

SINGLE CORE POWER CABLES

**POLARIS - SINGLE CORE POWER MULTISTRANDED COPPER / ALUMINIUM CONDUCTOR, ARMoured & UNARMoured, PVC INSULATED & SHEATHED CABLES
1100 V AS PER IS-1554 (1)**

CABLE SIZE	No of Cond. Wires	Thick of PVC Insul. (Nom.)		Dia. Of Armour Wire Alu.	Thick of Outer Sheath (Min.)		Approx. Overall Diameter		Approx. Net Wt. of Cable				Max. D.C. resistance at 20°C		Approx. A.C. resistance at 70°C		Approx. reactance at 50 Hz		Approx. capacitance per phase		Current Rating						Short Circuit rating for 1 sec.	
		Arm.	Unarm.		Arm.	Unarm.	Arm.	Unarm.	Arm	Unarm	Arm.	Unarm.	Arm.	Unarm.	Arm.	Unarm.	Arm.	Unarm.	Direct in Ground	In Duct	In Air							
		Sq.mm	No.	mm	mm	mm	mm	mm	mm	mm	mm	Kg/Km	Kg/Km	Ohm/Km	Ohm/Km	Ohm/Km	Ohm/Km	Ohm/Km	mf/Km	Amps	Amps	Amps	Kilo Amps					
	Cu/Al	Cu/Al	Cu/Al	Cu/Al	Cu/Al	Cu/Al	Cu/Al	Cu/Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu/Al	Cu/Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al		
4.00 MM ²	7	1.30	1.00	1.40	1.24	1.80	11.05	8.75	176	151	117	92	4.61	7.41	5.52	8.89	0.158	0.158	0.47	0.47	39	31	38	30	35	27	0.460	0.304
6.00 MM ²	7	1.30	1.00	1.40	1.24	1.80	11.60	9.30	206	168	143	105	3.08	4.61	3.69	5.53	0.148	0.148	0.56	0.56	49	39	48	37	44	35	0.690	0.456
10.0 MM ²	7	1.30	1.00	1.40	1.24	1.80	12.55	10.25	264	201	193	130	1.83	3.08	2.19	3.70	0.138	0.138	0.67	0.67	65	51	64	51	60	47	1.150	0.760
16.0 MM ²	7	1.30	1.00	1.40	1.24	1.80	13.60	11.30	340	240	261	161	1.15	1.91	1.38	2.29	0.128	0.128	0.81	0.81	85	66	83	65	82	64	1.840	1.220
25.0 MM ²	7	1.50	1.20	1.40	1.24	1.80	15.30	13.00	467	310	374	217	0.727	1.200	0.87	1.44	0.120	0.120	0.87	0.87	110	86	110	84	110	84	2.880	1.900
35.0 MM ²	7	1.50	1.20	1.40	1.24	1.80	16.45	14.15	581	363	479	261	0.524	0.868	0.627	1.040	0.114	0.114	1.00	1.00	135	100	125	100	130	105	4.030	2.660
50.0 MM ²	19	1.70	1.40	1.40	1.40	1.80	18.80	16.20	786	473	654	341	0.387	0.641	0.463	0.770	0.110	0.110	1.03	1.03	155	120	150	115	165	130	5.750	3.800
70.00 MM ²	19	1.70	1.40	4 x 0.80	1.40	1.80	19.30	17.90	1115	680	859	423	0.268	0.443	0.321	0.530	0.103	0.103	1.21	1.21	190	140	175	135	205	155	8.050	5.320
95.0 MM ²	19	1.90	1.60	4 x 0.80	1.40	2.00	21.50	20.50	1425	833	1150	558	0.193	0.320	0.231	0.380	0.010	0.010	1.27	1.27	220	175	200	155	245	190	10.900	7.220
120.0 MM ²	37	1.90	1.60	4 x 0.80	1.40	2.00	23.05	22.05	1702	954	1401	653	0.153	0.253	0.184	0.300	0.096	0.096	1.42	1.42	250	195	220	170	280	220	13.800	9.120
150.0 MM ²	37	2.10	1.80	4 x 0.80	1.40	2.00	25.15	24.15	2058	1122	1723	787	0.124	0.206	0.149	0.250	0.094	0.094	1.42	1.42	280	220	245	190	320	250	17.300	11.400
185.0 MM ²	37	2.30	2.00	4 x 0.80	1.56	2.00	27.60	26.30	2481	1327	2092	939	0.0991	0.1640	0.120	0.200	0.092	0.092	1.44	1.44	305	240	260	210	370	290	21.300	14.100
240.0 MM ²	61	2.50	2.20	4 x 0.80	1.56	2.00	30.55	29.20	3110	1607	2669	1166	0.0754	0.1250	0.0912	0.1500	0.090	0.090	1.53	1.53	345	270	285	225	425	335	27.300	18.200
300.0 MM ²	61	2.70	2.40	4 x 0.80	1.56	2.20	33.30	32.35	3764	1892	3306	1435	0.0601	0.1000	0.074	0.1200	0.088	0.088	1.56	1.56	375	295	310	245	475	380	34.500	22.800
400.0 MM ²	61	3.00	2.60	4 x 0.80	1.72	2.20	37.70	36.30	4886	2386	4325	1824	0.0470	0.0778	0.0592	0.0934	0.088	0.088	1.56	1.56	400	325	335	275	550	435	46.000	30.400

Notes : Colour Code

1) Red, Yellow, Blue or Black