

**Table 1**  
**Physical Parameters**  
 Relemac Aluminium/ Copper Conductor, PVC Insulated Unarmoured/ Armoured PVC Sheathed Four Core Cables

Nom Area	No of Wires		Nom. Thick of Insl	Thick of l/Sheath	Dimension of Armour		Thickness of Outer Sheath		Overall Diameter			Approximate Mass of Cable/Km								
	Al	Cu			Min	Wire	Strip	Unarmd		Armd		Unarmd	Armd		Unarmd		Armd			
mm <sup>2</sup>	No	No	mm	mm				mm	mm	mm	mm		mm	mm	mm	mm	mm	mm	Kg/Km	Kg/Km
					Al	Cu	Al					Cu								
4	1/7	1/7	1.00	0.30	1.40	-	1.80	1.24	1.24	-	15	17	-	290	400	520	620	-	-	
6	1/7	1/7	1.00	0.30	1.40	-	1.80	1.24	1.24	-	17	19	-	350	510	610	770	-	-	
10	1/7	7	1.00	0.30	1.60	4 x .8	1.80	1.24	1.40	1.40	19	21	19	440	710	790	1060	600	850	
16	7	7	1.00	0.30	1.60	4 x .8	2.00	1.40	1.40	1.40	21	23	21	550	950	950	1350	750	1100	
25	7	7	1.20	0.30	1.60	4 x .8	2.00	1.40	1.40	1.40	23	25	24	750	1350	1200	1800	950	1550	
35	7	7	1.20	0.30	1.60	4 x .8	2.00	1.40	1.56	1.40	26	28	26	900	1700	1450	2300	1150	2000	
50	7	7	1.40	0.40	2.00	4 x .8	2.20	1.56	1.56	1.56	29	32	30	1200	2300	2000	3100	1450	2550	
70	19	19	1.40	0.40	2.00	4 x .8	2.20	1.56	1.56	1.56	32	35	33	1500	3100	2400	4000	1850	3450	
95	19	19	1.60	0.40	2.00	4 x .8	2.40	1.72	1.72	1.56	37	40	38	2000	4200	3000	5250	2350	4600	
120	19	19	1.60	0.50	2.00	4 x .8	2.40	1.72	1.88	1.72	41	44	41	2400	5150	3500	6350	2800	5650	
150	19	19	1.80	0.50	2.50	4 x .8	2.60	1.88	2.04	1.88	45	49	45	2900	6350	4500	7950	3300	6800	
185	37	37	2.00	0.60	2.50	4 x .8	2.80	2.04	2.20	1.88	50	54	50	3600	7900	5350	9700	4000	8350	
240	37	37	2.20	0.60	2.50	4 x .8	3.00	2.20	2.36	2.20	56	60	57	4550	10200	6500	12250	5100	10800	
300	37	37	2.40	0.70	3.15	4 x .8	3.40	2.52	2.68	2.36	64	69	64	5650	12750	8500	15700	6200	13300	
400	61	61	2.60	0.70	3.15	4 x .8	3.60	2.68	2.84	2.52	70	75	71	7000	11610	10200	19350	7650	16750	
500	61	61	2.80	0.70	4.00	4 x .8	4.00	3.00	3.00	2.84	79	85	79	8950	20550	13550	25300	9600	21300	
630	91	91	3.40	0.70	4.00	4 x .8	4.00	3.00	3.00	3.00	89	95	89	11200	26250	16350	31450	11700	27050	

**Table 2**  
Electrical Parameters for Relemac Four Core PVC Insulated & PVC Sheathed Cables

Nom Area of Cond	Maximum D. C. Resistance at 20 Deg C		Approx A. C. Resistance at 70 Deg C		Reactance	Capacitance	Nominal Current Rating						Short Circuit Rating for 1 sec	
	Alum	Copper	Alum	Copper	At 50 Hz	of the Cable	Aluminium			Copper			Al	Cu
							Ground	Duct	Air	Ground	Duct	Air		
mm <sup>2</sup>	Ohm/Km	Ohm/Km	Ohm/Km	Ohm/Km	Ohm/Km	µF/Km	A	A	A	A	A	A	kA	
4	7.41	4.61	8.89	5.53	0.098	0.23	28	23	23	36	30	30	0.304	0.460
6	4.61	3.08	5.53	3.70	0.096	0.28	35	30	30	45	38	39	0.456	0.690
10	3.08	1.83	3.70	2.20	0.091	0.34	46	39	40	60	50	52	0.760	1.15
16	1.91	1.15	2.29	1.38	0.085	0.40	60	50	51	77	64	66	1.22	1.84
25	1.20	0.727	1.44	0.870	0.083	0.42	76	63	70	99	81	90	1.90	2.88
35	0.868	0.524	1.04	0.630	0.082	0.48	92	77	86	120	99	110	2.66	4.03
50	0.641	0.387	0.769	0.464	0.082	0.49	110	95	105	145	125	135	3.80	5.75
70	0.443	0.268	0.532	0.322	0.076	0.56	135	115	130	175	150	165	5.32	8.05
95	0.320	0.193	0.384	0.232	0.076	0.58	165	140	155	210	175	200	7.22	10.90
120	0.253	0.153	0.304	0.184	0.075	0.63	185	155	180	240	195	230	9.12	13.80
150	0.206	0.124	0.247	0.149	0.074	0.63	210	175	205	270	225	265	11.40	17.30
185	0.164	0.0991	0.197	0.119	0.074	0.64	235	200	240	300	255	305	14.10	21.30
240	0.125	0.0754	0.151	0.0912	0.073	0.67	275	235	280	345	295	355	18.20	27.30
300	0.100	0.0601	0.122	0.0733	0.073	0.68	295	305	260	315	385	335	400	34.50
400	0.0778	0.0470	0.0961	0.0580	0.072	0.70	335	290	375	425	360	435	30.40	46.00
500	0.0605	0.0366	0.0759	0.0459	0.072	0.70	370	320	425	470	390	520	38.00	57.50
630	0.0469	0.0283	0.0610	0.0368	0.072	0.70	405	350	480	555	470	675	47.90	72.50