

BESS DC CABLES



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**MESLA**TM
WIRE & CABLE

CORPORATE PROFILE

Mesla Wire & Cable Sdn. Bhd. is a prominent cable manufacturing factory situated in Melaka, Malaysia. Founded in 2014, and we underwent a rebranding in 2020, adopting the name Mesla Wire & Cable Sdn Bhd. a private entity of Malaysia
Mesla Wire & Cable has solidified its presence in the market over the past decade, specializing in the production of high-quality cables to meet various industrial and commercial needs.

Throughout its operational history, Mesla Wire & Cable has consistently demonstrated a commitment to excellence in manufacturing, innovation, and customer satisfaction. The company's state-of-the-art facilities, coupled with a dedicated team of professionals, enable it to produce a wide range of cables that adhere to stringent quality standards.

Located strategically in Melaka, Mesla Wire & Cable benefits from its central position within Malaysia, facilitating efficient distribution networks both domestically and internationally. The company's reputation for reliability, durability, and performance has earned it a trusted status among clients across various industries.



1500V MESLA BESS CABLE



APPLICATION

This cable is used for internal and external within Battery Energy Storage System (BESS) .
The nominal permissible DC voltage of the system must not exceed 1.5kV.

CONSTRUCTION

Tinned copper fine wire conductor
Core insulation: cross linked Halogen free compound
Outer sheath: cross linked Halogen free compound
Outer sheath colour; Black

TECHNICAL DATA

Rated voltage:	DC: 1.5/1.5kV. Max. permissible DC operating voltage 1.8kV (conductor & conductor)
Test voltage:	AC 6500 V
Temperature:	Fixed: Max. conductor operating temperature, per EN 60216-1: 120°C
Bending radius:	Fixed: 5 X Ø Occasional flexing: 10 X Ø
Reference standard:	EN 50618

No. of cores x Nominal Area (mm ²)	Outer diameter approx. (mm)	Cable Weight Approx. (kg/km)
1 X 1.5	4.5	18
1 X 2.5	5.1	28
1 X 4.0	5.4	45
1 X 6.0	6.0	65
1 X 10	7.1	105
1 X 16	8.6	170
1 X 25	10.5	230
1 X 35	12.2	330
1 X 50	14.4	480

No. of cores x Nominal Area (mm ²)	Outer diameter approx. (mm)	Cable Weight Approx. (kg/km)
1 X 70	16.2	665
1 X 95	18.2	900
1 X 120	19.8	1130
1 X 150	22.0	1420
1 X 185	25.0	1765
1 X 240	28.0	2250

TECHNICAL DATA



Copper Conductor Resistance (mm²)

Nominal cross-sectional area	Minimum number of wires in the conductor	Maximum diameter of wires in the conductor		Maximum resistance of conductor at 20°C (Ohm/km)			
		Class 5	Class 6	Class 2		Class 5 & Class 6	
(mm ²)	Class 2	(mm)	(mm)	Plain copper	Tinned copper	Plain copper	Tinned copper
0.5	7	0.21	0.16	36	36.7	39	40.1
0.75	7	0.21	0.16	24.5	24.8	26	26.7
1	7	0.21	0.16	18.1	18.2	19.5	20
1.5	7	0.26	0.16	12.1	12.2	13.3	13.7
2.5	7	0.26	0.16	7.41	7.56	7.98	8.21
4	7	0.31	0.16	4.61	4.70	4.95	5.09
6	7	0.31	0.21	3.08	3.11	3.3	3.39
10	7	0.41	0.21	1.83	1.84	1.91	1.95
16	7	0.41	0.21	1.15	1.16	1.21	1.24
25	7	0.41	0.21	0.727	0.734	0.78	0.795
35	7	0.41	0.21	0.524	0.529	0.554	0.565
50	19	0.41	0.31	0.387	0.391	0.386	0.393
70	19	0.51	0.31	0.268	0.270	0.272	0.277
95	19	0.51	0.31	0.193	0.195	0.206	0.210
120	37	0.51	0.31	0.153	0.154	0.161	0.164
150	37	0.51	0.31	0.124	0.126	0.129	0.132
185	37	0.51	0.41	0.0991	0.1	0.106	0.108
240	61	0.51	0.41	0.0754	0.0762	0.0891	0.0817
300	61	0.51	0.41	0.0601	0.0607	0.0641	0.0654
400	61	0.51		0.0470	0.0475	0.0486	
500	61	0.61		0.0366	0.0369	0.0384	
630	91	0.61		0.0283	0.0286	0.0287	
800	91			0.0221	0.0224		
1000	91			0.0176	0.0177		