

ELEKTRISOLA Copper Magnet Wire Types

ELEKTRISOLA - Product - Name ELEKTRISOLA - Product - Code	Polysol 155 P155
<u>General</u> Description Standards IEC (including the following norms) NEMA (including the following norms) UL-approval Diameters available <u>Technical values</u> 1. <u>Thermal values</u> Temperature index 20.000 h acc. to IEC 60172 Cut through temperature min °C acc. To IEC 60851.6.4 Elektrisola typical values for 0.05 mm/0.25 mm, Grade 1 Heat shock min °C acc. to IEC 60851.6.3 Elektrisola typical values for 0.05 mm/0.25 mm, Grade 1 2. <u>Electrical values</u> Low voltage continuity max. acc. to IEC 60851.5.1 for 0.05 mm/0.025 mm Elektrisola typical values for 0.05 mm/0.25 mm, Grade 1 High voltage continuity max. acc. to IEC 60851.5.2 for 0.05 mm/0.25 mm Elektrisola typical values for 0.05 mm/0.25 mm, Grade 1 Pin hole acc. to IEC 60851.5.7, with 0 % and 3 % elongation Breakdown voltage (at 20°C, 35% humidity), acc. to IEC 60851.5.4 Elektrisola typical values acc. to cylinder test 0.05 mm/0.25 mm, Grade 1 Decrease of breakdown voltage in % at elevated temperature Elektrisola typical values for 0.05 mm/0.25 mm, Grade 1, in % at °C 3. <u>Mechanical values</u> Elongation min. acc. to IEC 60851.3.3 for 0.05 mm/0.25 mm, Grade 1 Elektrisola typical values for 0.05 mm/0.25 mm, Grade 1 Tensile strength Elektrisola typical values for 0.05 mm/0.25 mm, Grade 1 4. <u>Chemical compatibility</u> Standard solution Pencil Hardness acc. to IEC 60851.4.3 / untreated Decrease of breakdown voltage in % General statements about chemical compatibility are not possible due to the high number of influencing factors such as winding, impregnationmoulding and cleaning materials etc. 5. <u>Solderability</u> acc. to IEC 60851.4.5, max. seconds at °C für 0.05mm/0.25mm Elektrisola-typical values acc. to IEC 60851.4.5 for 0.05 mm, Grade 1, seconds at °C for 0.25 mm, Grade 1, seconds at °C <u>Properties</u> <u>Applications</u>	mod. Polyurethane IEC 60317-20, IEC 60317-4 MW79 , MW2, MW75 yes 0.01 - 0.50 mm 158°C ≥ 200°C 225 / 230°C ≥ 175°C 190 / 180°C ≤ 40 / ≤ 10 0 / 0 ≤ 40 / ≤ 10 2 / 1 not resistant 240 / 180 V/μm 25 % at 155°C ≥ 14% / ≥ 25% 23% / 40% 57 / 1370 cN 4H / 4H 5 % 2s/390°C / 2s/390°C 0.3s/370°C / 0.2s/390°C 0.7s/370°C / 0.5s/390°C Very good solderability, good thermal properties, low sensitivity against humidity. Used in small transformers, linear motors, relays, solenoids, small motors, clock coils, fly-back-transformers, magnetic heads, instruments.

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ELEKTRISOLA typical values are the result of various tests and represent average values.