

Nickel Plated Copper

Wire

Pure electrolytic copper wire uniformly electroplated with nickel. This wire is used for inner-lead part in Lead-in-Wires of incandescent bulbs, fluorescent tube, halogen, HID, automotive, and other lamps. It is also used in cable industry for automotive and other electronics applications.

Nominal Chemical Composition (%)		
Wire	Cu	Others
Cu core	99.90 min	0.10 max
Nickel layer	High purity Nickel	

Thickness of Nickel layer

2-4% by weight or minimum of 2% by weight in thickness. Higher Nickel plating thickness (like 4% or 8%) can be manufactured as per customer requirement. The nickel coating has uniform adhesion over the full length of the copper core wire.

Diameter of wire mm	Thickness of Nickel plating % by weight	Application
0.20-0.60	2.0-4.0	For Lead-in-Wires / Cables
0.70-0.90	2.0-3.0	For Lead-in-Wires
0.80-1.50	8.0-12.0	For redraw

Mechanical Properties			
Alloy	Tensile strength N/mm ²		Elongation % at L ₀ =100 mm
Annealed (soft)	200	300	≥ 20
As drawn	350	500	≤ 5

Size in mm	0.2-0.3	0.4-0.9	1.0-2.0
Tolerance (+/-)	0.005	0.01	0.02

The ovality (the difference between the largest and smallest diameter in a section) is less than half the tolerance in diameter.

Stranded wires are also available. Please contact JLC for more information.

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Packaging

In standard DIN spools or corrugated drums / barrels (14" outer dia x 10" height)

Diameter of wire mm	Recommended Spool Type	Weight per spool Kg
0.20-0.60	DIN 160	5-7
	DIN 200	6-8
	DIN 250	12-20
	Corrugated Drum	12-20
0.70-0.90	DIN 200	6-8
	DIN 250	15-22
	Corrugated Drum	15-25
0.8-1.50	DIN 355	50-75
	K 400	~100

Each spool is individually shrink wrapped and put in cardboard box for maximum protection against oxidation. It is advisable to use the wire within six months from the date of manufacturing for best performance.