29 Cu COPPER LAND

Copper Land

Cables Factory

Our goal is your safety

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HIGH QUALITY

DURABLE

AFFORDABLE



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COPPER LAND · PVC INSULATED COPPER CABLES



Who we are

Copper Land manufactures PVC insulated copper cables at Al Kharj Industrial City, Kingdom of Saudi Arabia. Conductors are bright annealed electrolytic copper, Class 5 flexible to IEC 60228. Insulation and sheath follow IEC 60502-1 (NYY 600/1000 V) and IEC 60227 for house-wiring sizes.

Marking

Cables are inkjet printed with the brand name COPPER LAND and the conductor size at regular intervals along the length.

Colours

Standard cores: Brown, Black, Grey, Blue, Green/Yellow, and other colours on request. Outer sheath is typically black or grey PVC.

IEC 60502-1	IEC 60228	IEC 60227	Al Kharj
NYY / NYA 600/1000 V	Class 5 flexible copper	House wiring cords	Made in Saudi Arabia

PVC INSULATED SOLID / STRANDED COPPER CONDUCTOR





Application

Used for wiring of domestic and commercial buildings and industrial electrification. Suitable for conduits, trunking, and steel support brackets.

Features

Bright annealed pure copper conductors offer low DC resistance, lower heating, and longer life. Insulation is a special-grade PVC compound. Electrical minima follow IEC 60502-1 and IEC 60228.

Specifications may change as we improve design and process. Information is given in good faith. Copper Land shall not be liable for damage arising from incorrect use or interpretation. Typical values — confirm the size with a Copper Land datasheet.

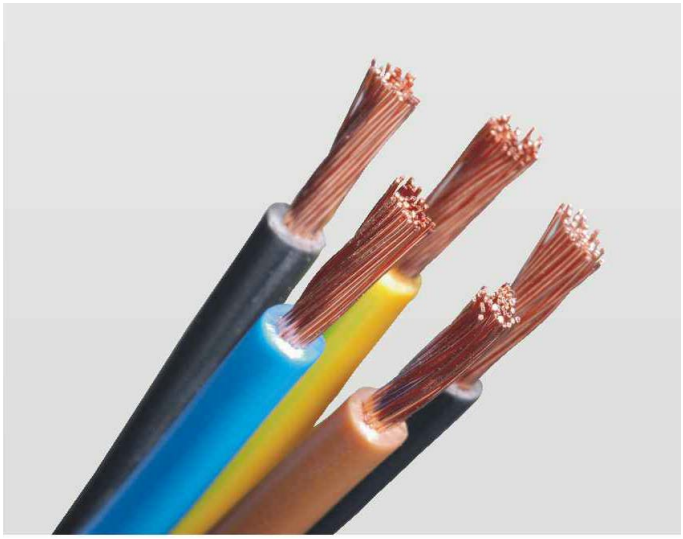
SINGLE CORE · NYA 600/1000 V · IEC 60502-1

COPPER LAND plain copper conductor, PVC insulated, unsheathed, up to 1000 V. Class 5 flexible. Values are IEC minima / typical ratings.

Area mm²	Conductor	Max wire Ø mm	Max R Ω/km 20°C	Insulation nom. mm	Overall Ø mm	Current A air
1	Class 5	0.21	19.5	0.8	2.4–2.8	17
1.5	Class 5	0.26	13.3	0.8	2.8–3.4	19
2.5	Class 5	0.26	7.98	0.8	3.4–4.1	26
4	Class 5	0.31	4.95	1	3.9–4.8	35
6	Class 5	0.31	3.3	1	4.4–5.3	44
10	Class 5	0.41	1.91	1	5.7–6.8	61
16	Class 5	0.41	1.21	1	6.8–8.2	82
25	Class 5	0.41	0.78	1.2	8.4–10.1	104
35	Class 5	0.41	0.554	1.2	9.7–11.7	129
50	Class 5	0.41	0.386	1.4	11.5–13.9	157
70	Class 5	0.51	0.272	1.4	13.2–16	202
95	Class 5	0.51	0.206	1.6	15.1–18.2	245
120	Class 5	0.51	0.161	1.6	16.7–20	285

These sizes are also supplied as flexible single-core house wires. Confirm strand count and finished diameter on the Copper Land datasheet for that size.

