



RPS CABLES PVT.LTD

BUILDING WIRES

FLEXIBLE CABLES

PANNEL WIRES,CAMARA CABLE

FS WIRES,CAT-5/6

SUBMERSIBLE CABLES

THERMOCOUPLE

SCREEN CABLE

INSTRUMENTATION CABLES

EPR/CSP SHEATHED RUBBER CABLE

**HT CABLE,LT POWER& CONTROL,HT/LT AB
CABLE**



“At RPS CABLES, we are focused on providing our customers quality products using the latest and updated state-of-the-art technology. We support our customers with outstanding and provide all necessary technical information and assistance.

Single and Multi-Core Flexible cables have been designed for wiring applications, and are suitable for use in office equipment, domestic appliances, kitchen utensils, lamps, devices, and any type of electrical/electronic equipment.

The conductor is made of plain annealed high purity Copper, excellent specific electrical conductivity, and superior mechanical flexibility.

Polyvinyl Chloride (PVC) is used for insulating and sheathing

as it is suitable for various flexible applications like high electrical, mechanical and thermal properties.

Upon request, RPS CABLES is also able to supply cables with special PVC Compounds suitable for continuous operating temperatures up to 105° C.

RPS CABLES products are being designed and manufactured complying with IS 694 and the most recent international standards including BS 6004, BS 6500, IEC 60227.

On your request cables can be supplied as per your project requirements.

Outer sheath (jacket) material is specially formulated to provide resistance against, oil, and moisture, and to provide mechanical strength without losing its flexibility.



with high
service
indoor
medical
having
material





- Conductor as per IS 8130: 1984.
- Number & diameter of conductor strands are for reference only and governed by conductor resistance.
- Insulated with Environment friendly lead free PVC compound.
- Generally conform to IS 694

“RPS CABLES” PLAIN COPPER CONDUCTOR, PVC INSULATED UNSHEATHED 650/1100V. SINGLE CORE CABLES FOR PANEL BOARD WIRING AS PER IS:694/1990 (UPTO 50 SQ. MM)

Area in sqmm	Conductor Construction in General	Insulation thickness in MM nominal	Cable dia approx.	Max. DC resistance Ohm/km at 20°C	Current Rating in Amp.	Area in sqmm	Conductor Construction in General	Insulation thickness in MM nominal	Cable dia approx.	Max. DC Resistance Ohm/km at 200C	Current Rating in Amp.
0.5	16/0.20	0.6	2.2	39.00	5	70	357 / 0.50	1.4	15.0	0.272	215
0.75	24/0.20	0.6	2.5	26.00	7	95	475/0.50	1.6	17.5	0.206	260
1.0	32/0.20	0.6	2.6	19.50	12	120	608/0.50	1.6	19.5	0.161	305
1.5	*22/0.30	0.6	2.9	13.30	16	150	756/0.50	1.8	22.0	0.129	355
2.5	**36/0.30	0.7	3.5	7.98	22	185	925/0.50	2.0	24.5	0.106	415
4	56/0.30	0.8	4.3	4.95	29	240	1221/0.50	2.2	28.0	0.0801	500
6	84/0.30	0.8	5.3	3.30	37	300	1517/0.50	2.4	30.0	0.0641	585
10	80/0.40	1.0	6.7	1.91	51	400	2013/0.50	2.6	34.5	0.0486	695
16	126/0.40	1.0	8.2	1.21	68	500	1769/0.60	2.8	39.0	0.0384	790
25	196/0.40	1.2	10.0	0.780	86	630	2220/0.60	3.0	43.5	0.0287	905
35	276/0.40	1.2	11.3	0.554	110	800	2821/0.60	3.2	49.0	0.0224	1050
50	396/0.40	1.4	13.5	0.386	145	1000	3538/0.60	3.4	53.0	0.0178	1185

NOTE : Cable above 50 Sq. mm are not covered by IS:694 But are as per IS-2465

* This size can be supplied in 30/0.25&48/0.2 construction, ** This size can be supplied in 50/0.25 &80/0.2 construction.

