

TUV Approved Tinned Copper Solar Cable



Construction

Conductor: Tinned Copper Class 5

Insulation: XLPO

Sheath: XLPO

Applications

Engineered specifically for interconnecting photovoltaic power supply systems, this TUV-approved cable connects solar panels to inverters and combiner boxes. Featuring high-conductivity tinned copper conductors and robust XLPO insulation, it is designed to withstand extreme environmental stresses, including long-term UV exposure, ozone, and hydrolysis. Suitable for both fixed and mobile installations on rooftops, ground-mounted solar farms, and floating PV plants.



Standards

Product Standard: EN 50618 (H1Z2Z2-K), IEC 62930, TUV 2PFG 1169/08.2007 (PV1-F).

Conductor: IEC 60228 Class 5 (Tinned Copper).

Flame Retardant: IEC 60332-1-2.

Low Smoke: IEC 61034-2.

Halogen Free: IEC 60754-1/2.

Environmental: RoHS 2011/65/EU, REACH Compliant.

Specification

Related Voltage	AC 1KV, DC 1.5KV
Test Voltage	3.5KV/5Min
Temperature Range	-40°C--90°C
Max. Temperature at Conductor	120°C
Service Life	25 Years

Technical Data

Specifications (AWG)	Conductor structure (No./mm)	Conductor section(mm ²)	Insulation thickness (mm)	Insulation outer diameter (mm)	Sheath thickness (mm)	Nom O.D	Weight (kg/km)	Tinned Copper Resistance
14	41/0.254	2.08	1.52	1.52	5	0.76	6.6	9.25
12	65/0.254	3.31	1.52	1.52	5.4	0.76	7	5.82
10	105/0.254	5.26	1.52	1.52	6.05	0.76	7.6	3.66
8	165/0.254	8.37	1.77	1.77	7.3	0.76	8.9	2.35
6	266/0.254	13.3	1.77	1.77	8.8	0.76	10.4	1.48
4	420/0.254	21.15	1.77	1.77	10.1	0.76	11.7	0.928
2	665/0.254	33.62	1.77	1.77	12	0.76	13.6	0.59