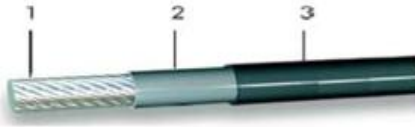




FG21M21 PV20 (1500 V cc) Extended Lifetime

Single core cables, for photovoltaic and solar system use, insulated in type G21 elastomeric compound and M21 elastomeric compound sheathed flame retardant, halogen free and low smoke flexible cables for fixed laying, lifetime testing 20.000 h.120°



- 1 – Flexible tin plated copper class 5 EN 60228
- 2 – LSOH Rubber compound type G21-PV20
- 3 – LSOH Rubber compound type M21-PV20

Applications:

Cable suitable for the interconnection of the various elements of photovoltaic systems. Suitable for fixed installation outside and inside without protection or inside pipes, ducts or similar closed systems. High resistance against Ozone U.V rays, oils, moisture and weather inclemencies. Suitable for use at an ambient temperature up to 90°C (120°C overload), thanks to the use of materials with temperature-index of 120°C, determined according to Norm IEC 60216 (20,000 h and 50% of residual elongation). Estimated lifetime of these cables is at least 25 years.

Sheath colour:

Black, Red, Blue

Operating temperature:

-40°C - 90°C on the conductor

Overload temperature:

120°C on the conductor

Expected lifetime:

>25 years

Rated voltage:

U_o/U AC 0.6/1 kV

U_o/U DC 0.9/1,5 kV

Max temperature in case of short circuit:

250°C on the conductor (max duration 5 seconds)

Min bending radius:

4 x outer diameter of the cable

Max installation temperature:

-25°C

Max laying stress during installation:

50 N/mm²

Standards:

CEI 20-91:02/2010, IMQ CPT 065 II Ed., IEC 60216-1, IEC 60216-2

Size	Max Ø of copper wires	Insulation thickness	Sheath thickness	Outer diameter	Max cond. Resistance at 20°C	Indicative cable weight	BATT Part number Black	BATT Part number Red
mm ²	Mm	Mm	Mm	Mm	Ohms/km	Kg/km		
1 x 1.5	0.26	0.7	0.8	4.5	13.7	35		
1 x 2.5	0.26	0.7	0.8	5.0	8.21	46	26014	
1 x 4	0.31	0.7	0.8	5.5	5.09	62	26001	26012
1 x 6	0.31	0.7	0.9	6.3	3.39	85	26002	26013
1 x 10	0.31	0.7	1.0	7.5	1.95	135	26003	
1 x 16	0.41	0.7	1.0	8.5	1.24	200	26008	
1 x 25	0.41	0.9	1.1	10.3	0.795	295	26009	
1 x 35	0.41	0.9	1.1	11.5	0.565	390		
1 x 50	0.41	1.0	1.2	13.2	0.393	560		
1 x 70	0.51	1.1	1.2	15.1	0.277	770	26006	
1 x 95	0.51	1.1	1.3	16.8	0.210	980	26007	
1 x 120	0.51	1.2	1.3	18.8	0.164	1250		

The data and the drawings of this technical leaflet are not binding and can be varied as a consequence of modifications and / or improvements deemed necessary by the manufacturer.

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Size mm ²	Current carrying capacity and max short circuit current		Voltage drop (***) (mV/Am)		
	Current rating (*) (A) single cable in free air	Short circuit current (***) (A)	Direct current	Alternate current	
				Monophase	Three – phase
1 x 1.5	30	71	33.90	27.29	23.64
1 x 2.5	41	119	20.34	16.43	14.23
1 x 4	55	191	12.62	10.24	8.87
1 x 6	70	287	8.40	6.86	5.94
1 x 10	98	499	4.86	4.01	3.48
1 x 16	132	785	3.08	2.58	2.24
1 x 25	176	1225	1.98	1.70	1.47
1 x 35	218	1724	1.42	1.24	1.08
1 x 50	276	2478	0.98	0.90	0.78
1 x 70	347	3516	0.68	0.66	0.57
1 x 95	416	4638	0.52	0.53	0.46
1 x 120	488	5939	0.40	0.43	0.37

* Current rating evaluation according to CEI 20-91:2010 and IEC 60364, in the following conditions:

Environmental temperature: 60°C

Max conductor operating temperature: 120°C

Single cable in free air

** : Short Circuit Current evaluation is based on a theoretical calculation according to IEC 60724, in the following conditions:

Operating temperature on the conductor: 120°C

Max short circuit temperature: 250°C

Short Circuit duration: 5 seconds

***: Voltage drop evaluation is based on a theoretical calculation, in the following conditions:

Operating temperature on the conductor: 90°C

Cos ϕ : 0,8

Two single cable touching horizontal in monophase circuit. Cables in trefoil in three-phase circuit