

POLYCOS

**ISO** 9001:2008

**ISO** 14001:2004

OHSAS 18001:2007

IS:694

POLYCHO

POLYCAR

POLYCAD

PVC FLEXIBLE WIRES & CABLES







Polycab is the market leader in Power, Control and Industrial Cables. Polycab is the fastest growing Company in cable Industry, offering the widest range of wires & cables. Polycab Single & Multi Core PVC Industrial Wires & Cables find a wide range of applications in the control panels, appliances, machine tools, machinery and are used in almost every industry.

Conductors: The conductors are drawn from bright electrolytic grade copper, annealed and bunched together (multistanded) as per class 5 of IS 8130: 1984

Insulation: Bunched conductors are insulated with specially formulated in-house developed PVC compound having high insulation resistance values. The insulation process is carried out on modern high speed extrusion lines with a high degree of accuracy, thus ensuring consistency in performance.

Sheathing: In case of multi core cables, the insulated cores are laid up to form the core assembly. Sheathing is provided with specially formulated PVC compound to facilitate stripping as also to withstand mechanical abrasion while in use.

Quality Control: You are assured of the highest quality standards in every Polycab product. Stringent quality control tests are applied at every stage from raw material to finished goods stage so as to give you the best product, meeting relevant quality standards.

Polycab PVC insulated Industrial Wires & Cables are manufactured as per IS 694: 1990, in Single Core sizes from 0.5 sq mm to 50 sq mm and Multi Core sheathed cables in sizes 0.5 sq mm to 4 sq mm upto 5 cores. These cable sizes are ISI marked and are duly approved by FIA/TAC. The remaining sizes generally conform to IS 694: 1990.

Cables as per BS 6004 : 1991 and BS 6500 : 1990 can be made available for export market. Special purpose Braided Cables/Screened instrumentation Cables are also available.

#### SINGLE CORE / MULTI CORE INDUSTRIAL CABLES AS PER 694:1990 **VOLTAGE GRADE UPTO 1100 VOLTS**

### TABLE NO. 1 POLYCAB BARE COPPER CONDUCTOR, PVC INSULATED UNSHEATHED 650/1100 V, SINGLE CORE INDUSTRIAL WIRE & CABLES FOR PANEL BOARD WIRING AS PER IS:694/1990 WITH ISI MARK (UP TO 50 SQ. MM)

Nominal Area in Sq. mm	Max. DC Resistance Ohm/Km At 20°C	Nominal Insulation Thickness in mm	Outer Dia (Approx)	Current Rating In Amps.	Nominal Area in Sq. mm	Max. DC Resistance Ohm/Km At 20°C	Nominal Insulation Thickness in mm	Outer Dia. (Approx)	Current Rating in Amps.
0.50	39.00	0.60	2.20	4	70	0.272	1.4	13.9	215
0.75	26.00	0.60	2.40	7	95	0.206	1.6	16.3	260
1.00	19.50	0.60	2.60	12	120	0.161	1.6	17.7	305
1.50	13.30	0.60	2.80	16	150	0.129	1.8	19.6	355
2.50	7.98	0.70	3.50	22	185	0.106	2.0	21.9	415
4.00	4.95	0.80	4.30	29	240	0.0801	2.2	24.7	500
6.00	3.300	0.80	4.80	37	300	0.0641	2.4	28.1	585
10.00	1.910	1.00	6.30	51	400	0.0486	2.6	32.2	695
16.00	1.210	1.00	7.30	68	500	0.0384	2.8	36.2	790
25.00	0.780	1.20	9.10	86	630	0.0287	2.8	39.8	905
35.00	0.554	1.20	10.10	110	800	0.0224	3.2	44.8	1050
50.00	0.386	1.40	11.90	145	1000	0.0178	3.2	50.0	1185

NOTE: Industrial Cables above 50 Sq. mm are not covered by IS:694 but are as per IS-2465. The conductor will be multistanded as per class 5 of IS 8130: 1984.