SINGLE CORE FLEXIBLE CABLES / HOUSE WIRES



Application

These cables are used for wiring domestic and commercial buildings. Multi-strand flexible conductors make them ideal for concealed wiring and panel connections.

Features

Manufactured from bright annealed 99.99% copper. Low conductor resistance, lower heating, longer life. PVC insulation with skin colouration. Conforms to IEC 60228 Class 5 and IEC 60502-1.

Marking

Inkjet printed with brand name COPPER LAND and the size of the cable at regular intervals.

Colour

Standard colours: Red, Yellow, Blue, Black, Green/Yellow, Brown, Grey. Special colours on request.

FLEXIBLE SINGLE CORE · IEC 60228 CLASS 5

COPPER LAND plain copper conductor, PVC insulated, unsheathed, up to 1000 V. House wiring and panel-board sizes.

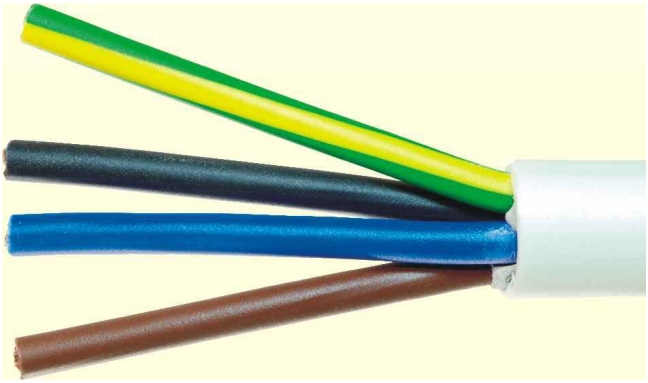
Area mm²	Conductor	Max wire Ø mm	Max R Ω/km 20°C	Insulation nom. mm	Overall Ø mm	Current A air
0.5	Class 5	0.21	39	0.8	2.1–2.5	10
0.75	Class 5	0.21	26	0.8	2.2–2.7	13
1	Class 5	0.21	19.5	0.8	2.4–2.8	17
1.5	Class 5	0.26	13.3	0.8	2.8–3.4	19
2.5	Class 5	0.26	7.98	0.8	3.4–4.1	26
4	Class 5	0.31	4.95	1	3.9–4.8	35
6	Class 5	0.31	3.3	1	4.4–5.3	44
10	Class 5	0.41	1.91	1	5.7–6.8	61
16	Class 5	0.41	1.21	1	6.8–8.2	82
25	Class 5	0.41	0.78	1.2	8.4–10.1	104
35	Class 5	0.41	0.554	1.2	9.7–11.7	129
50	Class 5	0.41	0.386	1.4	11.5–13.9	157
70	Class 5	0.51	0.272	1.4	13.2–16	202
95	Class 5	0.51	0.206	1.6	15.1–18.2	245
120	Class 5	0.51	0.161	1.6	16.7–20	285

Packing: coils or drums as ordered. Typical building-wire coils 90–100 m.

Specifications may change as we improve design and process. Information is given in good faith. Copper Land shall not be liable for damage arising from incorrect use or interpretation. Typical values — confirm the size with a Copper Land datasheet.

MULTI CORE FLEXIBLE CABLES





Application

Wiring of control panels, machines, and electrical installations in dry or damp interiors. The extra PVC sheath protects against abrasion. Ideal for concealed wiring and industrial conditions.

Features

PVC compound sheathing, easy stripping, resistance to mechanical abrasion, oil, grease, and chemicals. Construction Cu / PVC / PVC (NYY) to IEC 60502-1, 600/1000 V.

Packing

Generally supplied on drums or in coils as ordered. Standard colours of cores follow IEC identification. Outer sheath black or grey.

MULTI CORE NYY · 600/1000 V · IEC 60502-1

COPPER LAND plain copper conductor, PVC insulated and PVC sheathed. Overall diameter is the IEC 60227-5 mean range (mm).