“RPS CABLES” PLAIN COPPER CONDUCTOR, PVC INSULATED AND SHEATHED 650/1100V, SINGLE CORE & MULTICORE FLEXIBLE CABLES AS PER IS:694/1990

Area in sqmm	Conductor Construction in General	Insulation thickness in MM nominal	Sheath Thickness (Nominal)				Overall Dimension(Approx)				Max. DC Resistance Ohm/km at 200C	Current Rating in Amp.
			1 CORE	2 CORE	3 CORE	4 CORE	1 CORE	2 CORE	3 CORE	4 CORE		
0.5	16/0.20	0.6	0.9	0.9	0.9	0.9	4.0	6.2	6.6	7.2	39.00	5
0.75	24/0.20	0.6	0.9	0.9	0.9	0.9	4.2	6.6	7.0	7.6	26.00	7
1.0	32/0.20	0.6	0.9	0.9	0.9	0.9	4.4	7.0	7.4	8.2	19.50	12
1.5	*22/0.30	0.6	0.9	0.9	0.9	1.0	4.6	7.4	8.0	8.6	13.30	15
2.5	**36/0.30	0.7	1.0	1.0	1.0	1.0	5.0	9.0	9.6	10.5	7.98	20
4	56/0.30	0.8	1.0	1.0	1.1	1.1	6.2	10.4	11.3	12.4	4.95	26
6	84/0.30	0.8	1.0	1.1	1.1	1.2	6.8	12.0	12.6	14.1	3.30	33
10	80/0.40	1.0	1.0	1.2	1.2	1.3	8.8	16.0	17.0	18.8	1.91	45
16	126/0.40	1.0	1.0	1.3	1.3	1.4	10.0	18.8	20.0	22.4	1.21	61
25	196/0.40	1.2	1.1	1.4	1.5	1.6	12.0	22.6	24.5	27.2	0.780	78
35	276/0.40	1.2	1.1	1.5	1.6	1.7	13.5	25.6	27.7	31.0	0.554	99
50	396/0.40	1.4	1.2	1.6	1.7	1.8	16.0	30.5	33.0	36.5	0.386	135

NOTE :* This size can be supplied in 30/0.25 & 48/0.2 construction, ** This size can be supplied in 50/0.25 & 80/0.2 construction.



❖ HEAT RESISTANT (HR) 105°C CABLES

- Insulation with specially formulated Heat resistant PVC compound is used to withstand 105°C which enable the cable to withstand overload.

Area in sqmm	Conductor Construction in General	Insulation thickness in MM nominal	Cable dia approx.	Max. DC resistance Ohm/km at 20°C	Current Rating Amp.	
					Unenclosed-Clipped directly to a surface or on cable tray	In Conduit / Trunking
0.75	24/0.20	0.6	2.5	26.0	8	7
1.0	14/0.30	0.7	2.7	18.1	14	13
1.5	22/0.30	0.7	3.1	12.1	18	16
2.5	36/0.30	0.8	3.7	7.41	24	20
4	56/0.30	0.8	4.3	4.95	32	26
6	84/0.30	0.8	5.0	3.30	42	35

❖ FLAME RETARDENT (FR)

- Insulation with double layer FR grade PVC compound for better insulation & Electricals properties.

Area in sqmm	Conductor Construction in General	Insulation thickness in MM nominal	Cable dia approx.	Max. DC resistance Ohm/km at 20°C	Current Rating Amp.	
					Unenclosed-Clipped directly to a surface or on cable tray	In Conduit / Trunking
0.75	24/0.20	0.6	2.5	26.0	8	7
1.0	14/0.30	0.7	2.7	18.1	14	13
1.5	22/0.30	0.7	3.1	12.1	18	16
2.5	36/0.30	0.8	3.7	7.41	24	20
4	56/0.30	0.8	4.3	4.95	32	26
6	84/0.30	0.8	5.0	3.30	42	35





❖ FLAME RETARDENT LOW SMOKE (FR-LSH)

- Insulation with specially formulated high temperature grade of Flame Retardant Low Smoke compound to restrict the spread of flame in fire situation. The smoke emitted by the burning cable is less compared to traditional cables. This ensure improved visibility for evacuation of trapped victims and facilitates fire fighting operation.

