

TECHNICAL DATA SHEET LOW VOLTAGE SOLAR CABLES

Cable Description:

Cu / LS0H-XL / LS0H-XL 1kV 1X6 mm² Red (Flex) (Tinned), BS EN 50618 IEC 62930, FR-EN 60332-1

Design and Construction Data:		
Reference Manufacturing Standards		IEC/BS EN 60228, BS EN 50618, IEC 62930
Max. Conductor Temperature at rated current	°C	90
Max. Permissible Overload Conductor Temperature(Up to 20000 h)	°C	120
Max. Conductor Short Circuit Temp for 5 Seconds	°C	250 °C
Rated Voltage ' AC / DC '	V	1000 / 1500
Number of Phase Conductors x Cross-Section	mm²	1 x 6
Phase Conductor Material & Shape		Tinned Cu & Round Flexible class 5 IEC 60228
Insulation Material		LS0H-XL
Phase Nominal Thickness of Insulation	mm	0.70
Insulation Color Code		BLACK
Outer Sheath Material		LS0H-XL
Nominal Outer Sheath Thickness	mm	0.8
Colour of Outer Sheath		Red
Approximate Cable Overall Diameter	mm	6.0
Electrical Data:		
Max Phase Conductor DC resistance @ 20 °C	ohms/km	3.39
Phase Conductor AC resistance @ 90 °C	ohms/km	4.32
Conductor Short Circuit Current @ 1 Second	kA	0.86
Current Carry Capacity		
Laid @ 30 °C Ambient Temperature(Based on IEC 62930)		
Single cable free in air	A	72
Single cable on a surface	A	69
Two loaded cables touching, on a surface	A	58
Additional Data:		
Maximum pulling Tension	N	90
Minimum Bending Radius (Fixed/Free)	mm	(4 x D) / (6 x D)
The Cable shall meet all Test requirements of: IEC/BS EN 60228, BS EN 50618, IEC 62930, EN 60332-1		
Packing Data:		
Drum Type		Non-Returnable
Length of Cable per drum (± 5%)	m	1000
Drum Height (Approximate)	mm	800
Net / Gross Weight (Approximate)	kg	74 /104
Cable Sheath Marking:		
BAHRA CABLES CO. KSA 6 MM² 1500 V d.c 1000 V a.c H1Z2Z2-K BS EN 50618 HALOGEN FREE LOW SMOKE 62930 IEC 131 FR-IEC 60332-1-2		
Cable Drawing		
Description	Cu / LS0H-XL / LS0H-XL 1kV 1X6 mm2 Red (Flex) (Tinned) SOLAR CABLE	Approx. Diameter
1	Core	
	Flexible Tinned copper Conductor	3.02 mm
	Photovoltaic-LS0H-XL insulated	4.42 mm
2	Photovoltaic-LS0H-XL Outer Sheathing	6.02 mm



