Armour Resistances

Max. DC Resistance of Conductor & Armour for Single Core XLPE Insulated Cables Having Aluminium Wire Armour

XLPE/PVC/AWA/PVC Cables to BS5467
XLPE/LSF/AWA/LSF Cables to BS6724

Nominal Conductor Area	Max Resistance per Km of Cable @ 20°C		
	Copper Conductor (plain)	Aluminium Wire Armour Cables with Stranded Copper Conductors	
		600/1000V	1900/3300V
mm^2	ohms/km	ohms/km	ohms/km
50	0.387	1.3	0.75
70	0.268	0.75	0.67
95	0.193	0.67	0.61
120	0.153	0.61	0.42
150	0.124	0.42	0.39
185	0.0991	0.38	0.37
240	0.0754	0.34	0.34
300	0.0601	0.31	0.31
400	0.0470	0.22	0.22
500	0.0366	0.20	0.20
630	0.0283	0.18	0.18
800	0.0221	0.13	0.13
1000	0.0176	0.12	0.12

Armour Resistances

Max. DC Resistance of Conductor & Armour for 2, 3, 4 & 5 Core XLPE Insulated Cables Having Steel Wire Armour

XLPE/PVC/SWA/PVC Cables to BS5467
XLPE/LSF/SWA/LSF Cables to BS6724
MICA/XLPE/LSF/SWA/LSF Cables to BS7846

Nominal Conductor Area	Max Resistance per Km of Cable @ 20°C					
	Copper Conductor (plain)	Steel Wire Armour Cables with Stranded Copper Conductors				
		Two Core 600/1000V	Three Core 600/1000V	Three Core 1900/3300V	Four Core 600/1000V	Five-core 600/1000V
mm^2	ohms/km	ohms/km	ohms/km	ohms/km	ohms/km	ohms/km
1.5	12.1	10.2	9.5	-	8.8	8.2
2.5	7.41	8.8	8.2	-	7.7	6.8
4.0	4.61	7.9	7.5	-	6.8	6.2
6.0	3.08	7.0	6.7	-	4.3	3.9
10	1.83	6.0	4.0	-	3.7	3.4
16	1.15	3.7	3.5	1.9	3.1	3.2
25	0.727	3.7	2.5	1.7	2.3	1.8
35	0.524	2.6	2.3	1.8	2.0	1.6
50	0.387	2.3	2.0	1.3	1.8	1.1
70	0.268	2.0	1.8	1.2	1.2	0.94
95	0.193	1.4	1.3	1.1	1.1	–
120	0.153	1.3	1.2	0.76	0.76	–
150	0.124	1.2	0.78	0.71	0.68	–
185	0.0991	0.82	0.71	0.65	0.61	–
240	0.0754	0.73	0.63	0.59	0.54	–
300	0.0601	0.67	0.58	0.55	0.49	–
400	0.0470	0.59	0.52	0.50	0.35	–

Armour Resistances

Max. DC Resistance of Conductor & Armour for Auxiliary XLPE Insulated Cables Having Steel Wire Armour

XLPE/PVC/SWA/PVC Cables to BS5467
XLPE/LSF/SWA/LSF Cables to BS6724 600/1000V
MICA/XLPE/LSF/SWA/LSF Cables to BS7846 600/1000V

Nominal Conductor Area	Max Resistance per Km of Cable @ 20°C					
	Copper Conductor (plain)	Steel Wire Armour				
		Number of Cores*				
		7	12	19	27	37
mm²	ohms/km	ohms/km				
1.5	12.1	7.5	4.0	3.5	2.3	2.0
2.5	7.41	6.3	3.5	2.3	1.9	1.7
4.0	4.61	4.0	2.3	2.0	1.7	1.2

* For non-preferred sizes, the maximum resistance shall not be greater than that of the next lowest preferred number of cores.

Gross Cross-sectional Area of Armour for 2, 3 & 4 Core PVC Insulated Cables

PVC/PVC/SWA/PVC Cables to BS6346 and ENATS 09-6 600/1000V

Nominal Conductor Area	Gross cross-sectional area of round armour wires		
	Steel Wire Armour Cables with Stranded Copper Conductors		
	Two Core	Three Core	Four Core
mm²	mm²	mm²	mm²
1.5	15	16	17
2.5	17	19	20
4.0	20	22	34
6.0	22	34	38
10	40	42	46
16	46	50	72