

**POLYCAB**®

**PVC INSULATED  
HEAVY DUTY CABLE**

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 sectional area nominal diameter	nominal thickness mm	Minimum thickness mm	Minimum galv. flat mm	Minimum galv. of outer mm	arMour approx. thickness mm	approx. overall weight kg/km	Max. dc resistance at 20° c ohm/km	ratings								
								conductor direct in cable	in ground	ducts	air					
*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 SUBJECT TO MODIFICATION



**“polycab” 1.1 kv 3 core, aluminium conductor, pvc insulated, inner sheathed,  
armoured pvc sheathed cables conforming to is: 1554 (part i) amended upto date**

armour														
nominal cross sectional area of strip of Main sheath	nominal thickness of insulation	Minimum thickness of galv. flat steel	Minimum thickness of galv. flat steel	Minimum thickness of galv. flat steel	Minimum thickness of galv. flat steel	Minimum thickness of galv. flat steel	Minimum thickness of galv. flat steel	Minimum thickness of galv. flat steel	Minimum thickness of galv. flat steel	Minimum thickness of galv. flat steel	Minimum thickness of galv. flat steel	Minimum thickness of galv. flat steel	Minimum thickness of galv. flat steel	Minimum thickness of galv. flat steel
sq. mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
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**

armour														
number of cores	nominal thickness of insulation	Min. thickness of galv. strip	nominal thickness of galv. strip	Minimum thickness of galv. strip	Minimum thickness of galv. strip	Minimum thickness of galv. strip	Minimum thickness of galv. strip	Minimum thickness of galv. strip	Minimum thickness of galv. strip	Minimum thickness of galv. strip	Minimum thickness of galv. strip	Minimum thickness of galv. strip	Minimum thickness of galv. strip	Minimum thickness of galv. strip
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
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.

THE ABOVE DATA IS INDICATIVE AND MAY BE SUBJECT TO CHANGE WITHOUT NOTICE



**conductor resistance of plain copper conductors used for heavy duty cables as per is:8130-1984**

in ohm/km at 20° c size in sq. mm construction	in ohm/km at 20° c conductor		Max. cond. resistance	
	single core & Multi core	Multi core	size in sq. mm construction	conductor single 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**

sq. mm	area twin core 3, 3		1/2, 4 core area twin core 3, 3		1/2, 4 core
	amp.	amp.	sq. mm	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 IS INDICATIVE AND MAY BE REVISED WITHOUT PRIOR INFORMATION POLYCAB WILL NOT BE LIABLE FOR ANY DAMAGES ARISING OUT OF INCORRECT APPL

®

**RAVI CHHABRIA  
RAMESH CABLE COPRN.**

**461 BUDHWAR PETH,  
NEAR PASODIYA VITHOBA TEMPLE  
PUNE 411 002  
PH NO 020-24454590,2449602 1/2, 24459241/2  
MOBILE 9822048581**

