POLYCAB®

PVC INSULATED HEAVY DUTY CABLES

650/1100 V.

The Backbone of Solid Enterprises

ISO 9001:2000

"POLYCAB" 1.1 KV TWIN CORE, ALUMINIUM CONDUCTOR, PVC INSULATED, INNER SHEATHED, ARMOURED PVC SHEATHED CABLES CONFORMING TO IS: 1554 (PART I) AMENDED UPTO DATE

Nominal cross sectional area	Nominal thickness of insulation	Minimum thickness of Inner sheath	ARMOUR		Minimum thickness of outer sheath	Approx. overall diameter	Approx. weight of cable	Max. DC conductor resistance at 20° C	CURRENT RATINGS		
			Galv. round steel wire nominal diameter	Galv. flat steel strip nominal thickness					Direct in Ground	In Ducts	In Air
Sq. mm	mm	mm	mm	mm	mm	mm	Kg/Km	Ohm/Km	Amps.	Amps.	Amps.
*1.5	0.8	0.3	1.4	—	1.24	12.2	320	18.1000	18	16	16
*2.5	0.9	0.3	1.4	—	1.24	13.4	380	12.1000	25	21	21
*4.0	1.0	0.3	1.4	—	1.24	14.7	450	7.4100	32	27	27
*6.0	1.0	0.3	1.4	—	1.24	15.8	500	4.6100	40	34	35
*10	1.0	0.3	1.4	—	1.24	17.9	600	3.0800	55	45	47
16	1.0	0.3	—	0.8	1.40	17.0	500	1.9100	70	58	59
25	1.2	0.3	—	0.8	1.40	20.1	650	1.2000	90	76	78
35	1.2	0.3	—	0.8	1.40	21.7	750	0.8680	110	92	99
50	1.4	0.3	—	0.8	1.40	24.5	950	0.6410	135	115	125
70	1.4	0.3	—	0.8	1.56	27.1	1150	0.4430	160	140	150
95	1.6	0.4	—	0.8	1.56	30.8	1460	0.3200	190	170	185
120	1.6	0.4	—	0.8	1.56	32.9	1670	0.2530	210	190	210
150	1.8	0.4	—	0.8	1.72	36.3	2010	0.2060	240	210	240
185	2.0	0.5	—	0.8	1.88	40.3	2450	0.1640	275	240	275
240	2.2	0.5	—	0.8	2.04	44.8	2950	0.1250	320	275	325
300	2.4	0.6	—	0.8	2.20	49.6	3560	0.1000	355	305	365
400	2.6	0.7	—	0.8	2.36	55.9	4500	0.0778	385	345	420
500	3.0	0.7	—	0.8	2.68	62.5	5600	0.0605	410	370	450

"POLYCAB" 1.1 KV THREE CORE, ALUMINIUM CONDUCTOR, PVC INSULATED, INNER SHEATHED, ARMOURED PVC SHEATHED CABLES CONFORMING TO IS: 1554 (PART I) AMENDED UPTO DATE

*1.5	0.8	0.30	1.4	—	1.24	12.7	375	18.1000	16	14	13
*2.5	0.9	0.30	1.4	—	1.24	14.0	425	12.1000	21	18	18
*4.0	1.0	0.30	1.4	—	1.24	15.6	500	7.4100	28	23	23
*6.0	1.0	0.30	1.4	—	1.24	17.3	575	4.6100	35	30	30
*10	1.0	0.30	1.4	—	1.40	19.0	700	3.0800	46	39	40
16	1.0	0.30	—	0.80	1.40	19.3	650	1.9100	60	50	51
25	1.2	0.30	—	0.80	1.40	22.0	800	1.2000	76	63	70
35	1.2	0.30	—	0.80	1.40	24.0	950	0.8680	92	77	86
50	1.4	0.30	—	0.80	1.56	27.6	1200	0.6410	110	95	105
70	1.4	0.40	—	0.80	1.56	30.8	1500	0.4430	135	115	130
95	1.6	0.40	—	0.80	1.56	34.6	1900	0.3200	165	140	155
120	1.6	0.40	—	0.80	1.72	37.5	2240	0.2530	185	155	180
150	1.8	0.50	—	0.80	1.88	41.9	2700	0.2060	210	175	205
185	2.0	0.50	—	0.80	1.88	45.6	3200	0.1640	235	200	240
240	2.2	0.60	—	0.80	2.20	51.6	3990	0.1250	275	235	280
300	2.4	0.60	—	0.80	2.36	56.7	4850	0.1000	305	260	315
400	2.6	0.70	—	0.80	2.52	64.1	6100	0.0778	335	290	375
500	3.0	0.70	—	0.80	2.84	71.5	7600	0.0605	350	310	410

