

RATNAFLEX

Single Core flexible cables for
electrical panel switch boards upto
and including 1100 V



Conductor : Electrolytic grade annealed copper with high flexibility Class 5 and uniform resistance properties. Conductor with Annealed tin copper can also be made available on request.

Cable colors : Available in Red, Yellow, Blue, Green, Green/Yellow, Grey & Black. Other colors available on request.

Insulation : All insulation grades in PVC exceed the requirements as stated in IS 5831/1984. All grades of insulation offered are RoHS compliant.

Legends in marking on cable : RR KABEL, Ratnaflex ISI, CM/L, CE

Packing: Standard packing of 100 meters in coils. Longer length available as per request

Table 1: Variants available

Brand	Applications	Specifications
RATNAFLEX	General wiring of panels for use in max operating temperatures upto and including 70°C	IS 694, IS 8130 Class 5, IS 5831
RATNAFLEX FR	Wiring in high density & critical installations	IS 694, Category C1, IS 8130 Class 5, IS 5831
RATNAFLEX FRLSH	Wiring in public places & fire prone areas	IS 694, Category C2, IS 8130 Class 5, IS 5831

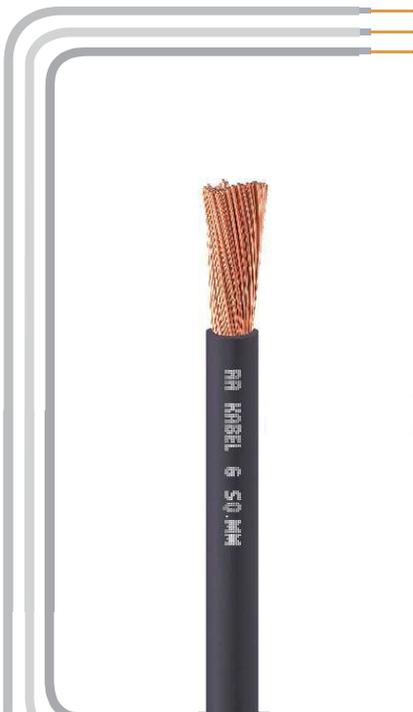
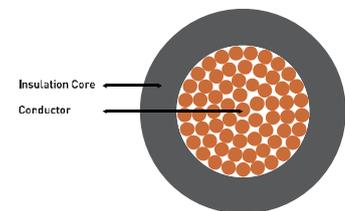
Table 2: Cable as per International Specification

Brand	Applications	Specifications
RR KABEL HFFR	Wiring for critical installation in public places and in vicinity of electronic systems	IEC 60228 Class 5, IEC 60332-1&3, IEC 60754-1&2
HR PVC 85°C/105°C	In high ambient temperature panels which can withstand upto and including 105°C	BS 6004-H07V2-K, BS 6231-type CK, UL 1569 300V, UL1015 600V, UL1275 600V
PVC 70°C	Wiring in public places & fire prone areas	IS 694, Category C2, IS 8130 Class5, IS 5831

Physical and Electrical Properties

Nominal Cross section mm ²	Wire Gauge	No. Of strands/Max Strand Diameter mm	Max DC Conductor Resistance at 20°C ©/Km	Nominal Insulation Thickness mm	Nominal Diameter over Insulation mm	Max. Permissible current Amps
0.5	22	16/0.2	39.0	0.6	2.1	4
0.75	20	24/0.2	26.0	0.6	2.3	7
1.0	18	32/0.2	19.5	0.6	2.5	12
1.5	16	30/0.25	13.3	0.6	3.0	15
2.5	14	50/0.25	7.98	0.7	3.5	20
4.0	12	56/0.3	4.95	0.8	4.1	27
6.0	10	84/0.3	3.30	0.8	4.8	35
10.0	8	140/0.3	1.91	1.0	6.3	46
16.0	6	126/0.4	1.21	1.0	7.1	62
25.0	4	196/0.4	0.780	1.2	8.75	80
35.0	2	276/0.4	0.554	1.2	10.0	102
50.0	1	396/0.4	0.386	1.4	11.85	138
70.0	2/0	360/0.5	0.272	1.4	15.0	214
95.0	3/0	480/0.5	0.206	1.6	17.5	260
120.0	4/0	608/0.5	0.161	1.6	18.3	305
150.0	250 MCM	750/0.5	0.129	1.8	21.5	355
185.0	350 MCM	931/0.5	0.106	2.0	23.5	415
240.0	450 MCM	1200/0.5	0.0801	2.2	26.0	500
300.0	550 MCM	1500/0.5	0.0641	2.4	29.0	550
400.0	-	2013/0.5	0.0486	2.6	33.0	590
500.0	-	2562/0.5	0.0384	2.8	37.0	660
630.0	-	3416/0.5	0.0287	2.8	41.5	725

Note: The configuration mentioned above are for reference purpose only, The conductors shall meet the resistance requirements as per class 5, IS 8130 or the relevant standards as applicable.



Ratnaflex Single Core:

They are typically used for wiring in high ambient temperature, such as wiring of internal electrical appliances. Apart from this, Ratnaflex-FRLSH is also used in high density critical installations especially in public places and fire prone areas and vicinity of electronics systems.

* The above data is indicative and may be revised without prior information.