

POLYCAB WIRES PVT LTD

TECHNICAL DETAILS



PVC WIRES & FLEXIBLES

"POLYCAB" PLAIN COPPER CONDUCTOR, PVC INSULATED UNSHEATHED 650 / 1100 V, SINGLE CORE CABLE FOR PANEL BOARD WIRING AS PER IS : 694 / 1990 WITH ISI MARK (UPTO 50 SQ.MM)

| AREA IN SQ.MM | CONDUCTOR CONSTRUCTION IN GENERAL | MAX.DC RESISTANCE OHM/KM AT 20 DEGC | INSULATION THICKNESS IN MM | CABLE DIA (APPX.) | CURRENT RATING IN AMP. |
|---|-----------------------------------|-------------------------------------|----------------------------|-------------------|------------------------|
| 0.50 | 16/0.20 | 39.00 | 0.60 | 2.20 | 4 |
| 0.75 | 24/0.20 | 26.00 | 0.60 | 2.50 | 7 |
| 1.00 | 32/0.20 | 19.50 | 0.60 | 2.60 | 12 |
| 1.50 | 30/0.25 | 13.30 | 0.60 | 2.90 | 16 |
| 2.50 | 50/0.25 | 7.98 | 0.70 | 3.50 | 22 |
| 4.00 | 56/0.30 | 4.95 | 0.80 | 4.30 | 29 |
| 6 | 84/0.30 | 3.300 | 0.80 | 5.30 | 37 |
| 10 | 140/0.30 | 1.910 | 1.00 | 6.70 | 51 |
| 16 | 126/0.40 | 1.210 | 1.00 | 8.20 | 68 |
| 25 | 196/0.40 | 0.780 | 1.20 | 10.00 | 86 |
| 35 | 276/0.40 | 0.554 | 1.20 | 11.3 | 110 |
| 50 | 396/0.40 | 0.386 | 1.40 | 13.5 | 145 |
| NOTE: Cable above 50 sq.mm are not covered by IS : 694 But are as per IS : 2465 | | | | | |
| 70 | 360/0.50 | 0.272 | 1.60 | 15.5 | 161 |
| 95 | 485/0.50 | 0.206 | 1.80 | 18.5 | 200 |
| 120 | 608/0.50 | 0.161 | 2.00 | 20.9 | 225 |
| 150 | 750/0.50 | 0.129 | 2.00 | 22.5 | 240 |
| 185 | 925/0.50 | 0.106 | 2.20 | 24.6 | 300 |
| 240 | 1221/0.50 | 0.0801 | 2.20 | 27.6 | 425 |
| 300 | 1527/0.50 | 0.0641 | 2.40 | 32.2 | 475 |
| 400 | 2036/0.50 | 0.0486 | 2.60 | 35.7 | 550 |

"POLYCAB" PLAIN COPPER CONDUCTOR, PVC INSULATED AND SHEATHED 650 / 1100 V, MULTICORE FLEXIBLE CABLES AS PER IS : 694/1990 WITH ISI MARK

| AREA IN SQ.MM | CONSTRUCTION NO./DIA. | COND. DIA. IN MM | MAX. DC RESISTANCE OHM/KM AT 20 DEG.C | INSULATION THICKNESS NOMINAL MM | CORE DIA. MM | SHEATH THICKNESS IN MM NOMINAL | | | OVERALL DIAMETER IN MM APPROX. | | | CURRENT RATING AMP. |
|---------------|-----------------------|------------------|---------------------------------------|---------------------------------|--------------|--------------------------------|--------|--------|--------------------------------|--------|--------|---------------------|
| | | | | | | 2 core | 3 core | 4 core | 2 core | 3 core | 4 core | |
| 0.50 | 16/0.2 | 0.94 | 39.00 | 0.60 | 2.20 | 0.90 | 0.90 | 0.90 | 6.20 | 6.60 | 7.20 | 4 |
| 0.75 | 24/0.2 | 1.20 | 26.00 | 0.60 | 2.50 | 0.90 | 0.90 | 0.90 | 6.80 | 7.20 | 7.90 | 7 |
| 1.00 | 32/0.2 | 1.34 | 19.50 | 0.60 | 2.60 | 0.90 | 0.90 | 0.90 | 7.00 | 7.50 | 8.10 | 12 |
| 1.50 | 30/0.25 | 1.64 | 13.30 | 0.60 | 2.90 | 0.90 | 0.90 | 1.00 | 7.60 | 8.10 | 9.00 | 16 |
| 2.50 | 50/0.25 | 2.08 | 7.98 | 0.70 | 3.50 | 1.00 | 1.00 | 1.00 | 9.00 | 9.60 | 10.50 | 22 |
| 4.00 | 56/0.3 | 2.61 | 4.95 | 0.80 | 4.30 | 1.00 | 1.00 | 1.00 | 10.60 | 11.30 | 12.40 | 29 |

