



NEWAGE SOLAR CABLES - SOLARFLEX-X-PV1-F

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newage
CABLES

NEWAGE SOLARFLEX-X-PV1-F

Single core power cable, for photovoltaic and solar system use, insulated and sheathed with cross linked polyolefin compound. Flame retardant, halogen free, low smoke, UV & Ozone resistant flexible cable for fixed laying.

THERMAL CHARACTERISTICS

- Operating Temperature Normal 90 °C
Maximum 120 °C
(For 20,000 h)
- Expected Life Time* > 25 years
- Max. Short Circuit Temp. 250 °C for 5 Sec

STANDARDS

BS EN 50618 : 2015, 2 PFG 1169 / 08.2007, IEC 60228
BS 6360, BS EN 62230, BS EN 50363-5, BS EN 60811-401
BS EN 60811-403, BS EN 60811-404, BS EN 60811-501
BS EN 60811-503, BS EN 60811-504, BS EN 60811-505
BS EN 60811-506, BS EN 60811-507, BS EN 60811-508
BS EN 60216-1-1, BS EN 50395, BS EN 50396, IEC 61034
IEC 60332-1-2, BS EN 50525-1, BS EN 60754-1
BS EN 61034-2, BS EN 60754-2

ELECTRICAL CHARACTERISTICS

- Rated Voltage Normal 1500V DC
Maximum 1800V DC

CONSTRUCTION

- Conductor Tinned Coated Flexible Copper, Class 5 according to IEC 60228
- Insulation Cross Linked Polyolefin Compound
- Sheath Cross Linked Polyolefin Compound

Cross Sectional Area of Conductor mm ²	Insulation Thickness Nominal mm	Sheath Thickness Nominal mm	Overall Diameter Approx mm	DC Resistance of Conductor at 20 °C Ω / KM	Insulation Resistance at 20 °C MΩ. KM	Insulation Resistance at 90 °C MΩ. KM
1.5	0.7	0.8	5.4	13.70	860	0.86
2.5	0.7	0.8	5.9	8.21	690	0.69
4	0.7	0.8	6.6	5.09	580	0.58
6	0.7	0.8	7.4	3.39	500	0.50
10	0.7	0.8	8.8	1.95	420	0.42
16	0.7	0.9	10.1	1.24	340	0.34
25	0.9	1.0	12.5	0.795	340	0.34
35	0.9	1.1	14.0	0.565	290	0.29
50	1.0	1.2	16.3	0.393	270	0.27
70	1.1	1.2	18.7	0.277	250	0.25
95	1.1	1.3	20.8	0.21	220	0.22
120	1.2	1.3	22.8	0.164	210	0.21
150	1.4	1.4	25.5	0.132	210	0.21
185	1.6	1.6	28.5	0.108	200	0.20
240	1.7	1.7	32.1	0.0817	200	0.20

- DC Resistance is in accordance with IEC 60228
- Dimensions & Insulation Resistance is in accordance with BS EN 50618:2015
- Expected lifetime is for normal usage conditions



CURRENT CARRYING CAPACITY

CURRENT CARRYING CAPACITY ACCORDING TO METHOD OF INSTALLATION

Cross Sectional Area of Conductor	Single Cable Free in Air	Single Cable on a Surface	Two Loaded Cables Touching on a Surface
mm ²	A	A	A
1.5	30	29	24
2.5	41	39	33
4	55	52	44
6	70	67	57
10	98	93	79
16	132	125	107
25	176	167	142
35	218	207	176
50	276	262	221
70	347	330	278
95	416	395	333
120	488	464	390
150	566	538	453
185	644	612	515
240	775	736	620

Ambient temperature: 60 °C. For other temperature see below table

DE-RATING FACTOR

Air Temperature	Up to 60 °C	70 °C	80 °C	90 °C
De-Rating Factor	1.00	0.92	0.84	0.75

**TRANSMITTING
SUN'S ENERGY
THROUGH NEWAGE
SOLAR CABLES
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 33-K. Gulberg II. Lahore. Pakistan

 info@newagecables.com

 (92-42) 111 777 300

 www.newagecables.com

