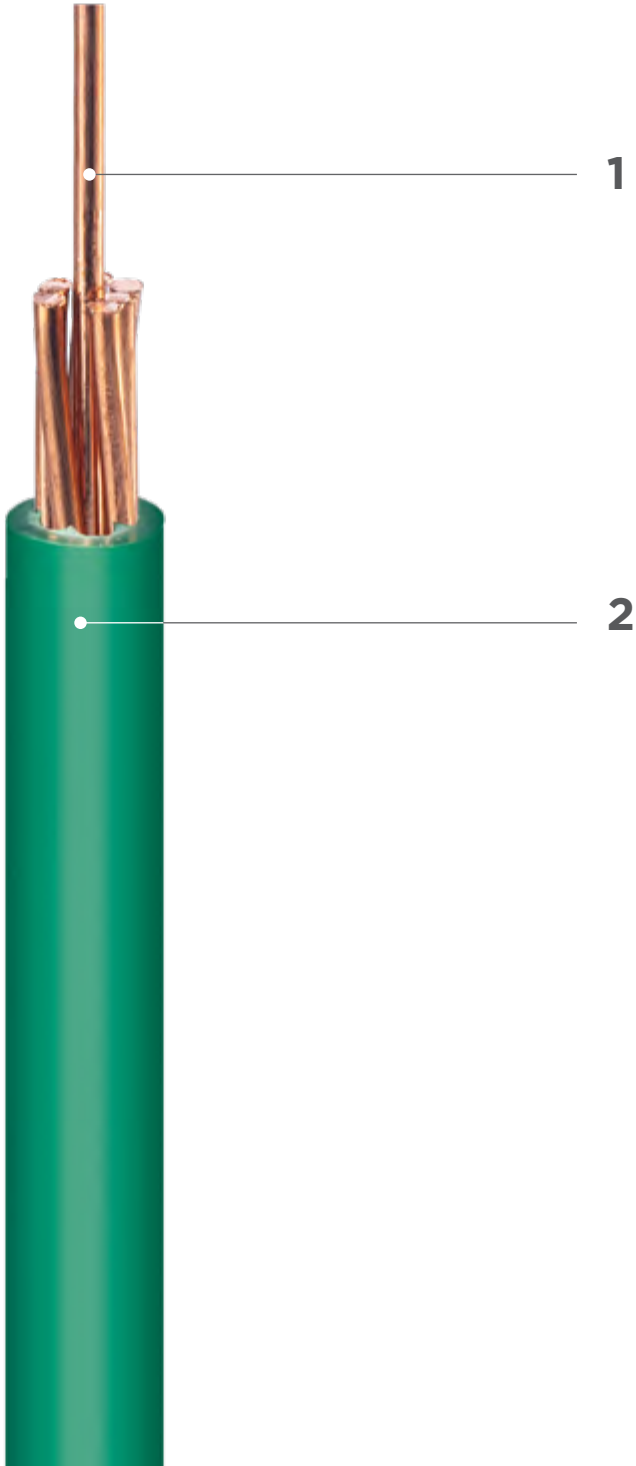


BUILDING
WIRES

Rated Voltages up to and Including 450/750 V



CONSTRUCTION DETAILS:

- 1. Conductor:**
Circular Copper or Aluminium conductor.
- 2. Insulation:**
An extruded layer of Polyvinyl Chloride compound.
For general purpose cable
 - Maximum conductor operating temperature at normal conditions 70 °C.For heat resistant cables
 - Maximum conductor operating temperature at normal conditions 90 °C.

Applicable Standards:
Single core non-sheathed cables are designed and tested as per IEC 60227 and BS EN 50525.

- Applications:**
- Suitable for fixed installation general purpose and heat resistant applications.
 - These cables also used in indoor fixed installation, distribution in conduit as well as in closed installation ducts and are ideal for internal wiring of appliance and apparatus.

