

150°C Irradiated Cross-linked Shielded Cable EV738



Application

Cardiffcable EV738 Shielded Cable is used in power battery systems for electric vehicles, fuel cell vehicles, and hybrid vehicles. The product is flexible and easy to bend, with properties such as resistance to heat aging, low temperature, fluids, oil, humidity, and ozone. The tinned copper braided shielding provides strong resistance against external electromagnetic interference, ensuring the stability of the cable system. With a rated voltage of up to 1500V, it not only meets the demands of general passenger vehicles but also those of commercial vehicles, large buses, and public transport vehicles with high power requirements. This product can also be used in energy storage systems.

Cable Structure

Conductor	Stranded fine bare copper wires, complying with IEC60228/VDE0295, Class 5 and 6 conductors.
Insulation	Special halogen-free environmentally friendly irradiated cross-linked material
Insulation Color	Orange
Shield	Tinned copper wire braid + aluminum foil
Sheath	Special halogen-free environmentally friendly irradiated cross-linked material
Sheath Color	Orange

Technical Data

Rated Voltage	1500V
Test Voltage	5000V
Insulation Resistance	$\geq 10^9 \Omega \cdot \text{mm}$
Minimum Bending Radius	Approximately 5xD
Ambient Temperature	-40°C to +150°C
Flame Retardant Properties	IEC/EN 60332-1-2
Reference Standards	GB/T25085, ISO 6722, QC/T 1037

Part No.	Rated Voltage	Conductor Size (mm ²)	Number of Strands	Diameter of Single Wire (mm)	Maximum Diameter of Conductor (mm)	Outside Diameter (mm)	Max DC Conductor Resistance (20°C) Ω/Km	Approx. Weight (kg/km)
738 00150 01 **	600VAC/900VDC	1.5	48	0.2	1.8	4.0	12.7	34.3
738 00250 01 **	600VAC/900VDC	2.5	80	0.2	2.2	4.6	7.6	48.4
738 00400 01 **	600VAC/900VDC	4	56	0.3	2.8	5.3	4.71	69.8
738 00600 01 **	600VAC/900VDC	6	84	0.3	3.4	6.3	3.14	98.7
738 01000 01 **	600VAC/900VDC	10	320	0.2	4.5	8.3	1.82	167.3
738 01600 01 **	600VAC/900VDC	16	512	0.2	5.8	9.6	1.16	241.9
738 02500 01 **	600VAC/900VDC	25	798	0.2	7.2	11.5	0.743	353.8
738 03500 01 **	600VAC/900VDC	35	1120	0.2	8.5	13.6	0.527	491.9
738 05000 01 **	600VAC/900VDC	50	1591	0.2	10.5	15.5	0.368	675.9
738 07000 01 **	600VAC/900VDC	70	2229	0.2	12.5	18.0	0.259	921.7
738 01000 02 **	1000VAC/1500VDC	10	323	0.2	4.5	9.7	1.82	197.9
738 01600 02 **	1000VAC/1500VDC	16	513	0.2	5.8	11.1	1.16	279.4
738 02500 02 **	1000VAC/1500VDC	25	798	0.2	7.2	13.3	0.743	407.9
738 03500 02 **	1000VAC/1500VDC	35	1121	0.2	8.5	14.7	0.527	537.4
738 05000 02 **	1000VAC/1500VDC	50	1591	0.2	10.5	17.1	0.368	739.3
738 07000 02 **	1000VAC/1500VDC	70	2229	0.2	12.5	19.0	0.259	967.1
738 09500 02 **	1000VAC/1500VDC	95	3034	0.2	14.8	21.2	0.196	1274.7
738 12000 02 **	1000VAC/1500VDC	120	3820	0.2	16.5	22.9	0.153	1546.7

** denotes reserved bits. Please contact us for more details when placing an order.