

450/750V 60227 IEC 01

Single-core non-sheathed cable with rigid conductor

(450/750V IV)

SCOPE

It is mainly used in fixed wiring of electric apparatus and equipment up to and 450/750V.

APPLICATION STANDARDS

IEC 60227-3 Polyvinyl chloride insulated cables of rated voltage up to and including 450/750V
Part 3 : Non-sheathed cables for fixed wiring

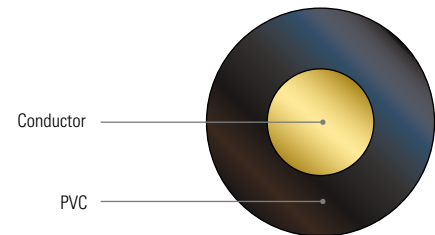
MATERIALS & CONSTRUCTION

Conductor Annealed copper wires, Class 1(Solid type) or 2(Stranded type)

Insulation PVC (Max. operating conductor temperature, 70°C)

COLOR

Brown, Black, Gray, Green, Green/Yellow and others



450/750V CU/PVC

Type	Conductor		Thick. of Insulation (nom.) mm	Overall Diameter		Max. D.C Conductor Resistance (20°C) Ω/km	Net Weight (approx.) kg/km
	Size	Outer Dia. (approx.)		Min.	Max.		
	mm ²	mm		mm	mm		
Class 1 (Solid)	1.5	1.38	0.7	2.6	3.2	12.1	22
	2.5	1.78	0.8	3.2	3.9	7.41	35
	4	2.25	0.8	3.6	4.4	4.61	50
	6	2.76	0.8	4.1	5.0	3.08	71
	10	3.57	1.0	5.3	6.4	1.83	117
Class 2 (Strand)	1.5	1.59	0.7	2.7	3.3	12.1	24
	2.5	2.01	0.8	3.3	4.0	7.41	36
	4	2.55	0.8	3.8	4.6	4.61	53
	6	3.12	0.8	4.3	5.2	3.08	75
	10	4.05	1.0	5.6	6.7	1.83	124
	16	5.10	1.0	6.4	7.8	1.15	187
	25	6.42	1.2	8.1	9.7	0.727	296
	35	7.56	1.2	9.0	10.9	0.524	398
	50	8.90	1.4	10.6	12.8	0.387	534
	70	10.70	1.4	12.1	14.6	0.268	752
	95	12.60	1.6	14.1	17.1	0.193	1038
	120	14.21	1.6	15.6	18.8	0.153	1293
	150	15.75	1.8	17.3	20.9	0.124	1590
	185	17.64	2.0	19.3	23.3	0.0991	1974
	240	20.25	2.0	22.0	26.6	0.0754	2608
300	22.68	2.4	24.5	29.6	0.0601	3260	
400	25.65	2.6	27.5	33.2	0.0470	4150	

0.6/1kV

Flame retardant PVC Insulated Grounding Wire (0.6/1kV TFR-GV)

SCOPE

This wire is used for grounding of electric apparatus.

APPLICATION STANDARDS

IEC 60502-1 Power cables with extruded insulation and their accessories for rated voltages from 1 kV (Um = 1,2 kV) up to 30 kV (Um = 36 kV)

Part 1: Cables for rated voltages of 1 kV (Um = 1,2 kV) and 3 kV (Um = 3.6 kV)

IEC 60332-3-24 Tests on electric cables under fire conditions - Part 3-24 : Test for vertical flame spread of vertically-mounted bunched wires or cables - Category C

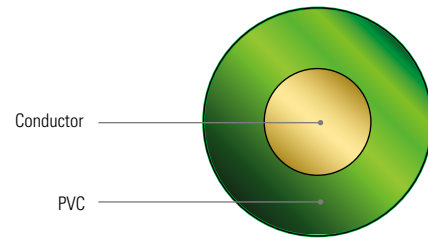
MATERIALS & CONSTRUCTION

Conductor Annealed copper wires Class 2 (Circular stranded or Compacted circular stranded type)

Insulation Flame retardant PVC (FR-PVC)

COLOR

Green or Green/Yellow



0.6/1kV CU/PVC

Size mm ²	Conductor		Thick. of Insulation (nom.) mm	Overall Diameter (approx.) mm	Max. D.C Conductor Resistance (20°C) Ω/km	A.C Test Voltage V/5min.	Net Weight (approx.) kg/km
	Construction Nos./mm	Outer Dia. (approx.) mm					
1.5	7/0.53	1.59	2.2	7	12.1	3500	61
2.5	7/0.67	2.01	2.2	7	7.41	3500	75
4	7/0.85	2.55	2.4	9	4.61	3500	105
6	7/1.04	3.12	2.4	9	3.08	3500	132
10	7/1.35	4.05	2.4	10	1.83	3500	184
16	C.C	4.7	2.4	11	1.15	3500	240
25	C.C	5.9	2.6	12	0.727	3500	352
35	C.C	6.9	2.6	14	0.524	3500	455
50	C.C	8.1	2.8	15	0.387	3500	600
70	C.C	9.8	2.8	17	0.268	3500	816
95	C.C	11.4	3.1	19	0.193	3500	1114
120	C.C	12.9	3.1	21	0.153	3500	1367
150	C.C	14.4	3.4	23	0.124	3500	1684
185	C.C	15.9	3.7	25	0.0991	3500	2087
240	C.C	18.3	4.0	29	0.0754	3500	2708
300	C.C	20.5	4.3	31	0.0601	3500	3376
400	C.C	23.2	4.6	35	0.0470	3500	4270
500	C.C	26.4	4.9	39	0.0366	3500	5433
630	C.C	30.2	5.0	43	0.0283	3500	6905

Note) C.C : Compacted circular stranded type