Rated Voltages up to and Including 450/750 V

COPPER SINGLE CORE NON - SHEATHED CABLES

Nominal Cross Sectional Area	Max Conductor Resistance		Current Carrying Capacity		Overall Diameter (approx.)	Overall Weight (approx.)
	DC at 20°C	AC at 70°C	Free Air	In Pipe		
			Flat Formation			
mm²	Ω/km	Ω/km	A	A	mm	kg/km
CU/PVC (H05V-R) 300/500 V						
0.5	36.0	43.07	5	3	2.1	9
0.75	24.5	29.31	8	6	2.4	12
1	18.1	21.65	13	11	2.5	16
CU/PVC (H07V-R) 450/750 V						
1.5	12.1	14.47	19	14	3	22
2	9.05	10.83	24	17	3.5	28
2.5	7.41	8.86	26	19	3.7	33
3	6.03	7.21	29	21	3.9	40
4	4.61	5.51	43	25	4.2	49
6	3.08	3.68	53	32	4.7	69
10	1.83	2.18	71	45	6	113
16	1.15	1.37	92	60	6.9	170
25	0.727	0.870	121	81	8.7	270
35	0.524	0.627	150	99	9.7	360
50	0.387	0.463	185	121	11.2	490
70	0.268	0.321	254	153	13.3	695
95	0.193	0.232	309	188	15.3	955
120	0.153	0.184	354	215	16.3	1175
150	0.124	0.15	405	247	18.2	1470
185	0.0991	0.1210	467	285	20.4	1825
240	0.0754	0.0937	558	339	23.3	2380
300	0.0601	0.0762	656	386	26	2980
400	0.0470	0.0617	773	448	29.3	3845
500	0.0366	0.0506	922	524	34.1	4900
630	0.0283	0.0423	1070	593	37.2	6210
800	0.0221	0.0363	1233	665	41.3	7970



ALUMINIUM SINGLE CORE NON - SHEATHED CABLES

Nominal Cross Sectional Area	Max Conductor Resistance		Current Carrying Capacity		Overall Diameter (approx.)	Overall Weight (approx.)
	DC at 20°C	AC at 70°C	Free Air	In Pipe		
			Flat Formation			
mm²	Ω/km	Ω/km	A	A	mm	kg/km
16	1.91	2.295	68	45	6.9	73
25	1.20	1.44	94	61	8.7	113
35	0.868	1.04	117	74	9.7	147
50	0.641	0.771	144	90	11.2	200
70	0.443	0.533	187	115	13.3	265
95	0.320	0.385	232	142	15.3	365
120	0.253	0.305	268	164	16.3	445
150	0.206	0.249	310	188	18.2	540
185	0.164	0.199	361	220	20.4	680
240	0.125	0.152	432	263	23.3	870
300	0.100	0.123	497	305	26	1075
400	0.0778	0.0969	570	359	29.3	1375
500	0.0605	0.0772	635	427	34.1	1780
630	0.0469	0.0621	661	495	37.2	2230
800	0.0367	0.0513	638	570	41.3	2790



Rated Voltages Up to and Including 450/750 V

COPPER SINGLE CORE NON - SHEATHED CABLES

Nominal Cross Sectional Area	Max Conductor Resistance		Current Carrying Capacity		Overall Diameter (approx.)	Overall Weight (approx.)
	DC at 20°C	AC at 70°C	Free Air	In Pipe		
			Flat Formation			
mm²	Ω/km	Ω/km	A	A	mm	kg/km
CU/PVC (H05V-K) 300/500 V						
0.5	39.0	46.66	5	3	2.1	9
0.75	26.0	31.1	8	6	2.4	12
1	19.5	23.33	13	11	2.5	16
CU/PVC (H07V-K) 450/750 V						
1.5	13.3	15.9	19	14	3.1	22
2	9.9	11.85	24	17	3.4	28
2.5	7.98	9.55	26	19	3.7	33
3	6.6	7.89	29	21	3.9	39
4	4.95	5.92	43	25	4.3	49
6	3.30	3.94	53	32	4.9	70
10	1.91	2.28	71	45	6.4	116
16	1.21	1.45	92	60	6.9	175
25	0.780	0.933	121	81	9.9	280
35	0.554	0.663	150	99	10.9	375
50	0.386	0.462	185	121	12.8	505
70	0.272	0.326	254	153	15.1	710
95	0.206	0.247	309	188	16.9	975
120	0.161	0.194	354	215	19.1	1210
150	0.129	0.156	405	247	22.1	1505
185	0.106	0.129	467	285	24.3	1875
240	0.0801	0.0990	558	339	27.6	2440
300	0.0641	0.0810	656	386	30.2	3015

