

SC series cables

autarco

Autarco SC series H1Z2Z2-K type solar cable are TUV tested according to EN50618 and are intended for use in photovoltaic systems with string voltage rates up to 1500VDC. They are suitable for applications in homes, commercial rooftops and in industrial and agriculture fields.



10 10-year product warranty



UV resistant



Water resistant



Halogen free



Fire protection

Quality certificates

- ▣ TUV EN 50618 H1Z2Z2-K
- ▣ EN 50618 Reference number: R50311889
- ▣ EN 50575, DoP: C-SC003 CP



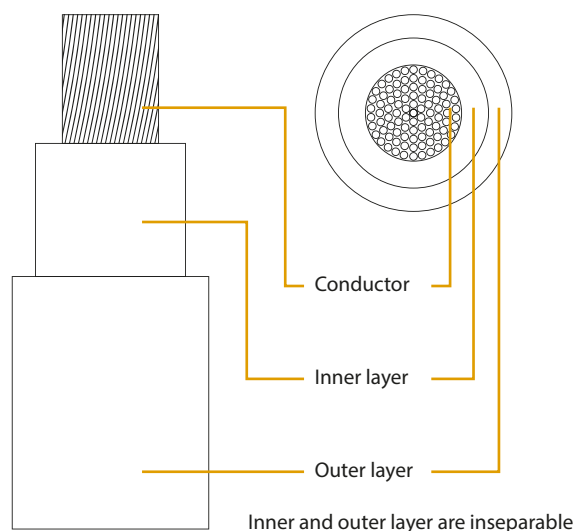
Physical properties

Elongation	≥125% for both inner and outer layer
Strength	≥8 Mpa for both inner and outer layer
Cold bend test	No cracking (-40±2.0°Cx16h)
Sunlight resistance 720h	Elongation and strength retention rate ≥ 70%
Bending radius	≥4xCable OD
Ambient temperature	-40°C up to +90°C
Content of halogen gas	IEC670754-1, EN50267-2-1
Thermal Endurance	> 25 years
Insulation resistance	≥500MΩ-km (at 20°C)
Max. conductor temp.	120°C
Smoke emission test	≥60% EN61034-2
Flame	PASS IEC60332-1



Cable

Cross Section



Thermal performance

Operating temperature range	-40°C to +120°C
Maximum short-circuit temperature	250°C (max. 5s)

Fire protection

Flame non-propagation	UNE-EN 60332-1 and IEC 60332-1
Low Smoke Zero Halogen	UNE-EN 60754-1 and IEC 60754-1
Low smoke emission	UNE-EN 61034 and IEC 61034
Light transmittance	> 60%
Low corrosive gases emission	UNE-EN 60754-2 and IEC 60754-2

Other characteristics

Conductor material	Stranded tinned copper
Spark test	10000 VAC
Dielectric-withstand test	6500 VAC / 5 minutes
Colour options	Black / Red / Blue
Inner and Outer material	XLPE
Typical rated voltage	1500 VDC
Packaging units	500m (reel) 100m and 10m
Cable with EVO-2 connector	1.6m and 2.55m with Staubli EVO-2

Electrical characteristics

	S4.SC4-H1Z2Z2	S4.SC6-H1Z2Z2	S4.SC10-H1Z2Z2	S4.SC16-H1Z2Z2	S4.SC25-H1Z2Z2	S4.SC35-H1Z2Z2
Rated voltage (V)	1500 VDC	1500 VDC	1500 VDC	1500 VDC	1500 VDC	1500 VDC
Cross-section (mm ²)	4	6	10	16	25	35
Outer diameter (mm)	5.6	6.2	7.6	9.2	11.2	12.6
Weight (kg/km)	64.2	86	128	210	335	450
Resistance (mΩ/m)	5.09	3.39	1.95	1.24	0.795	0.565
Voltage drop (V/A · km)	14.3	9.49	5.46	3.47	2.23	1.58
Current free in air (A)	55	70	98	132	176	218
Current on surface (A)	52	67	93	125	167	207
Conductor design	52/0.3	78/0.3	84/0.4	128/0.4	195/0.4	276/0.4

High temperature current correction factor

Ambient temperature (°C)	< 60	70	80	90	100	110
Current conversion factor	1.00	0.91	0.82	0.71	0.58	0.41

The specifications contained in this datasheet may deviate slightly from our actual products due to on-going product improvement and are subject to change at any time without prior notice.