TABLE NO. 2 POLYCAB BARE COPPER CONDUCTOR, PVC INSULATED AND SHEATHED 650/1100 V, MULTICORE INDUSTRIAL CABLES AS PER IS:694/1990 WITH ISI MARK

Nominal Area in sq.mm	Max. DC resistance Ohm/Km at 20°C	nominal Insulation thickness mm	Core dia. mm	Nominal Sheath thickness in mm			- 0 i	Current Rating		
				2 core	3 core	4 core	2 core	3 core	4 core	
0.50	39.00	0.60	2.20	0.90	0.90	0.90	6.40	6.70	7.20	4
0.75	26.00	0.60	2.40	0.90	0.90	0.90	6.70	7.10	7.70	7
1.00	19.50	0.60	2.60	0.90	0.90	0.90	7.20	7.60	8.30	12
1.50	13.30	0.60	2.80	0.90	0.90	1.00	7.70	8.20	9.10	16
2.50	7.98	0.70	3.50	1.00	1.00	1.00	9.20	9.70	10.60	22
4.00	4.95	0.80	4.30	1.00	1.00	1.00	10.70	11.40	12.50	29

TABLE NO. 3 POLYCAB PLAIN COPPER CONDUCTOR, PVC INSULATED AND SHEATHED 650/1100 V, MULTICORE INDUSTRIAL CABLES

Nominal Area in Sq. mm	Max. DC resistance Ohm/Km at 20°C	Nominal Insultion thickness mm	Core dia. mm	Nominal Sheath thickness in mm			Overall Diameter in mm (Approx)			Current Rating
				2 core	3 core	4 core	2 core	3 core	4 core	
6	3.30	0.80	4.80	1.10	1.10	1.20	11.50	12.50	13.90	37
10	1.91	1.00	6.30	1.20	1.20	1.30	15.00	16.00	17.80	51
16	1.21	1.00	7.30	1.30	1.30	1.40	17.20	18.40	20.40	68
25	0.780	1.20	9.10	1.40	1.50	1.60	20.90	22.50	25.10	86
35	0.554	1.20	10.10	1.50	1.60	1.70	23.20	25.00	27.80	110
50	0.386	1.40	11.90	1.60	1.70	1.80	26.80	28.90	32.10	145
70	0.272	1.40	13.90	1.70	1.80	1.90	31.00	33.40	37.20	215
95	0.206	1.60	16.30	1.80	1.90	2.00	36.00	38.80	43.20	260



# PVC FLEXIBLE WIRES & CABLES

#### TABLE NO. 4

# POLYCAB MULTICORE ROUND INDUSTRIAL CABLE (6 CORES TO 30 CORES). GENERALLY CONFORMING TO IS: 694/1990

Area Sq. m  Conductor Dia in mm  Avg. Insu. thickness mm		0.50	0.75	1.00	1.50	2.50	4.00
		0.94	1.20	1.34	1.64	2.08	2.61
		0.60	0.60	0.60	0.60	0.70	0.80
Core Di	a in mm	2.20	2.50	2.60	2.90	3.50	4.30
No. of (	Cores						
	Avg. Sheath thickness mm	0.90	1.00	1.00	1.00	1.10	1.20
6	App. Overall Dia mm	8.50	9.50	9.80	10.70	12.70	15.30
T-MARK C	Avg. Sheath thickness mm	0.90	1.00	1.00	1.00	1.10	1.20
7	App. Overall Dia mm	8.50	9.50	9.80	10.70	12.70	15.30
	Avg. Sheath thickness mm	1.00	1.00	1.00	1.10	1.20	1.30
8	App. Overall Dia mm	9.30	10.40	10.70	11.90	14.10	16.90
	Avg. Sheath thickness mm	1.00	1.10	1.10	1.10	1.30	1.40
10	App. Overall Dia mm	10.80	12.20	12.60	13.80	16.60	20.00
12	Avg. Sheath thickness mm	1.00	1.10	1.10	1.10	1.30	1.40
	App. Overall Dia mm	11.20	12.60	13.00	14.30	17.20	20.70
14	Avg. Sheath thickness mm	1.10	1.10	1.10	1.20	1.30	1.40
	App. Overall Dia mm	12.00	13.30	13.70	15.20	18.10	21.80
1012	Avg. Sheath thickness mm	1.10	1.20	1.20	1.20	1.40	1.50
16	App. Overall Dia mm	12.60	14.20	14.60	16.00	19.30	23.20
	Avg. Sheath thickness mm	1.10	1.20	1.30	1.30	1.40	1.50
19	App. Overall Dia mm	13.20	14.90	15.60	17.10	20.30	24.50
	Avg. Sheath thickness mm	1.20	1.30	1.30	1.40	1.40	1.50
24	App. Overall Dia mm	15.60	17.60	18.20	20.20	23.80	28.80
	Avg. Sheath thickness mm	1.30	1.30	1.30	1.40	1.40	1.50
30	App. Overall Dia mm	16.80	18.70	19.30	21.50	25.70	30.60
	Max. Conductor Resistance in Ohm/Km at 20°C.	39.00	26.00	19.50	13.30	7.98	4.95
	Recommended Current Rating in AMP	4	7	12	16	22	29

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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