Area mm²	Max R Ω/km	Insul. mm	Ø 2-core	Ø 3-core	Ø 4-core	Ø 5-core	Current A
0.5	39	0.8	5–6.5	5.4–6.9	—	6.6–8.4	2.5
0.75	26	0.8	5.7–7.2	6–7.6	6.6–8.3	7.4–9.3	5
1	19.5	0.8	5.9–7.5	6.3–8	7.1–9	7.8–9.8	8.5
1.5	13.3	0.8	6.8–8.6	7.4–9.4	8.4–10.5	9.3–11.6	16
2.5	7.98	0.8	8.4–10.6	9–11.4	10.1–12.7	11.2–14	22
4	4.95	1	9.6–12	10.5–13.1	11.5–14.3	12.7–15.8	30
6	3.3	1	10.7–13.5	11.7–14.6	12.8–16	14.1–17.6	37
10	1.91	1	13.4–16.6	14.6–18.1	16–19.8	17.6–21.8	52
16	1.21	1	16.3–20.2	17.6–21.8	19.4–24	21.4–26.5	70
25	0.78	1.2	—	—	—	—	88

Control cables of 7, 8, 10, 12 and 16 cores: next page. Also 105 °C PVC, double-jacket (DJ) and TQ. Special constructions on request.

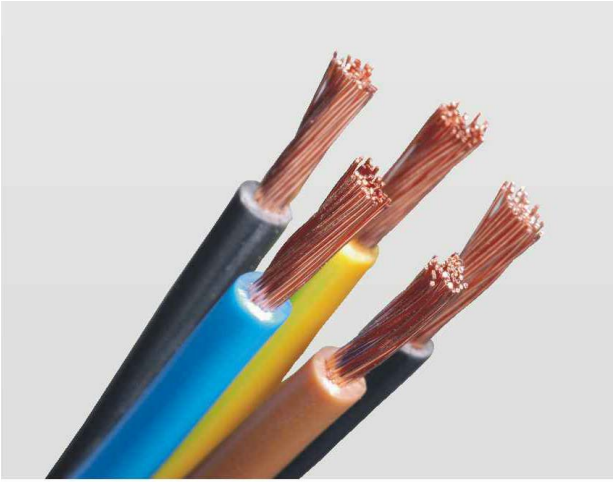
MULTI CORE CONTROL CABLES · 7 – 16 CORES · 600/1000 V

COPPER LAND plain copper conductor, IEC 60228 Class 5, cores PVC insulated and numbered or colour coded, PVC sheathed. For control panels, motors, pumps and signalling.

Cores × mm²	Conductor	Max R Ω/km 20°C	Insulation mm	Sheath mm	Overall Ø mm	Current A
7 × 0.5	Class 5	39	0.8	0.9	7.4–9.4	2.5
7 × 0.75	Class 5	26	0.8	1	8.2–10.3	5
7 × 1	Class 5	19.5	0.8	1	8.7–10.9	8.5
7 × 1.5	Class 5	13.3	0.8	1.1	10.4–13	16
7 × 2.5	Class 5	7.98	0.8	1.2	12.5–15.6	22
7 × 4	Class 5	4.95	1	1.4	14.2–17.6	30
7 × 6	Class 5	3.3	1	1.3	—	37
8 × 1	Class 5	19.5	0.8	1.1	9.4–11.8	8.5
8 × 2.5	Class 5	7.98	0.8	1.3	—	22
8 × 4	Class 5	4.95	1	1.3	—	30
10 × 0.5	Class 5	39	0.8	1.4	—	2.5
10 × 1	Class 5	19.5	0.8	1.2	11.2–14	8.5
10 × 1.5	Class 5	13.3	0.8	1.2	12.6–15.7	16
10 × 2.5	Class 5	7.98	0.8	1.4	15.2–18.9	22
12 × 1	Class 5	19.5	0.8	1.2	12–15	8.5
12 × 1.5	Class 5	13.3	0.8	1.3	13.5–16.8	16
12 × 2.5	Class 5	7.98	0.8	1.4	16.3–20.2	22
16 × 1	Class 5	19.5	0.8	1.3	13.8–17.2	8.5
16 × 1.5	Class 5	13.3	0.8	1.4	15.6–19.4	16

Other core counts and sizes on request. Packing: drums or coils as ordered.

