

SOLAR ENERGY CABLE



APPLICATION

Standard solar cable intended for the connection of solar panel arrays and similar equipment. Suitable for internal and external installations, Fixed, or within conduit. Our solar cable is manufactured in accordance to BS EN 50618 and meets harmonised code of H1Z2Z2-K.

CABLE STANDARDS

BS EN 50618

Halogen free to EN 50267 / IEC 60754

Smoke Density: light transmittance according to EN 50267 / IEC 61034

CONSTRUCTION

Conductor: Electrolytic annealed flexible tinned copper conductor

Insulation: Cross Linked Halogen Free compound

Sheath: Cross Linked Halogen Free compound

Sheath Colour: ■ Black

CHARACTERISTICS

Nominal Voltage: 600V-1000V AC
1800V DC

HCl Content: <0.5%

pH: > 4.3

Conductivity: <10 IS/mm

Smoke Density: light transmittance: >60%

Temperature Limits

Ambient Temperature: -40 to 90°C

Maximum conductor temp: 120°C

Maximum short circuit temp: 250°C (max 5s)

Short Circuit temp: 250°C

Minimum Bending Radius: As per cable manufacturer datasheet

Should not be installed at temperatures below 0°C

SOLAR ENERGY CABLE - DIMENSIONS

CCC CODE	CONDUCTOR SIZE (MM ²)	STRANDING (MM)	NO. OF CORES	WEIGHT (Kg/Km)	APPROX OVERALL DIAMETER (MM)	MAXIMUM RESISTANCE AT 20°C
SOLAR1X1/5BK	1.5	29/0.25	1	40	4.9	13.54
SOLAR1X2/5BK	2.5	48/0.25	1	49	5.35	8.21
SOLAR1X4BK	4	48/0.3	1	66	6	5.09
SOLAR1X6BK	6	72/0.3	1	86	6.55	3.39
SOLAR1X10BK	10	126/0.3	1	132	7.6	1.95
SOLAR1X16BK	16	116/0.4	1	188	8.6	1.24
SOLAR1X25BK	25	180/0.4	1	294	10.8	0.795
SOLAR1X35BK	35	260/0.4	1	390	11.9	0.565

SOLAR ENERGY CABLE – CURRENT CARRYING CAPACITY / RESISTANCE

NOMINAL CROSS SECTIONAL AREA (MM ²)	ONE SINGLE CORE CABLE			MAXIMUM RESISTANCE AT 20°C
	SINGLE CABLE IN FREE AIR	SINGLE CABLE FREE ON A SURFACE	TWO CABLES ADJACENT ON A SURFACE	
1.5	30	29	24	13.54
2.5	41	39	33	8.21
4	55	52	44	5.09
6	70	67	57	3.39
10	98	93	79	1.95
16	132	125	107	1.24
25	176	167	142	0.795
35	218	207	176	0.565

THE ABOVE IS IN ACCORDANCE WITH 18TH EDITION OF IET WIRING REGULATIONS

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.