BS 6360.
- Cables up to and including 10 mm² can be offered with Solid Conductor also (harmonized code H07V-U).

Other types of cables offered to overseas markets include :

- Multicore sheathed cables as per BS 6004 or BS 6500, with stranded (Class 2) or Flexible (Class 5) conductors.
- HR PVC Insulated winding wires for submersible pump motors
- PVC Insulated and sheathed three core flat cables and three core round double sheathed cables for submersible pumps
- HR PVC Insulated single core flexible cables as per BS 6231 Type CK
- PVC Insulated auto and battery cables as per DIN 72551, JIS C 3406, JASO D 611, ISO 6722 and IS 2465.
- PVC Insulated and sheathed power and control cables as per BS 6346 and IEC 60502
- XLPE Insulated and sheathed power cables as per BS 5467 and IEC 60502

Solar Cables

Solar photovoltaic industry gets more attention as the most promising environment- friendly industry, and it is expected to have the significant role in resolving the earth’s energy problem. As production costs diminish, users increasingly view these energy sources as clean, cheap and reliable. In this background, the demand for “SOLAR CABLE”, which is the current transmission medium of solar energy power generation, is expected to increase with the expansion of market.

Special Properties of Solar Cables

- Lifetime reliability: lasts up to 30 years even under tough external conditions.
- Outdoor durability: resists extreme temperatures (-40°C to 120°C maximum at the core) and ozone resistant.
- UV resistance: full protection against ultraviolet rays.
- Halogen-free: Low Smoke Emission & Low Toxicity/Corrosivity during fire.
- Properties against fire: flame retardant, fire retardant.
- Flexibility and stripability: for fast and easy installation.
- Fully recyclable: in accordance with new environmental regulations.
- Easy installation with color identification (blue, red).
- Suitable to common connector types.

Constituents

Tortek Solar Cables are manufactured upto 240 Sq.mm with the following materials.

1. Annealed Tinned Copper Conductor
 2. Cross Linked Polyolefin Compound
 3. zero Halogen Polyolefin Compound
- Required Features of Solar cable

Chemical Features

- Weather resistant
- Resistant to mineral oils
- Resistant to acids & alkaline

Thermal Features

- Maximum conductor temperature of operation-120°C during 20000 hours.
- Minimum operating temperature: - 40°C

Electrical Features

- Voltage rating: 1.5 (1.8) KV DC / 0.6/1.0 (1.2) KV AC
- High voltage test: 6.5 KV DC for 5 minutes.

Mechanical Features

- Resistant to Impact, tear & abrasion
- Minimum bending radius – 4 times of overall diameter.
- Safe pulling force -50 N/Sq.mm.

