



Flexible Multicore / Singlecore wires & cable as per IS - 694 (1990/2010)

Table-1 : Single core / Multicore flexible industrial cables as per IS 694 : 1990/2010, Voltage Grade upto 1100 / 750 volts

mm		Area Sq.	0.5	0.75	1.0	1.5	2.5	4.0	6.0	10.0	16.0	25.0	35.0	50.0
	No. & Size of Wire (Nom.)	No. / mm	16/2	24/2	32/2 OR 14/3	30/25 OR 22/3	50/25 OR 36/3	56/3	84/3	80/4 OR 140/3	126/4	196/4	276/4	396/4
CONDUCTOR	RESISTANCE (MAX.) @ 20°C	Ohms/km	39.0	26.0	19.5	13.3	7.98	4.95	3.30	1.91	1.21	0.780	0.554	0.386
	CURRENT RATING DC or AC	Amps	4	7	12	15	20	27	35	46	62	80	102	138
INSULATION	THICKNESS (Nom.)	mm	0.6	0.6	0.6	0.6	0.7	0.8	0.8	1.0	1.0	1.2	1.2	1.4
SINGLE CORE UN-SHEATHED	OVERALL DIAMETER (Approx.)	mm	2.00	2.30	2.45	2.75	3.50	4.10	4.75	6.30	7.25	8.80	10.35	12.25
SINGLE CORE SHEATHED	SHEATH THICKNESS (Nom.) OVERALL DIAMETER (Approx.)	mm	0.9 4.00	0.9 4.25	0.9 4.50	0.9 4.80	1.0 5.45	1.0 6.30						
TWIN FLAT SHEATHED	OVERALL WIDTH (Approx.) OVERALL HEIGHT (Approx.)	mm	6.2 4.0	6.7 4.25	- -	- -	- -	- -						
2 CORE	SHEATH THICKNESS (Nom.) OVERALL DIAMETER (Approx.)	mm	0.9 6.1	0.9 6.7	0.9 7.0	0.9 7.6	1.0 9.1	1.0 10.5						
3 CORE	SHEATH THICKNESS (Nom.) OVERALL DIAMETER (Approx.)	mm	0.9 6.4	0.9 7.1	0.9 7.4	0.9 8.0	1.0 9.6	1.0 11.4						
4 CORE	SHEATH THICKNESS (Nom.) OVERALL DIAMETER (Approx.)	mm	0.9 6.9	0.9 7.7	0.9 8.1	1.0 9.2	1.0 10.7	1.0 12.4						
5 CORE	SHEATH THICKNESS (Nom.) OVERALL DIAMETER (Approx.)	mm	0.9 7.5	0.9 8.3	1.0 9.1	1.0 9.9	1.0 11.7	1.1 13.8						

Note: The conductor construction given above is indicative only and will be such that all requirements of strand diameter and conductor resistance as per IS 694 and IS 8130 are met.

Table-2 : Single core flexible industrial cables generally conforming to IS 694 : 1990/2010, Voltage Grade upto 1100 / 750 volts

Description		70.0	95.0	120.0	150.0	185.0	240.0	
	No. & Size of Wire (Nom.)	No. / mm	360/5	475/5	608/5	750/5	925/5	1221/5
CONDUCTOR	RESISTANCE (MAX.) @ 20°C	Ohms/km	0.272	0.206	0.161	0.129	0.106	0.0801
	CURRENT RATING DC / AC	Amps	214	260	305	355	415	500
INSULATION	THICKNESS (Nom.)	mm	1.4	1.6	1.6	1.8	2.0	2.2
	OVERALL DIAMETER (Approx.)	mm	13.9	15.9	17.8	19.8	22.0	26.0



Table-3 : Flexible multicore industrial cables (6 cores to 19 cores) generally conforming to IS 694 : 1990 / 2010, Voltage Grade upto 1100 / 750 volts

Core	Description	0.5	0.75	1.0	1.5	2.5	4.0
6	SHEATH THICKNESS (Nom.) mm	0.9	1.0	1.0	1.0	1.1	1.2
	OVERALL DIAMETER (Approx.) mm	8.1	9.4	9.8	10.7	12.9	16.0
7	SHEATH THICKNESS (Nom.) mm	0.9	1.0	1.0	1.0	1.1	1.2
	OVERALL DIAMETER (Approx.) mm	8.1	9.4	9.8	10.7	12.9	16.0
8	SHEATH THICKNESS (Nom.) mm	1.0	1.0	1.0	1.1	1.2	1.3
	OVERALL DIAMETER (Approx.) mm	9.4	10.4	10.9	12.2	14.6	17.0
10	SHEATH THICKNESS (Nom.) mm	1.0	1.1	1.1	1.1	1.3	1.4
	OVERALL DIAMETER (Approx.) mm	10.5	11.9	12.5	13.7	16.7	19.5
12	SHEATH THICKNESS (Nom.) mm	1.0	1.1	1.1	1.1	1.3	1.4
	OVERALL DIAMETER (Approx.) mm	10.8	12.3	12.9	14.1	17.3	20.5
14	SHEATH THICKNESS (Nom.) mm	1.1	1.1	1.1	1.2	1.3	1.4
	OVERALL DIAMETER (Approx.) mm	11.5	12.8	13.5	15.0	18.1	22.5
16	SHEATH THICKNESS (Nom.) mm	1.1	1.2	1.2	1.2	1.4	1.5
	OVERALL DIAMETER (Approx.) mm	12.1	13.7	14.4	15.8	19.3	24.0
19	SHEATH THICKNESS (Nom.) mm	1.1	1.2	1.3	1.3	1.4	1.5
	OVERALL DIAMETER (Approx.) mm	12.7	14.4	15.1	16.8	20.3	25.5

Table-4 : Three & four flexible industrial cables for Voltage Grade upto 1100 / 750 volts

Description	6.0	10.0	16.0	25.0	35.0	50.0	70.0	95.0	120.0	
NO. & SIZE OF WIRE (No. / mm)	84 / 3	140 / 0.3 OR 80 / 4	226 / 3 OR 126 / 4	354 / 3 OR 196 / 4	495 / 3 OR 276 / 4	703 / 3 OR 396 / 4	360 / 5	475 / 5	608 / 5	
Conductor RESISTANCE (MAX.) @ 20°C (Ohms/Km)	3.30	1.91	1.21	0.78	0.554	0.386	0.272	0.206	0.161	
CURRENT RATING (Amps)	31	42	57	72	91	120	165	200	225	
Insulation THICKNESS (mm)	0.8	1.0	1.0	1.2	1.2	1.4	1.4	1.6	1.6	
3 Core	SHEATH THICKNESS (Nom.) (mm)	1.3	1.4	1.4	1.5	1.6	2.0	2.2	2.4	2.5
	OVERALL DIAMETER (Approx.) (mm)	13.3	16.9	19.1	23.0	26.3	31.7	38.5	45.0	49.0
4 Core	SHEATH THICKNESS (Nom.) (mm)	1.4	1.4	1.4	1.6	1.7	2.0	2.2	2.4	2.5
	OVERALL DIAMETER (Approx.) (mm)	14.7	18.6	21.0	25.5	29.2	33.4	40.0	46.5	51.0

For UPS Cables:

PVC insulated single core flexible cables in grey and with colour are ideal for use in cabling for UPS in establishment that have large computer networks. These unique colours can help identify the cabling for UPS wiring in the circuit and are available in sizes 0.5 sq. mm to 6.0 sq. mm. These cables conforming to IS 694:1990/2010 carry the prestigious ISI mark. **These cables can also be made available with FR or FRLS Insulating compound on request.** Technical details as per Table 1.