

SINGLE CORE ALUMINIUM XLPE ARMoured & UNARMoured POWER CABLES

No of cores & cross sectional area	Min No of strand in conductor	Thickness of xlpe insulation		ARMoured								UNARMoured			Max D.C. Resistance at 20 c	Max A.C Resistance at 90	ARMoured		UNARMoured		CURRENT RATING	
				Nominal Dimensions of armour		Min.Thickness of pvc outer sheath		Overall Diameter (Approx) (nom)		Approx.Net Wt. of Cable		Thickness of pvc outer sheath	Approx Overall Diameter of cable	Approx Weight of cable			Approx Reactance at 50 Hz	Approx capacitance	Approx Reactance at 50 Hz	Approx capacitance	Direct in Ground	In Air
				U/A	ARMoured	Wire	Strip	wire	strip	Wire	Strip											
(MM)	(MM)	(MM)	(MM)	(MM)	(MM)	(MM)	(MM)	(MM)	MM	Kg/Km	Kg/Km	(MM)	(MM)	Kg/Km	Ohm/Km	Ohm/Km	Ohm/Km	mFd/Km	Ohm/Km	mFd/Km	Amps	Amps
1 X 4	1/3	0.70	1.00	1.40	-	1.24	-	10	-	120	-	1.80	7	70	7.41	9.48	0.152	0.22	0.136	0.29	-	-
1 X 6	1/3	0.70	1.00	1.40	-	1.24	-	11	-	130	-	1.80	8	80	4.61	5.90	0.144	0.26	0.128	0.34	48	45
1X10	1/7	0.70	1.00	1.40	-	1.24	-	12	-	150	-	1.80	9	90	3.08	3.94	0.133	0.31	0.118	0.42	62	61
1 X16	6	0.70	1.00	1.40	-	1.24	-	12	-	200	-	1.80	10	130	1.91	2.44	0.122	0.40	0.108	0.50	81	83
1X 25	6	0.90	1.20	1.40	-	1.24	-	14	-	250	-	1.80	11	150	1.20	1.54	0.116	0.40	0.102	0.52	99	115
1 X35	6	0.90	1.20	1.40	-	1.24	-	15	-	300	-	1.80	12	200	0.868	1.11	0.11	0.47	0.097	0.60	117	135
1 X50	6	1.00	1.30	1.40	-	1.24	-	16	-	360	-	1.80	14	250	0.641	0.82	0.103	0.50	0.092	0.63	138	170
1 X 70	12	1.10	1.40	1.40	-	1.24	-	18	-	450	-	1.80	16	350	0.443	0.567	0.099	0.55	0.088	0.68	168	210
1 X95	15	1.10	1.40	1.60	4 X0.80	1.40	1.40	21	19	600	500	1.80	18	450	0.320	0.411	0.097	0.64	0.085	0.79	204	255
1 X120	15	1.20	1.50	1.60	4 X0.80	1.40	1.40	22	21	700	600	1.80	19	500	0.253	0.325	0.093	0.67	0.082	0.79	230	300
1 X150	15	1.40	1.70	1.60	4 X0.80	1.40	1.40	24	23	800	750	2.00	21	650	0.206	0.265	0.091	0.67	0.082	0.79	265	342
1 X185	30	1.60	1.90	1.60	4 X0.80	1.40	1.40	26	25	950	900	2.00	24	800	0.164	0.211	0.09	0.67	0.082	0.79	295	385
1 X240	30	1.70	2.00	1.60	4 X0.80	1.40	1.40	29	27	1150	1050	2.00	26	950	0.125	0.162	0.086	0.72	0.079	0.84	340	450
1 X300	53	1.80	2.10	1.60	4 X0.80	1.56	1.56	32	30	1400	1300	2.00	29	1150	0.100	0.130	0.085	0.75	0.078	0.86	390	519
1 X400	53	2.00	2.40	2.00	4 X0.80	1.56	1.56	36	34	1850	1650	2.20	33	1500	0.0778	0.1023	0.085	0.75	0.077	0.88	450	605
1 X500	53	2.20	2.60	2.00	4 X0.80	1.56	1.56	40	37	2200	2000	2.20	36	1850	0.0605	0.0808	0.083	0.77	0.076	0.90	500	700
1 X630	53	2.40	2.80	2.00	4 X0.80	1.72	1.72	44	42	2750	2520	2.20	40	2350	0.0469	0.0648	0.082	0.81	0.075	0.94	555	809
1 X800	53	2.60	3.10	2.00	4 X0.80	1.88	1.72	49	46	3450	3150	2.40	44	2900	0.0367	0.0530	0.081	0.88	0.075	0.97	625	935
1X 1000	53	2.80	3.30	2.50	4 X0.80	2.04	1.88	54	50	4300	3850	2.60	48	3600	0.0291	0.0444	0.081	0.88	0.068	1.01	690	1065