"POLYCAB" 1.1 KV FOUR CORE, ALUMINIUM CONDUCTOR, PVC INSULATED, INNER SHEATHED, ARMOURED PVC SHEATHED CABLES CONFORMING TO IS: 1554 (PART I) AMENDED UPTO DATE

*1.5	0.8	0.3	1.4	—	1.24	15.0	400	18.1000	16	14	13
*2.5	0.9	0.3	1.4	—	1.24	16.5	480	12.1000	21	18	18
*4.0	1.0	0.3	1.4	—	1.24	18.0	550	7.4100	28	23	23
*6.0	1.0	0.3	1.4	—	1.24	19.5	650	4.6100	35	30	30
*10	1.0	0.3	—	0.8	1.40	20.0	660	3.0800	46	39	40
16	1.0	0.3	—	0.8	1.40	23.0	750	1.9100	60	50	51
25	1.2	0.3	—	0.8	1.40	23.7	950	1.2000	76	63	70
35	1.2	0.3	—	0.8	1.40	25.9	1165	0.8680	92	77	86
50	1.4	0.4	—	0.8	1.56	30.4	1540	0.6410	110	95	105
70	1.4	0.4	—	0.8	1.56	33.5	1800	0.4430	135	115	130
95	1.6	0.4	—	0.8	1.72	38.1	2400	0.3200	165	140	155
120	1.6	0.5	—	0.8	1.88	41.9	2800	0.2530	185	155	180
150	1.8	0.5	—	0.8	1.88	45.9	3350	0.2060	210	175	205
185	2.0	0.6	—	0.8	2.04	50.9	4000	0.1640	235	200	240
240	2.2	0.6	—	0.8	2.36	57.1	5050	0.1250	275	235	280
300	2.4	0.7	—	0.8	2.52	63.2	6200	0.1000	305	260	315
400	2.6	0.7	—	0.8	2.84	71.4	7850	0.0778	335	290	375
500	3.0	0.7	—	0.8	3.00	79.2	9600	0.0605	350	310	410

** If required, these sizes can be offered with standard conductors also.*

THE ABOVE DATA IS INDICATIVE AND MAY BE REVISED WITHOUT PRIOR INFORMATION

"POLYCAB" 1.1 KV 3 1/2 CORE, ALUMINIUM CONDUCTOR, PVC INSULATED, INNER SHEATHED, ARMOURED PVC SHEATHED CABLES CONFORMING TO IS: 1554 (PART I) AMENDED UPTO DATE

