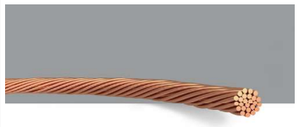
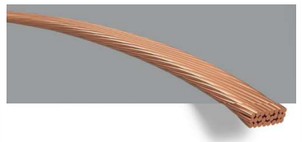
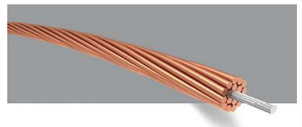
ELEKTRISOLA | **Litz Wire Types**

Type	Basic	Taped	Extruded	Profiled	Served	With strain relief	EFOLIT®
							
Diameter of Magnet Wire	0.010 - 0.500 mm	0.040 - 0.500 mm	0.032 - 0.500 mm	0.200 - 0.500 mm	0.020 - 0.300 mm	0.032 - 0.500 mm	0.030 - 0.300 mm
No. of wires	2 - 25.000 strands	max. 25.000 strands	max. 700 strands	max. 25.000 strands	2 - 23.000 strands	max. 500 strands	max. 23.000 strands
Total outer diameter	0.095 - 15.0 mm	1.0 - 10.0 mm	0.4 - 1.2 mm	max. 10.0 mm	Silk: 0.071 - 4.0 mm Nylon: 0.071 - 10.0 mm	0.4 - 1.2 mm	0.5 - 5.0 mm
Total copper cross section	80 mm²	36 mm²	0.5 mm²	36 mm²	Silk: 6 mm² Nylon: 36 mm²	0.38 mm²	up to 10.6 mm²
Outer coating	-	PET (Thermal class A-F) PEN (Thermal class B-H) PI (Thermal class H-C)	Polyamide Polyester Polyurethane	optional with/out serving Serving: Nylon Taping: PET,PEN,PI	Natural silk Nylon Polyester	optional with/out extrusion: Polyamide Polyester Polyurethane	Taping: PET PEN
Additional options	-	Overlapping of tape: 50 or 67 % No. of tapes (max.): 2	Wallthickness overcoat: 0.1 - 0.4 mm	Min. construction (H x W): 1.2 x 1.2 mm Ratio hight : width (H : W): 1 : 2 (1 : 3, where appropriate) Tolerance (+/-): 0.1 mm	No. of layers (max.): 2	Multifilament: optional: PES: 30 - 450 dtex LCP: Fmax = 1.53 - 99.2 N Aramide: Dension: 3.3 - 12.4 %	Taping construction: 3 layers (min.)
Characteristics	Flexible optimization of construction and conductor material possible acc.: ● HF-performance, resistance ● high flexibility, flexlife-performance ● form stability	● very high electric break down voltage ● high mechanical robustness ● optimal round form stability (e.g. for layered winding)	● high mechanical robustness ● high flexibility ● good resistance against water, oils and grease ● increased electric break down voltage	● increase of copper filling factor up to 20 % ● high flexibility and dimensional stability ● good windability ● optional with/out outer coating	● optimal round form stability (e.g. for layered winding) ● specified distance between windings ● resistance against splicing in combination with high flexibility ● support for impregnation- & potting processes	● very high tensile strength possible ● smallest litz wire constructions with highest tensile strenght and flexlife performance ● very good processability also for very small litz wires ● combination of all conductor and coating materials possible	VDE-certified acc.: DIN EN 60950/U, 62378/J, 61558/K, 62368/J, 60601/L Max. working voltage: 1000 Vrms / 1414 Vpeak Max. frequency: 500 kHz Thermal class: F/155 °C, H/180 °C
Typical applications	Transformers, Chokes, RF-tranducers, medical applications, sensors, electronic ballasts, switching power supplies, heating applications	Inverter, RF-transformers, RF-transducers, RF-chokes, Inductive charger	Heating applications, Smart Textiles, Patient Comfort	Induction cooking hobs, RF-transformers, RF-chokes, E-motors	Inverter, RF-transformers, RF-transducers, RF-chokes, Inductive charger	Automotive industry, industrial applications, medical applications, Smart Textiles, special applications for technical textiles, sports equipment	Inverter, RF-transformers, RF-transducers, RF-chokes, Inductive charger