

CU/HMWPE/PVC/DSWA/HMWPE (IEC & ASTM)

SCOPE

This specification covers 0.6/1kV copper conductor, HMWPE insulated and armoring cables.
 Application included ; a cable between a DC power source and a protected structure or a negative/an anode cable junction box, or between two negative/positive cable junction boxes, or between an anode junction box and a positive cable junction box, or offshore anode.

APPLICATION STANDARDS

IEC Standard IEC 60228
 ASTM Standard ASTM B 3, ASTM B 8 and ASTM D 1248

CONDUCTOR

The conductor shall consist of plain annealed copper wires, and shall be class 2 in accordance with IEC 60228 or ASTM B 3 and ASTM B 8..

INSULATION

The insulation shall be extruded with black HMWPE (High Molecular Weight Polyethylene) comply with Type 1 or 3, Class C, Category 4 or 5, Grades E-4 or E-5, J1 to J3 of ASTM D 1248.

BEDDING

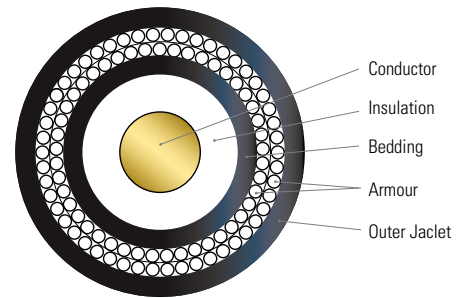
The bedding shall be extruded with black PVC compound complying with IEC 60502-1.

ARMOR

The armor shall have two layers of armor wires spirally wound over the PVC bedding to provide completed coverage. The first layer shall be a right hand lay and the second layer shall be a left hand lay, and the binder tape over the each armoring wire may be applied by manufacturer's option.

OUTER JACKET

The outer jacket shall be extruded with a black HMWPE (High Molecular Weight Polyethylene) comply with Type 1 or 3, Class C, Category 4 or 5, Grades E-4 or E-5, J1 to J3 of ASTM D 1248. option.



Conductor			Thick. of insulation (nom.)	Thick. of bedding (nom.)	Dia. of wire for armor	Thick. of outer jacket (nom.)	Completed cable diameter (approx.)	Max. DC conductor resistance at 20°C	A.C. Test Voltage	Net weight of cable (approx.)
Nominal Cross Sectional Area	No of wire	Overall Diameter (approx.)								
mm ² /AWG	No.	mm	mm	mm	mm	mm	mm	Ω/km	kV/5min.	kg/km
50	19	8.1	2.79	1.2	1.2	1.65	28	0.387	3.5	1750
(1/0AWG)		(9.45)					29	0.335		1935
70	19	9.8	3.18	1.2	1.2	1.65	31	0.268	3.5	2195
(2/0AWG)		(10.64)					32	0.266		2220