Nominal cross sectional area		Nominal thickness of insulation		Minimum thickness of inner sheath	ARMOUR Galv. flat steel strip nominal thickness	Minimum thinckness of outer sheath	Approx. overall diameter	Approx. weight of cable	Max. DC conductor resistance at 20° C		CURRENT RATINGS		
Main	Neutral	Main	Neutral						Main	Neutral	Direct in Ground	In Ducts	In Air
Sq. mm	Sq. mm	mm	mm	mm	mm	mm	mm	Kg/Km	Ohm/km	Ohm/km	Amps.	Amps.	Amps.
25	16	1.2	1.0	0.3	0.8	1.40	23.1	900	1.200	1.910	76	63	70
35	16	1.2	1.0	0.3	0.8	1.40	24.9	1030	0.868	1.910	92	77	86
50	25	1.4	1.2	0.3	0.8	1.56	28.8	1350	0.641	1.200	100	95	105
70	35	1.4	1.2	0.4	0.8	1.56	32.2	1725	0.443	0.868	135	115	130
95	50	1.6	1.4	0.4	0.8	1.56	36.3	2130	0.320	0.641	165	140	155
120	70	1.6	1.4	0.5	0.8	1.72	40.1	2580	0.253	0.443	185	155	180
150	70	1.8	1.4	0.5	0.8	1.88	43.8	3050	0.206	0.443	210	175	205
185	95	2.0	1.6	0.5	0.8	2.04	48.4	3650	0.164	0.320	235	200	240
240	120	2.2	1.6	0.6	0.8	2.20	54.3	4580	0.125	0.253	275	235	280
300	150	2.4	1.8	0.6	0.8	2.36	59.7	5500	0.100	0.206	305	260	315
400	185	2.6	2.0	0.7	0.8	2.68	67.6	7000	0.0778	0.164	335	290	375
500	240	3.0	2.2	0.7	0.8	2.84	75.2	8600	0.0605	0.125	350	310	410

"POLYCAB" 1.1 KV , ANNEALED HIGH CONDUCTIVITY SOLID COPPER CONDUCTOR, 1.5 SQ. MM, PVC INSULATED, INNER SHEATHED, ARMOURED/UNARMOURED PVC SHEATHED CONTROL CABLES CONFORMING TO IS : 1554 (PART I) AMENDED UPTO DATE

Number of cores	Nominal thickness of insulation	Min. thickness of Inner sheath	ARMOUR Galv. round steel wire nom. dia.	ARMOUR Galv. flat steel strip nom. thick.	Nominal sheath thickness Unarmoured	Minimum sheath thickness Armoured	Approx. overall diameter Unarmoured	Approx. overall diameter Armoured	Approx. weight of cable Unarmoured	Approx. weight of cable Armoured	Max. DC conductor resistance at 20° C	CURRENT RATINGS Direct in Ground	In Ducts	In Air
	mm	mm	mm	mm	mm	mm	mm	mm	Kg/Km	Kg/Km	Ohm/Km	Amps.	Amps.	Amps.
2	0.8	0.3	1.4	—	1.80	1.24	10.20	13.38	130	350	12.1	23	20	20
3	0.8	0.3	1.4	—	1.80	1.24	10.70	13.88	160	400	12.1	21	17	17
4	0.8	0.3	1.4	—	1.80	1.24	11.50	14.68	190	450	12.1	21	17	17
5	0.8	0.3	1.4	—	1.80	1.24	12.45	15.55	225	500	12.1	21	17	17
6	0.8	0.3	1.4	—	1.80	1.24	13.20	16.48	250	550	12.1	15	13	13
7	0.8	0.3	1.4	—	1.80	1.24	13.20	16.48	265	565	12.1	14	13	13
10	0.8	0.3	1.4	—	1.80	1.40	16.20	18.70	350	750	12.1	13	11	11
12	0.8	0.3	—	0.8	1.80	1.24	17.80	19.20	400	650	12.1	12	10	10
14	0.8	0.3	—	0.8	1.80	1.40	17.90	19.97	450	760	12.1	11	10	10
16	0.8	0.3	—	0.8	1.80	1.40	19.25	20.87	500	800	12.1	11	9	9
19	0.8	0.3	—	0.8	2.00	1.40	20.00	21.80	600	850	12.1	10	9	9
24	0.8	0.3	—	0.8	2.00	1.40	23.00	24.90	725	1050	12.1	9	8	8
30	0.8	0.3	—	0.8	2.00	1.40	24.50	26.17	860	1200	12.1	9	7	7
37	0.8	0.3	—	0.8	2.00	1.40	26.00	28.0	1050	1400	12.1	8	7	7
61	0.8	0.4	—	0.8	2.20	1.56	33.00	34.72	1650	2100	12.1	7	6	6