PVC 105 °C · INDUSTRIAL & HIGH-TEMPERATURE



Application

Where conductor operating temperature may exceed standard 70 °C PVC. Typical uses: engine rooms, industrial panels, and hot service routes. Marked 105 °C.

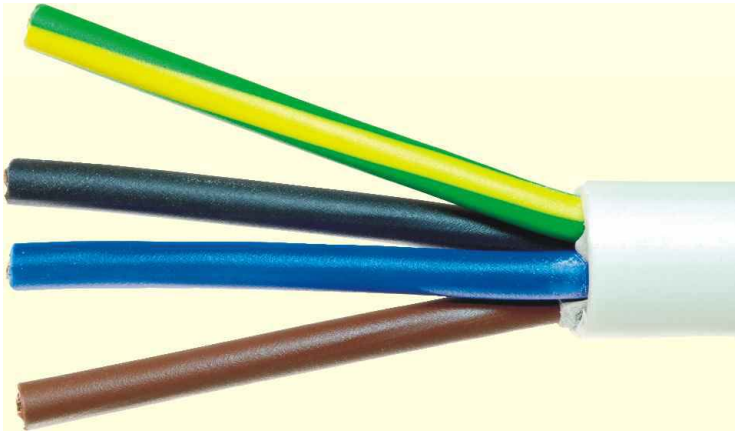
Construction

Same Class 5 copper conductor. Heat-resistant PVC insulation (and sheath on multi-core). Electrical resistance still rated at 20 °C to IEC 60228.

Area mm²	Voltage grade	Max R Ω/km 20°C	Insulation nom. mm	Current A air
0.5	600-1000	39	0.8	10
0.75	600-1000	26	0.8	13
1	600-1000	19.5	0.8	17
1.5	600-1000	13.3	0.8	19
2.5	600-1000	7.98	0.8	26
4	600-1000	4.95	1	35
6	600-1000	3.3	1	44
10	600-1000	1.91	1	61

Ask the datasheet bot: 1x16 105 · 3x2.5 105

FLAT CABLE · 2 & 3 CORE



Application

Flat twin and 3-core cables for pumps, lifts, and confined routes where a round cable is impractical. Copper Land produces 2-core flat sizes from the production file.

Area mm²	Conductor	Insulation mm	Sheath mm	Max R Ω/km 20°C	Current A
1.5	Class 5	0.8	0.9	13.3	16
2.5	Class 5	0.8	1	7.98	22
4	Class 5	1	1.1	4.95	30
6	Class 5	1	1.2	3.3	37
10	Class 5	1	1.4	1.91	52
16	Class 5	1	1.4	1.21	70

Type 2x2.5 flat in the datasheet channel for a size-specific sheet from production.

STANDARDS · CURRENT · SHORT CIRCUIT

Reference values used on Copper Land technical datasheets.

Area mm²	R DC 20°C Ω/km	R AC 70°C Ω/km	Air A	In pipe A	Isc 1 s kA (k=143)
1	19.5	23.33	8.5	7	0.143
1.5	13.3	15.91	16	13	0.215
2.5	7.98	9.55	22	17	0.358
4	4.95	5.92	30	23	0.572
6	3.3	3.95	37	30	0.858
10	1.91	2.29	52	40	1.43
16	1.21	1.45	70	54	2.288
25	0.78	0.93	88	70	3.575
35	0.554	0.66	110	86	5.005
50	0.386	0.46	133	103	7.15
70	0.272	0.33	171	130	10.01
95	0.206	0.25	207	156	13.585
120	0.161	0.19	240	179	17.16

Notes

Current ratings follow IEC 60364-5-52 PVC 70 °C, three loaded cores (Method E air / Method B2 pipe), then derated to 40 °C ambient for Saudi Arabia (Table B.52.14, Ca = 0.87). Sizes below 1.5 mm² start from IEC 60227 flexible-cord values. Derate further for grouping and ambient above 40 °C. Short-circuit current is copper 75 °C → 160 °C, 1 second. Always size the protective device to the installation method.

Copper Land Company

Cables Factory

Our goal is your safety

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For a size-specific datasheet, write 3x4 or 1x16 105 in the Copper Land Data Sheet channel.