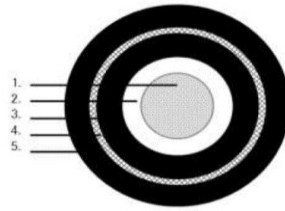


**GUARANTEED TECHNICAL PARTICULARS**

**CABLE TYPE : - ATC Conductor Single Core UV resistant, silane crosslinkable, halogen free, flame-retardant insulated and sheathed Cable ATC screened cable generally as per TUV 2 Pfg**



- 1- Tinned copper conductor
- 2 - XLPO insulation
- 3- XLPO inner sheath
- 4- Tinned braiding
- 5- XLPO sheath

SQ.MM		1 x 6-6	
SR.NO	PARAMETER	UNIT	SPECIFICATIONS
<b>CONDUCTOR AT DRAWING</b>			
1	a) Type of Conductor		Annealed Tinned Copper
	b) Class of Conductor		Class-5 Flexible Bunch Conductor as per EN 60228
	c) No of Wires	Nos	84
	d) Conductor Resistance @ 20°C (Max)	Ω/KM	3.39
	e) Max. Conductor Temp For -Continuous	°C	90 / 120 based on 60216-1 (20000 Hrs , 50 % Residual Elongation)
	f) Max. Conductor Temp For -Short Circuit to a period of 5 sec	°C	200
	g) Temperature Range	°C	-40 to 90 Deg Max Ambient( 120 Max conductor temprature)
	h) Minimum Bending Radius for flexible	mm	6 x Cable Diameter
	i) Minimum Bending Radius for fixed installation	mm	4 x Cable Diameter
	j) Maximum Safe pulling force when pulled by pulling eye	g/mm	5 kg/sq.mm of Copper area
<b>BUNCHER / STRANDING</b>			
2	a) Lay direction		Right hand
	b) Lay Length ( Max)	mm	64
	c) Conductor diameter	mm	2.93
<b>INSULATION</b>			
3	a) Material		<b>UV resistant ,Silane crosslinkable , halogen free,flame retardant compound</b>
	b) Insulation Colour		<b>Natural</b>
	c) Overall Approx diameter of cable ( ± 0.05 )	mm	4.93
	d) Thickness (Nom)	mm	1.00
	e) Thickness minimum at a point		Smallest value measured shall not fall below 90 % of the specified value by more than 0.1 mm
<b>INNER SHEATHING</b>			
4	a) Material		<b>UV resistant ,Silane crosslinkable , halogen free,flame retardant compound</b>
	b) Sheath Colour		Black
	c) Overall Approx diameter of cable ( ± 0.05 )	mm	6.93
	d) Thickness (Nom)	mm	1.00
	e) Thickness minimum at a point		Smallest value measured shall not fall below 85 % of the specified value by more than 0.1 mm
<b>SCREEN</b>			
5	a) Material		<b>Tinned copper braiding</b>
	b) Area of braid		Minimum 6 sq.mm
	c) Wire diameter of braid		0.150 mm
	d) No of layers		Two
	e) Dia over braiding	mm	7.5
<b>OUTER SHEATHING</b>			
6	a) Material		<b>UV resistant ,Silane crosslinkable , halogen free,flame retardant compound</b>
	b) Sheath Colour		Black
	c) Overall Approx diameter of cable ( ± 0.05 )	mm	9.7
	d) Thickness (Nom)	mm	1.10
	e) Thickness minimum at a point		Smallest value measured shall not fall below 85 % of the specified value by more than 0.1 mm
<b>PRINT MESSAGE ON THE CABLE</b>			
5	a) Printing Distance ( Max )	mm	<b>SOLAR 1 X 6-6 SQ.MM REACH RoHS CE</b> 550 mm (Max) meurement as per EN 50618:2015
<b>ELECTRICAL PROPERTIES</b>			
6	<b>Current carrying capacity</b>		Ambient temperature: 40 °C (see below table for other ambient temperatures) max. conductor temperature: 120 °C.
	<b>Single cable free in air</b>	Amps.	70
	<b>Single cable on a surface</b>	Amps.	67
	<b>Two loaded cable touching on a surface</b>	Amps.	57
<b>ADDITIONAL PROPERTIES</b>			
7	a) Flammability Test		as per IEC 60332-1-2
	b) Smoke emission		as per IEC 61034
	c) HCL Acid gas evaluation test		as per IEC 60754-1
8	<b>Recommended use</b>		Intended for use in PV installations e.g.acc. to HD 60364-7-712./ÖVE guideline R11-1(2022) They are intended for permanent use outdoor and indoor, for free movable, free hanging and fixed installation. Installation also in conduits and trunkings on, in or under plaster as well as in appliances. Suitable for the application in/at equipment with protective insulation (protection class II).They are inherently short-circuit and earth fault proof acc. to HD 60364-5-52.

**Current rating conversion factors for different ambient temperatures**

Ambient temperature °C	Conversion factor
up to 60	1,00
70	0,92
80	0,84
90	0,75

For installation in groups the reduction factors for current rating according to HD 60364-5-52:2011, Table B.52.17 shall apply.