"POLYCAB" 1.1 KV , ANNEALED HIGH CONDUCTIVITY SOLID COPPER CONDUCTOR, 2.5 SQ. MM, PVC INSULATED, INNER SHEATHED, ARMOURED/UNARMOURED PVC SHEATHED CONTROL CABLES CONFORMING TO IS : 1554 (PART I) AMENDED UPTO DATE

2	0.9	0.3	1.4	—	1.8	1.24	10.68	14.58	160	425	7.41	32	27	27
3	0.9	0.3	1.4	—	1.8	1.24	11.40	15.17	225	475	7.41	27	24	24
4	0.9	0.3	1.4	—	1.8	1.24	11.50	16.13	250	530	7.41	27	24	24
5	0.9	0.3	1.4	—	1.8	1.24	14.10	17.49	300	600	7.41	27	24	24
6	0.9	0.3	1.4	—	1.8	1.24	15.40	18.28	340	675	7.41	20	18	18
7	0.9	0.3	1.4	—	1.8	1.24	15.40	18.28	375	700	7.41	20	17	17
10	0.9	0.3	—	0.8	1.8	1.40	19.00	21.10	500	780	7.41	18	15	15
12	0.9	0.3	—	0.8	2.0	1.40	20.00	21.69	600	850	7.41	17	14	14
14	0.9	0.3	—	0.8	2.0	1.40	20.90	22.62	650	950	7.41	16	13	13
16	0.9	0.3	—	0.8	2.0	1.40	22.10	23.69	750	1050	7.41	15	13	13
19	0.9	0.3	—	0.8	2.0	1.40	23.00	24.80	850	1150	7.41	14	12	12
24	0.9	0.3	—	0.8	2.0	1.40	26.60	28.82	1050	1400	7.41	13	11	11
30	0.9	0.3	—	0.8	2.0	1.56	28.40	30.34	1250	1700	7.41	12	10	10
37	0.9	0.4	—	0.8	2.2	1.56	31.00	32.72	1550	2000	7.41	11	10	10
61	0.9	0.4	—	0.8	2.2	1.56	38.40	40.44	2450	3100	7.41	9	8	8