Area in sqmm	Conductor Construction in General	Insulation thickness in MM nominal	Cable dia approx.	Max. DC resistance Ohm/km at 20°C	Current Rating Amp.	
					Unenclosed-Clipped directly to a surface or on cable tray	In Conduit / Trunking
0.75	24/0.20	0.6	2.5	26.0	8	7
1.0	14/0.30	0.7	2.7	18.1	14	13
1.5	22/0.30	0.7	3.1	12.1	18	16
2.5	36/0.30	0.8	3.7	7.41	24	20
4	56/0.30	0.8	4.3	4.95	32	26
6	84/0.30	0.8	5.0	3.30	42	35

❖ ZERO HALOGEN FLAME RETARDENT (ZHFR)

- Insulation with specially formulated polymeric compound of zero halogen flame retardant is used. The performance of the cable in fire situation is exceptionally good. The insulation does not burn readily. The smoke is negligible, transparent, non-toxic. The victims trapped in fire do not suffocated and this facilitates fire fighting operations. Unlike PVC the smoke emitted is non-corrosive. Thus the electronics printed circuit boards, hard disks and other sensitive electronic equipment are unaffected.

Area in sqmm	Conductor Construction in General	Insulation thickness in MM nominal	Cable dia approx.	Max. DC resistance Ohm/km at 20°C	Current Rating Amp.	
					Unenclosed-Clipped directly to a surface or on cable tray	In Conduit / Trunking
0.75	24/0.20	0.6	2.5	26.0	8	7
1.0	14/0.30	0.7	2.7	18.1	14	13
1.5	22/0.30	0.7	3.1	12.1	18	16
2.5	36/0.30	0.8	3.7	7.41	24	20
4	56/0.30	0.8	4.3	4.95	32	26
6	84/0.30	0.8	5.0	3.30	42	35

- ❖ Each year fires result in thousands of fatalities with many more injuries / burns. The financial cost of the fires is huge. Ordinary cables contribute to fire by propagating flame of the burning cable from one area to another and liberate smoke, toxic gases and corrosive gases.

A wire that will continue to operate in the presence of fire keeping all critical systems running for necessary time & at the same time not propagating flame, very less smoke generation, toxic & corrosive gases.

Area in sqmm	Conductor Construction in General	Insulation thickness in MM nominal	Cable dia approx.	Max. DC resistance Ohm/km at 20°C	Current Rating Amp.	
					Unenclosed-Clipped directly to a surface or on cable tray	In Conduit / Trunking
0.75	24/0.20	0.6	2.7	26.0	9	8
1.0	14/0.30	0.7	3.2	18.1	15	14
1.5	22/0.30	0.7	3.5	12.1	20	18
2.5	36/0.30	0.8	4.2	7.41	27	23
4	56/0.30	0.8	4.8	4.95	36	30
6	84/0.30	0.8	5.8	3.30	46	39

1. Greater Current Carrying Capacity.
2. Higher Short Circuit Capacity.
3. No Overheating / Melting.
4. Resistant to Fire.
5. Circuit Integrity during a fire assuring operation of system .
6. Minimizes the Emission of Toxic Fumes for safeguard of human life.
7. Does not emit Corrosive Gases which lessen likelihood of damage to sensitive equipments.
8. Low Smoke allows humans for rapid evacuation.
9. Less Flame Spread diminishes spread of fire.
10. As per BS: 6387, BS: 7846, BS: 7655 Section 6.1, SPC Specification.