SINGLE CORE COPPER XLPE ARMoured & UNARMoured POWER CABLES

No of cores & cross sectional area	Min No of Wires	Thickness of xlpe insulation		ARMoured								UNARMoured			Max D.C. Resistance at 20 c	Max A.C Resistance at 90	ARMoured		UNARMoured		CURRENT RATING	
				Nominal Dimensions of armour		Min.Thickness of pvc outer sheath		Overall Diameter (Approx)		Approx.Net Wt. of Cable		Thickness of pvc outer sheath	Approx Overall Diameter of cable	Approx Weight of cable			Approx Reactance at 50 Hz	Approx capacitance	Approx Reactance at 50 Hz	Approx capacitance	Direct in Ground	In Air
				U/A	ARMoured	Wire	Strip	wire	strip	Wire	Strip											
(MM)	(MM)	(MM)	(MM)	(MM)	(MM)	(MM)	(MM)	(MM)	MM	Kg/Km	Kg/Km	(MM)	(MM)	Kg/Km	Ohm/Km	Ohm/Km	Ohm/Km	mFd/Km	Ohm/Km	mFd/Km	Amps	Amps
1 X 4	1/3	0.70	1.00	1.40	-	1.24	-	10	-	150	-	1.80	7	90	4.61	5.90	0.152	0.22	0.136	0.29	48	45
1 X 6	1/3	0.70	1.00	1.40	-	1.24	-	11	-	170	-	1.80	8	110	3.08	3.94	0.144	0.26	0.128	0.34	60	57
1X10	1/7	0.70	1.00	1.40	-	1.24	-	12	-	220	-	1.80	9	160	1.83	2.34	0.133	0.31	0.118	0.42	80	77
1 X16	6	0.70	1.00	1.40	-	1.24	-	12	-	300	-	1.80	10	250	1.15	1.47	0.122	0.4	0.108	0.50	104	106
1X 25	6	0.90	1.20	1.40	-	1.24	-	14	-	400	-	1.80	11	350	0.727	0.931	0.116	0.4	0.102	0.52	130	145
1 X35	6	0.90	1.20	1.40	-	1.24	-	15	-	500	-	1.80	12	400	0.524	0.671	0.11	0.47	0.097	0.60	155	175
1 X50	6	1.00	1.30	1.40	-	1.24	-	16	-	650	-	1.80	14	550	0.387	0.495	0.103	0.5	0.092	0.63	185	215
1 X 70	12	1.10	1.40	1.40	-	1.24	-	18	-	850	-	1.80	16	750	0.268	0.343	0.099	0.55	0.088	0.68	225	270
1 X95	15	1.10	1.40	1.60	4 x0.80	1.40	1.40	21	19	1150	1100	1.80	18	1000	0.193	0.248	0.097	0.64	0.085	0.79	265	330
1 X120	18	1.20	1.50	1.60	4 x0.80	1.40	1.40	22	21	1400	1300	1.80	19	1250	0.153	0.197	0.093	0.67	0.082	0.79	300	380
1 X150	18	1.40	1.70	1.60	4 x0.80	1.40	1.40	24	23	1650	1600	2.00	21	1500	0.1240	0.159	0.091	0.67	0.082	0.79	335	430
1 X185	30	1.60	1.90	1.60	4 x0.80	1.40	1.40	26	25	2050	1950	2.00	24	1850	0.0991	0.127	0.09	0.67	0.082	0.79	380	495
1 X240	34	1.70	2.00	1.60	4 x0.80	1.40	1.40	29	27	2600	2500	2.00	26	2400	0.0754	0.0976	0.086	0.72	0.079	0.84	435	590
1 X300	34	1.80	2.10	1.60	4 x0.80	1.56	1.56	32	30	3200	3100	2.00	29	2950	0.0601	0.0778	0.085	0.75	0.078	0.86	490	670
1 X400	53	2.00	2.40	2.00	4 x0.80	1.56	1.56	36	34	4100	3900	2.20	33	3750	0.0470	0.0618	0.085	0.75	0.077	0.88	550	780
1 X500	53	2.20	2.60	2.00	4 x0.80	1.56	1.56	40	37	5100	4900	2.20	36	4750	0.0366	0.0489	0.083	0.77	0.076	0.90	610	900
1 X630	53	2.40	2.80	2.00	4 x0.80	1.72	1.72	44	42	6500	6300	2.20	40	6100	0.0283	0.0391	0.082	0.81	0.075	0.94	680	1020
1 X800	53	2.60	3.10	2.00	4 x0.80	1.88	1.72	49	46	8250	7950	2.40	44	7750	0.0221	0.0319	0.081	0.88	0.075	0.97	740	1140
1X 1000	53	2.80	3.30	2.50	4 x0.80	2.04	1.88	54	50	10300	9850	2.60	48	9650	0.0176	0.0268	0.081	0.88	0.068	1.01	780	1250

ARMoured CABLES

Cross-sectional view



UNARMoured CABLES

Cross-sectional view