** If required, these sizes can be offered with standard conductors also.*

CONDUCTOR RESISTANCE OF PLAIN COPPER CONDUCTORS USED FOR HEAVY DUTY CABLES AS PER IS:8130-1984

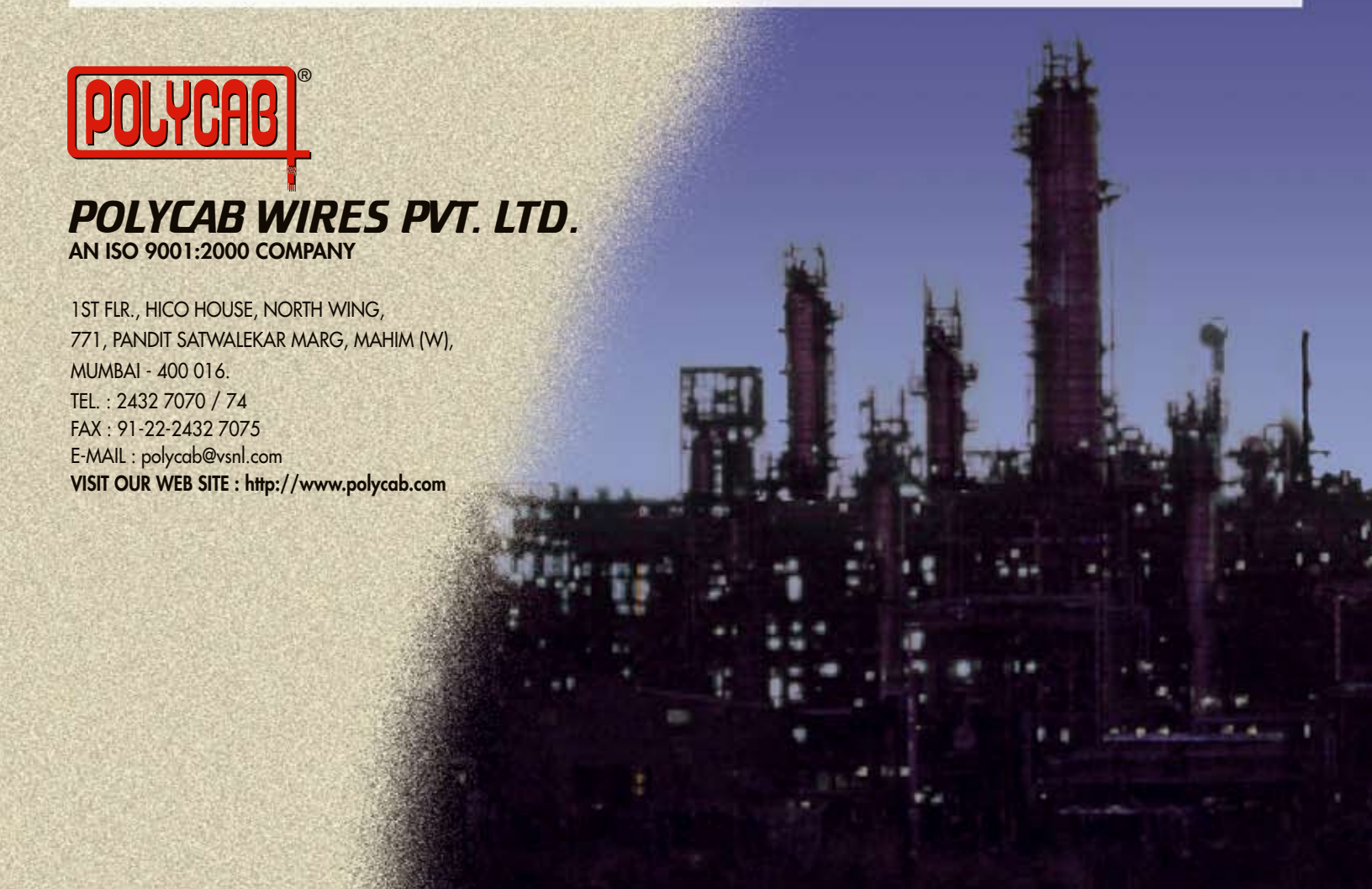
Size in sq. mm	Conductor Construction	Max. cond. resistance in ohm /km at 20°C	Size in sq. mm	Conductor Construction	Max. cond. resistance in ohm/km at 20° C
		Single core & Multi core			Single core & Multi core
1.5*	1/1.38	12.100	120	37/2.03	0.153
2.5*	1/1.78	7.410	150	37/2.24	1.124
4.0*	1/2.24	4.610	185	37/2.50	0.0991
6.0*	1/2.76	3.080	240	61/2.24	0.0754
10	7/1.35	1.830	300	61/2.50	0.0601
16	7/1.70	1.150	400	61/2.85	0.0470
25	7/2.14	0.727	500	61/3.20	0.0366
35	7/2.50	0.524	630	91/3.00	0.0283
50	7/3.00	0.387	—	—	—
70	19/2.14	0.268	800	127/2.83	0.0221
95	19/2.50	0.193	1000	127/3.16	0.0176

** Solid Conductor*

CURRENT RATING OF "POLYCAB" COPPER ARMOURED/UNARMOURED CABLES 650/1100 V GRADE IN AIR

Area Sq. mm	Twin Core Amp.	3, 3½, 4 Core Amp.	Area Sq. mm	Twin Core Amp.	3, 3½, 4 Core Amp
1.5	20	17	70	195	165
2.5	27	24	95	230	200
4	35	30	120	265	235
6	45	39	150	305	265
10	60	52	185	350	305
16	78	66	240	410	355
25	105	90	300	465	400
35	125	110	400	530	455
50	155	135	—	—	—

THE ABOVE DATA IS INDICATIVE AND MAY BE REVISED WITHOUT PRIOR INFORMATION
POLYCAB WILL NOT BE LIABLE FOR ANY DAMAGES ARISING OUT OF INCORRECT APPLICATION



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