The Comparative Properties are explained by the following chart

Component	Normal PVC	Fire Retardant (FR)	Fire Retardant Low Smoke (FR-LSH)	Low Smoke Zero Halogen (LSZH / ZHFR)	Fire Survival (FS)
Oxygen Index of (ASTM-D-2863)	21 to 24	29 to 32	29 to 32	34 to 36	34 to 36
Temperature required to catch fire (with 21% oxygen) (ASTM-D-2863)	<150°C	>250°C	>250°C	>300°C	>300°C
Halogen Content(IEC 754-I)	32 to 37	30 to 37	<18	<0.5	<0.5
Visibility during burning (ASTM-D-2843)	5 to 10	5 to 10	>40	>95	>95
Flame Retardancy	Poor	Good	Good	Very Good	Very Good
Circuit Integrity (BS 6387)	No	No	No	No	Yes
Toxic Index	>5	>5	>5	<3	<3
Carbon mono oxide (%)	High	High	High	Low	Low

“RPS CABLES” MULTICORE ROUND FLEXIBLE CABLE (6 CORE TO 30 CORES)
GENERALL AS PER IS: 694/1990



Area in sqmm	Conductor Construction in General	Insulation thickness in mm (Nominal)	Sheath Thickness (Nominal)					Overall Dimension (Approx)					Max. DC Resistance Ohm/km at 200C	Current Rating Amp.	
			6 CORE	7 CORE	8 CORE	10 CORE	12 CORE	6 CORE	7 CORE	8 CORE	10 CORE	12 CORE		Unclipped directly to a surface or on cable tray	In Conduit / Trunking
0.5	16/0.20	0.6	0.9	0.9	1.0	1.0	1.0	8.5	8.5	9.3	10.8	11.2	39.00	4	4
0.75	24/0.20	0.6	1.0	1.0	1.0	1.1	1.1	9.5	9.5	10.4	12.2	12.6	26.00	7	7
1.0	32/0.20	0.6	1.0	1.0	1.1	1.1	1.1	9.8	9.8	10.7	12.6	13.0	19.50	12	11
1.5	*22/0.30	0.6	1.0	1.0	1.1	1.1	1.1	10.7	10.7	11.9	13.8	14.3	13.30	16	13
2.5	**36/0.30	0.7	1.1	1.1	1.2	1.3	1.3	12.7	12.7	14.1	16.6	17.2	7.98	22	18
4	56/0.30	0.8	1.2	1.2	1.3	1.4	1.4	15.3	15.3	16.9	20.0	20.7	4.95	29	24

Area in sqmm	Conductor Construction in General	Insulation thickness in mm (Nominal)	Sheath Thickness (Nominal)					Overall Dimension (Approx)					Max. DC Resistance Ohm/km at 20°C	Current Rating in Amp.	
			14 CORE	16 CORE	19 CORE	24 CORE	30 CORE	14 CORE	16 CORE	19 CORE	24 CORE	30 CORE		Unclipped directly to a surface or on cable tray	In Conduit / Trunking
0.5	16/0.20	0.6	1.1	1.1	1.1	1.2	1.3	12.0	12.6	13.2	15.6	16.8	39.00	4	4
0.75	24/0.20	0.6	1.1	1.2	1.2	1.3	1.3	13.3	14.2	14.9	17.6	18.7	26.00	7	7
1.0	32/0.20	0.6	1.1	1.2	1.3	1.3	1.3	13.7	14.6	15.6	18.2	19.3	19.50	12	11
1.5	*22/0.30	0.6	1.2	1.2	1.3	1.4	1.4	15.2	16.0	17.1	20.2	21.5	13.30	16	13
2.5	**36/0.30	0.7	1.3	1.4	1.4	1.4	1.4	18.1	19.3	20.3	23.8	25.7	7.98	22	18
4	56/0.30	0.8	1.4	1.5	1.5	1.5	1.5	21.8	23.2	24.5	28.8	30.6	4.95	29	24

NOTE : * This size can be supplied in 30/0.25 & 48/0.2 construction.

** This size can be supplied in 50/0.25 & 80/0.2 construction.