"POLYCAB" PLAIN COPPER CONDUCTOR, PVC INSULATED AND SHEATHED 650 / 1100 V, MULTICORE FLEXIBLE CABLES AS PER IS : 694/1990 WITH ISI MARK

| AREA IN SQ.MM | CONSTRUCTION NO./DIA. | COND. DIA. IN MM | MAX. DC RESISTANCE OHM/KM AT 20 DEG.C | INSULATION THICKNESS NOMINAL MM | CORE DIA. MM | SHEATH THICKNESS IN MM NOMINAL | | | OVERALL DIAMETER IN MM APPROX. | | | CURRENT RATING AMP. |
|---------------|-----------------------|------------------|---------------------------------------|---------------------------------|--------------|--------------------------------|--------|--------|--------------------------------|--------|--------|---------------------|
| | | | | | | 2 core | 3 core | 4 core | 2 core | 3 core | 4 core | |
| 6.00 | 84/0.3 | 3.5 | 3.30 | 0.80 | 5.10 | 1.15 | 1.15 | 1.40 | 12.60 | 13.40 | 15.20 | 37 |
| 10.00 | 140/0.3 | 4.60 | 1.91 | 1.00 | 6.60 | 1.40 | 1.40 | 1.40 | 16.00 | 17.00 | 18.80 | 51 |
| 16.00 | 126/0.4 | 6 | 1.21 | 1.00 | 8.00 | 1.40 | 1.40 | 1.40 | 18.80 | 20.10 | 22.20 | 68 |
| 25.00 | 196/0.4 | 7.6 | 0.78 | 1.20 | 10.00 | 2.00 | 2.00 | 2.00 | 24.00 | 25.60 | 28.20 | 86 |
| 35.00 | 276/0.4 | 8.7 | 0.554 | 1.20 | 11.10 | 2.00 | 2.00 | 2.00 | 26.30 | 28.00 | 31.00 | 110 |
| 50.00 | 396/0.4 | 10.6 | 0.386 | 1.40 | 13.40 | 2.00 | 2.00 | 2.00 | 30.90 | 33.00 | 36.50 | 145 |
| 70.00 | 360/0.5 | 12.3 | 0.272 | 1.40 | 15.10 | 2.00 | 2.20 | 2.40 | 34.20 | 37.00 | 41.00 | 215 |
| 95.00 | 485/0.5 | 14.7 | 0.206 | 1.60 | 17.90 | 2.20 | 2.40 | 2.40 | 40.20 | 43.50 | 47.80 | 260 |

"POLYCAB" MULTICORE ROUND FLEXIBLE CABLES (6 CORES TO 19 CORES) GENERALLY AS PER IS : 694/1990

| | | | | | | | |
|------------------------------|---|--------|--------|--------|---------|---------|--------|
| Area Sq.mm | | 0.50 | 0.75 | 1.00 | 1.50 | 2.50 | 4.00 |
| General Construction no./dia | | 16/0.2 | 24/0.2 | 32/0.2 | 30/0.25 | 50/0.25 | 56/0.3 |
| Conductor Dia. In MM | | 0.94 | 1.20 | 1.34 | 1.64 | 2.08 | 2.61 |
| Avg. Insu. Thickness in MM | | 0.60 | 0.60 | 0.60 | 0.60 | 0.70 | 0.80 |
| Core Dia in MM | | 2.20 | 2.50 | 2.60 | 2.90 | 3.50 | 4.30 |
| No. of Cores | | | | | | | |
| 6 | Avg. Sheath thickness MM | 0.90 | 1.00 | 1.00 | 1.00 | 1.10 | 1.20 |
| | App. Overall Dia MM | 8.50 | 9.50 | 9.80 | 10.70 | 12.70 | 15.30 |
| 7 | Avg. Sheath thickness MM | 0.90 | 1.00 | 1.00 | 1.00 | 1.10 | 1.20 |
| | App. Overall Dia MM | 8.50 | 9.50 | 9.80 | 10.70 | 12.70 | 15.30 |
| 8 | Avg. Sheath thickness MM | 1.00 | 1.00 | 1.00 | 1.10 | 1.20 | 1.30 |
| | App. Overall Dia MM | 9.30 | 10.40 | 10.70 | 11.90 | 14.10 | 16.90 |
| 10 | Avg. Sheath thickness MM | 1.00 | 1.10 | 1.10 | 1.10 | 1.30 | 1.40 |
| | 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 |
| 16 | Avg. Sheath thickness MM | 1.10 | 1.20 | 1.20 | 1.20 | 1.40 | 1.50 |
| | App. Overall Dia MM | 12.60 | 14.20 | 14.60 | 16.00 | 19.30 | 23.20 |
| 19 | Avg. Sheath thickness MM | 1.10 | 1.20 | 1.30 | 1.30 | 1.40 | 1.50 |
| | App. Overall Dia MM | 13.20 | 14.90 | 15.60 | 17.10 | 20.30 | 24.50 |
| 24 | Avg. Sheath thickness MM | 1.20 | 1.30 | 1.30 | 1.40 | 1.40 | 1.50 |
| | App. Overall Dia MM | 15.60 | 17.60 | 18.20 | 20.20 | 23.80 | 28.80 |
| 30 | Avg. Sheath thickness MM | 1.30 | 1.30 | 1.30 | 1.40 | 1.40 | 1.50 |
| | App. Overall Dia MM | 16.80 | 18.70 | 19.30 | 21.50 | 25.70 | 30.60 |
| | Max. Conductor Resistance in Ohm/km at 20 deg.C | 39.00 | 26.00 | 19.50 | 13.30 | 7.98 | 4.95 |
| | Recommended Current Rating in AMP | 4 | 7 | 12 | 16 | 22 | 29 |